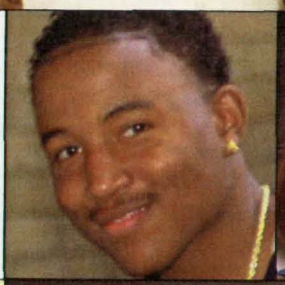
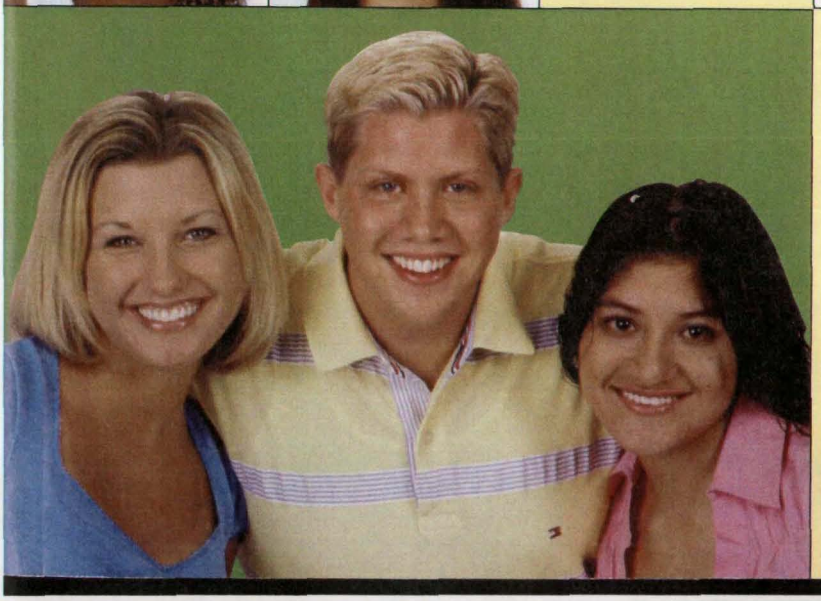
2004-06 DCCCD Catalog

It all begins here.





Dallas County
Community Colleges

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Beginning College

1. Apply to be admitted to the college.

Complete an application for admission. Applying early is a good idea. Your place in registration is determined by the date you apply. An early start also ensures you have plenty of time to visit with an advisor to plan your course schedule. There are several convenient ways to get an application and apply:

- Come by the campus and fill out your application in person.

- Get your application by mail. Just call, toll-free, metro 817-COLLEGE and we'll send you an application and other information you would like about the college.

- Apply on-line at our website at www.dcccd.edu

2. See your DCCCD college advisor.

After you are admitted to college, you must attend an orientation session. Please contact your college's Advisement/Counseling Center to schedule a session. After orientation, you should contact the Assessment/ Testing Center to schedule your assessment. After your assessment is completed, you will visit with your academic advisor to select your courses.

3. Register for classes.

You may register for classes by:

- In-person registration during early and regular registration times. Regular registration occurs the week before classes begin.

- By telephone--telephone registration is easy and convenient.

- Or register online through our website at eConnect:dcccd.edu.

There are certain qualifications you must meet to register by telephone or online. Please contact your college's Advisement/Counseling Center to find out if you meet the qualifications.

2004-06 Catalog

We are glad you decided to take a look at what the seven Dallas County Community Colleges have to offer you. Our goal is to serve Dallas County with excellent learning opportunities that are accessible, affordable and accredited. We've been serving learners like you since 1966, teaching you what you need to know to be successful at work, at home, and at play. That's what we're all about.

Telephone: toll-free metro 817-COLLEGE (817-265-5343)
Website: *www.dcccd.edu*

Please Note:

This printed catalog is produced for your convenience. However the official catalog of the DCCCD is available online at: www.dcccd.edu along with other important information about the colleges.

Brookhaven College
3939 Valley View Lane
Farmers Branch, TX 75244

Cedar Valley College
3030 North Dallas Avenue
Lancaster, TX 75134

Eastfield College
3737 Motley Drive
Mesquite, TX 75150

El Centro College
Main at Lamar Streets
Dallas, TX 75202

Mountain View College
4849 W. Illinois Avenue
Dallas, TX 75211

North Lake College
5001 N. MacArthur Boulevard
Irving, TX 75038

Richland College
12800 Abrams Road
Dallas, TX 75243

R.L. Thornton Jr. Bldg.
701 Elm Street
Dallas, TX 75202

Bill Priest Institute
1402 Corinth Street
Dallas, TX 75215

District Service Center
4343 N. Highway 67 East
Mesquite, TX 75150

LeCroy Center for Educational Telecommunications
9526 Walnut Street
Dallas, TX 75243

Each of the seven Dallas County Community District colleges are individually accredited by the Commission of Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501) to award the associate degree.

This catalog contains policy regulations and procedures in existence at the time this publication went to press. The DCCCD reserves the right to make changes at any time to reflect current Board policies, administrative regulations and procedures and applicable state and federal regulations. This catalog is for information purposes and does not constitute a contract, express or implied, between any applicant, student or faculty member and the Dallas County Community College District.

Educational opportunities are offered by the DCCCD without regard to race, color, age, national origin, religion, sex, disability or sexual orientation.

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Child Development
Commercial Music
Computer-Aided Design & Drafting
Computer Graphics
Computer Information Technology
Construction Management & Technology
Construction Technology
Criminal Justice
Diagnostic Medical Sonography
Digital Imaging Technology
Echocardiology Technology
Educational Personnel
Electrical Technology
Electronic Commerce
Electronic Telecommunications
Electronics/Computer Technology
Electronics Technology
Emergency Medical Services
Engine Technology
Engineering Technology
Fasion Design
Food and Hospitality Institute
Geographic Information Systems Technology
Health Information Management
Hospitality Management
Interior Design
International Business and Trade
Internet Development Technologies
Interpreter Training Program
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Logistics Technology
Management
Marketing Careers
Medical Assisting
Medical Laboratory Technology
Medical Staff Services
Medical Transcription
Mortgage Banking
Multimedia Technology
Office Technology
Ornamental Horticulture Technology
Paralegal
Paramedic
Patient Care Technician
Plumbing and Pipefitting Construction
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Real Estate
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Academic Calendar

Mini-semesters, flexible-entry classes and other alternative schedules, along with thier final exam dates, may be offered between or during regular semesters by some of the Dallas County Community Colleges. Please contact individual colleges or go online to www.dcccd.edu *for updated class and registration schedules.*

Fall Semester, 2004

Note: Students should register as early as possible. By registering early, students may take full advantage of academic advisement and may have more course options available. Check the class schedule or website for registration times.

August 16 (M)	Faculty reports
August 23 (M)	Classes begin
September 4 (S)	12th class day
September 6 (M)	Labor Day holiday
November 11 (R)	Last day to withdraw with a grade of "W"
November 25 (R)	Thanksgiving holidays begin
November 29 (M)	Classes resume
December 6-9 (M-R)	Final exams
December 9 (R)	Semester closes
December 13 (M)	Grades due in Registrar's Office by 10 a.m.
December 23 (R)	College buildings and offices close for the holidays at end of workday

Winter Term, 2004/2005

Note: Contact colleges for availability and schedules.

Spring Semester, 2005

Note: Students should register as early as possible. By registering early, students may take full advantage of academic advisement and may have more course options available. Check the colleges for registration times.

January 3 (M)	College buildings and offices open
January 10 (M)	Faculty reports
January 17 (M)	Martin Luther King, Jr. Day holiday
January 18 (T)	Classes begin
January 31 (M)	12th class day
February 17 (R)	District Conference Day, faculty and administrators
February 18 (F)	Faculty professional development (TCCTA)
March 14 (M)	Spring Break begins
March 17 (R)	District Conference Day, professional support staff
March 18 (F)	Spring holiday for all employees
March 21 (M)	Classes resume

Spring Semester, 2005 (continued)

March 25 (F)	Holiday begins
March 28 (M)	Classes resume
April 14 (R)	Last day to withdraw with a grade of "W"
May 9-12 (M-R)	Final exams
May 12 (R)	Semester ends
May 12 (R)	Graduation
May 16 (M)	Grades due in Registrar's Office by 10 a.m.

May Term, 2005

Note: Contact colleges for availability and schedules.

Summer Sessions, 2005*

Note: Students should register as early as possible. By registering early, students may take full advantage of academic advisement and may have more course options available. Check with your college or it's website for registration times and dates.

First Summer Session Please see asterisk note below.*
(Based on a 4-day class week plus first Friday)

May 30 (M)	Memorial Day holiday
June 6 (M)	Classes begin
June 9 (R)	4th class day
June 10 (F)	Class day (1st Friday class meeting)
June 28 (W)	Last day to withdraw with a grade of "W"
July 4 (M)	Fourth of July holiday
July 7 (R)	Final exams
July 7 (R)	Session I ends
July 11 (M)	Grades due in Registrar's Office by 10 a.m.

Second Summer Session Please see asterisk note below.*
(Based on 4 day class week plus first and second Friday)

July 12 (T)	Classes begin
July 15 (F)	Class day (1st Friday class meeting)
July 15 (F)	4th class day
August 3 (W)	Last day to withdraw with a grade of "W"
August 11 (R)	Final exams
August 11 (R)	Session II ends
August 15 (M)	Grades due in Registrar's Office by 10 a.m.

*** Summer Sessions, 2005 - DCCCD Colleges' summer sessions can vary. Please see your college's class schedule or its website for updated times, dates and locations**

General Information

Accreditation

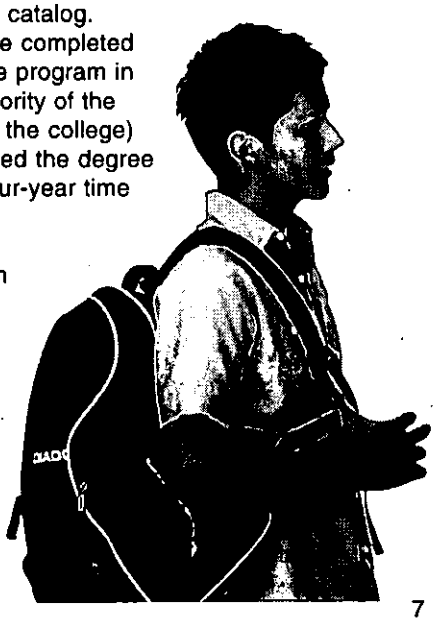
Each of the Dallas County Community College District's seven colleges - Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, and Richland - is individually accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404.679.4501) to award the associate degree. The official statement of accreditation for each college is published in that college's individual catalog.

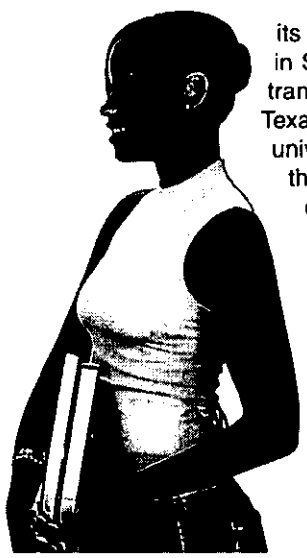
Guarantee for Job Competency

The college makes certain guarantees to its students who earn its Associate in Applied Sciences degree or who complete a certificate program. If an Associate in Applied Sciences or Certificate Program graduate is judged by his or her employer to be lacking in technical job skills identified as exit competencies for his or her specific degree or certificate program, the graduate will be provided up to nine tuition-free hours of additional skill training by the college under the conditions of the guarantee policy.

Special conditions, which apply to the guarantee, are as follows:

- The graduate must have earned the Associate in Applied Sciences Degree or completed the certificate program beginning May 1992, or thereafter in a Technical program identified in the college catalog.
- The graduate must have completed this degree or certificate program in the DCCCD (with a majority of the credits being earned at the college) and must have completed the degree or certificate within a four-year time span.
- Graduates must be employed full-time in an area directly related to the area of program concentration as certified by the Vice President of Instruction.
- Employment must commence within 12 months of graduation.
- The employer must certify in writing that the employee is lacking entry-level skills identified by the college as the employee's program competencies and must specify the areas of deficiency within 90 days of the graduate's initial employment.
- The employer, graduate, division dean, job placement, counselor, and appropriate faculty member will develop a written educational plan for retraining.
- Retraining will be limited to nine credit hours related to the identified skill deficiency and to those classes regularly scheduled during the period covered by the retraining plan.
- All retraining must be completed within a calendar year from the time the educational plan is agreed upon.
- The graduate and/or employer is responsible for the cost of books, insurance, uniforms, and other course-related expenses.
- The guarantee does not imply that the graduate will pass any licensing or qualifying examination for a particular career.
- The student's sole remedy against the college and its employees for skill deficiencies shall be limited to nine credit hours of tuition-free education under conditions described above.
- The program can be initiated through written contact with the office of the college president.



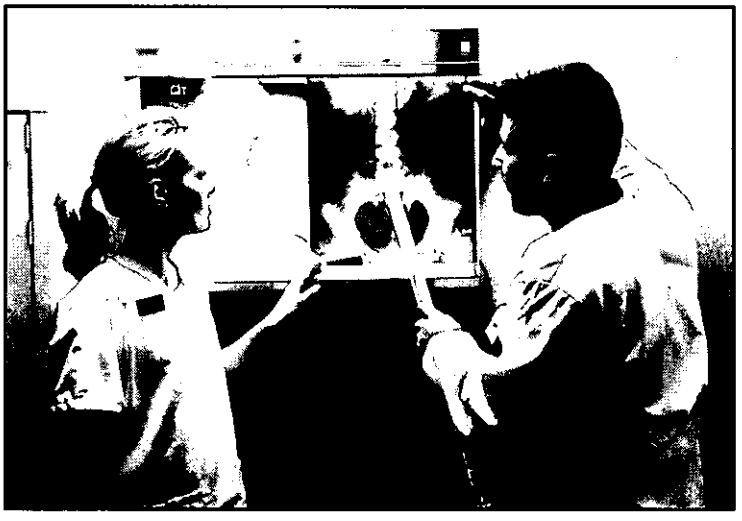


Guarantee for Transfer Credit

The college guarantees to its Associate in Arts and Associate in Sciences graduates the transferability of course credit to Texas public colleges and universities. Students pursuing these degrees will complete the college's core curriculum of 48 credit hours. By Texas State Law, the entire core will transfer as a block to all Texas public colleges and universities to take the place of the core curriculum of the receiving transfer institution. Students should work closely with an advisor in the choice of electives to ensure that the transfer institution has

cooperated with the college in the development of Transfer Guides that clearly indicate how the university accepts the selected elective courses in transfer.

Another means of ensuring the transferability and applicability of all courses within an Associate in Arts or an Associate in Sciences is to follow specific degree plans in specific majors that are called Fields of Study. A Field of Study plan has the approval of the Texas Higher Education Coordinating Board. The entire plan of courses is designed to transfer as a block of courses to all Texas public colleges and universities when the student majors in the specific Field of Study at the transfer institution.



The college guarantees the transferability of course credit to private and out-of-state colleges and universities when the student pursues the Associate in College/University Transfer degree. This degree is composed of courses negotiated through a formal articulation process with private and out-of-state universities. Students interested in pursuing this degree should contact the Advisement Center early in their college career.

The college guarantees that a student may take tuition-free course(s) if: (a) A Texas public college or university refuses to accept in transfer core courses when the student has received the Associated in Arts or Associate in Sciences degree; (b) A Texas public college or university refuses to accept in transfer courses listed in that institution's Transfer Guide; (c) A Texas public college or university refuses to accept in transfer all courses taken in order to receive a Field of Study Associate in Arts/Associate in Sciences degree; or (d) A private or out-of-state institution refuses to accept in transfer a course when the student has received the Associate in College/ University Transfer.

The conditions that apply to the guarantee area are as follows:

- Transferability means the acceptance of credits toward a specific major and degree at a Texas public college or university. The courses must consist entirely of those in the core curriculum, the courses outlined in an official Field of Study, and additional elective courses identified by the receiving university as transferable and applicable toward a specific major and degree in its Transfer Guides written within the last five years.
- For transfer to private and out-of-state institutions, a written plan with the receiving institution must be executed; and
- Limitations of total number of credits accepted in transfer, grades required, relevant grade point average and duration of transferability apply as stated in the catalog of the receiving institution.

The college works with a number of institutions to develop Transfer Guides. These include such as the University of North Texas, Texas A&M Commerce, The University of Texas at Arlington, The University of Texas at Dallas, Texas Woman's University, Texas Tech University, Amberton University, Dallas Baptist University, Baylor University, Southern Methodist University, and others. In order to secure such a guarantee, students should begin the process in the college Counseling/Advisement Center to work closely with an advisor.

To ensure guaranteed transfer, students are strongly encouraged to check with the university where they plan to transfer. No university shall be required to accept in transfer toward a degree, more than 66 semester credit hours of academic credits earned by a student in a community college. Universities, however, may choose to accept additional credit hours. Also, all public colleges and universities must offer at least 45 semester credit hours of academic courses that are substantially equivalent to courses listed in the Lower Division Academic Course Guide manual including those that fulfill the lower-division portion of the institution's core curriculum.

History

The Dallas County Community College District (DCCCD) enrolls over 100,000 credit and non-credit students every semester, making it one of the largest higher education institutions in the State of Texas.

The DCCCD comprises seven colleges located strategically throughout Dallas County. Anyone in Dallas County has only a short drive, bus or train ride to reach the nearest college.

More than three decades of growth and progress are a credit to the vision of Dallas area citizens. In May 1965, Dallas County voters created the Dallas County Junior College District and approved a $41.5 million bond issue to finance it. The next year, El Centro College began serving students in downtown Dallas. Eastfield College in Mesquite and Mountain View College in southwest Dallas enrolled their first students in 1970. Richland College opened two years later in north Dallas.

An additional $85 million in bonds supported the DCCCD's expansion, and construction began on three more colleges. Cedar Valley College in Lancaster and North Lake College in Irving opened in 1977, followed by Brookhaven College in Farmers Branch in 1978.

In addition to the colleges, the DCCCD also operates the Bill Priest Institute and R. Jan LeCroy Center for Educational Telecommunications, both named for former DCCCD chancellors. The Bill Priest Institute opened south of downtown Dallas in 1989, serving individuals and businesses of all sizes with training programs customized to meet their needs. The LeCroy Center is one of the largest producers of distance education products in the nation.

Dallas County Community College District Vision, Mission, and Goals

Vision

The Dallas County Community College District adds value to lives and builds communities.

Mission

We prepare students to become productive and responsible members in communities that are increasingly diverse in a world that continues to change dramatically. We provide students with academic, technical, work and life skills, as well as self-confidence to be successful in the workplace, community, and in other endeavors.

Goals

In implementing our goals, we are clear that we must remain accessible and affordable while maintaining educational quality. We will embrace and celebrate the diversity of our students, staff, and communities in all we do. The diversity of our institution and our programs and services is important. We will continue to improve our student retention and offer necessary remediation for students to successfully reach their goals.

- Student Success – The success of students is always our primary focus.
- Employee Success – Our commitment to hiring, retaining and developing successful employees is key to the positive impact we have on our students and communities.
- Economic and Workforce Development – We play a major role in economic and workforce development programs and initiatives that are key to development in this region, state and nation.
- Community Development – We support improvement in the quality of life of our communities and will continue to strengthen and expand our connections to civic, community, and educational organizations.
- Business and Fiscal Affairs – We maintain the public's trust by being fiscally responsible and accountable at all times.
- Institutional Development – Our regular assessment of programs and services, as well as our daily business, guides our planning into future.

Approved by the DCCCD Board of Trustees on December 16, 2003.

The DCCCD and Innovation

The Dallas County Community College District is a member of the League for Innovation in the Community College. The League is comprised of 19 outstanding community colleges and districts throughout North America. The League Alliance includes more than 700 community and technical colleges from around the world. The League's purpose is to encourage innovation, experimentation, institutional transformation, and the continuing development of the community college movement internationally. Membership commits the District to research, evaluation and cooperation with other community college districts. The goal is to serve the community with the best educational programs and to make a positive difference in the lives of students. See http://www.league.org/welcome.htm for more information about the League for Innovation.

Commonly Used Terms & Abbreviations

Academic Advisor: A member of the college staff who helps students set educational goals and select courses to meet those goals.

Add: During any single semester to enroll in additional course(s) after the registration period, only if the course is available and has not met more than twice.

Admission: A person wishing to enroll must complete an application, be accepted and receive acknowledgement of acceptance from the Admissions Office before registering for classes. An application can be acquired online at www.dcccd.edu

Audit: Enrollment in a credit course without receiving academic credit.

Career & Technical Courses: Courses that lead to a Certificate or Associate in Applied Sciences Degree in a technical or occupational program. These courses are designed to aid the student in developing entry-level skills to be used in the job market. Consult an advisor regarding transferability if you plan to attend a four-year institution.

Catalog: The book containing course descriptions, certificate, and associate degree requirements, and general information. The DCCCD Catalog can be located on the web at www.dcccd.edu.

Class schedule: A booklet that is published prior to each semester listing classes, sections, dates, times, instructors' names and meeting places. This booklet is utilized by students in preparing personal class schedules each semester.

College-Based Distance Learning Class: A College-based Distance Learning Class has a portion of the instructional contact hours delivered at a distance, with occasional college-based instructional requirements, i.e. testing and review sessions. Most student services are delivered on campus. College-based Distance Learning Classes are offered using one or more of the distance learning course delivery formats.

College Level Math: Requires a student to have successfully completed two years of high school algebra and acquire an appropriate assessment score at the DCCCD standard, a standard which is higher than the state's TSI standard, or successfully complete Developmental Mathematics 0099 or Developmental Mathematics 0093 with a grade of C or better. Other math prerequisites may be required.

Common Course Numbers: Beginning in Fall 1995, the Common Course Number became the official number of the course. This same Common Course Number is being used for the same course by a number of colleges throughout Texas to help students identify how a course will transfer. However, the lack of a Common Course Number does not necessarily mean a course will not transfer.

Concurrent enrollment: (a) Enrollment by the same student in two different colleges of the DCCCD at the same time; (b) Enrollment by a high school student in one of the DCCCD colleges while still enrolled in high school; (c) Enrollment by a student in two courses in the same semester; (d) Enrollment in both a college of the DCCCD and another college or university at the same time (e) Enrollment in both credit and continuing education courses at the same time.

Core: The 48 prescribed hours of a 61-hour degree plan that a student must successfully complete in order to receive an Associate in Arts/Associate in Sciences Degree.

Course Load: The number of hours or courses in which a student is enrolled in any given semester.

Credit: The numerical value assigned to a course (see "credit hours/semester hours.")

Credit hours/semester hours: The unit of credit earned for course work. Each college course is worth a certain number of credit or semester hours. This number is determined by the type of class and the number of hours per week it meets. For example, a three-credit-hour class (English, history, etc.) meets three hours per week during the fall/spring semester; a four-credit-hour class (science, languages, etc.) meets six hours per week. Check the Catalog or the current Class Schedule for the value of any course you wish to take.

Credit/non-credit: Credit classes are those that award academic credit and may apply toward a degree. Non-credit classes do not apply toward a degree and are usually offered as continuing education courses.

DCCCD: Dallas County Community College District. The district is composed of Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, and Richland Colleges. These colleges are all subject to the policies established by the DCCCD Board of Trustees.

Dallas TeleCollege Virtual Class: Courses offered through Dallas TeleCollege are defined as "virtual classes." A Dallas TeleCollege virtual class requires that all instruction and student services be delivered at a distance with no on-campus requirements. Dallas TeleCollege virtual class sections are numbered 9000-level. Virtual class sections may be offered using the online course or Telecourse Plus distance learning course delivery formats. A course offered through Dallas TeleCollege is the equivalent of the same course offered by all colleges of the DCCCD.

Developmental Studies Courses: Courses that develop prerequisite skills in reading, writing, and mathematics. Because of the nature of these courses, the credit earned will not count toward graduation requirements and may not be transferred to colleges outside the DCCCD.

Distance Learning: Distance learning courses are offered in a variety of formats. Each format requires a unique set of technologies essential to successful course completion.

Dropping a Course: The act of officially withdrawing from a particular course without penalty before a specified date. See the Academic Calendar in this catalog for "Last Day to Withdraw." It is the student's responsibility to drop a course by the date published. Effective with the Fall 2004 Semester, students may have to pay a higher rate of tuition for the third or more times they attempt a course. Students should take care in dropping a course as any future retake of that course may result in a higher rate of tuition.

Dual credit: Credit earned for both high school and college via concurrently enrolled high school students.

eConnect: eConnect is a web application that allows you to search, register and pay for your credit classes, view your grades and access your financial information online. You must meet certain eligibility criteria to register on-line. All students are eligible to pay for credit classes and access your financial information using eConnect.

Electives: Courses that do not count toward a major but are required for most college degrees. Electives are selected for personal interest, skill development, or to increase one's knowledge or understanding. Consult with an advisor before deciding upon electives.

Flexible-entry course: A course beginning and ending on dates that are different from the regular semester. This is also referred to as "flex-entry" or "short semester." Consult the Class Schedule for further information.

Former student: One who has not attended a college of the DCCCD in the past year.

Full-time student: A student who is enrolled for at least 12 credit hours during a semester or for six credit hours during a summer session. The student may be enrolled in one or more colleges of the DCCCD as long as the total number of hours meets the full-time requirement.

GPA: Grade Point Average. Two different ways of computing a GPA are utilized. For further explanation, see Grades & Transcripts.

Grade points: See Grades & Transcripts.

Grades: See Grades & Transcripts.

Lab hours: The number of hours a student spends each week in a laboratory or other learning environment.

Lecture hours: The number of hours a student spends each week in a classroom other than a laboratory.

Live-Interactive Television Course: The live-interactive television course uses one-way video and two-way audio. Each class is a live cable broadcast. Tapes are not available for these courses. Students must view class at broadcast times. See the Cable Broadcast Schedule in the distance learning pages printed in the College's Class Schedule. Students must have access to a participating cable television system. Students may interact during the live class with the faculty by telephone, placing a call to a voice bridge system. The course may include college-based requirements including orientations, testing and review sessions. Call the Distance Learning Hotline for more information about participating cable systems, (972)-669-6400 or if outside Dallas, toll-free: 1(888)-468-4268. Only college based distance learning classes may utilize the live-interactive television course delivery format.

Major: The subject or field of study in which the student plans to specialize. For example, one "majors" in Automotive Technology, Business, etc.

Online Courses: Online courses are delivered using only computers and computer peripherals. Students are required to have reliable Internet access and the latest version of an Internet browser software. The online classroom is used to deliver instruction and facilitate interactions among faculty and students.

Part-time student: A student who is enrolled for less than 12 credit hours during a semester or less than six credit hours in a summer session. The student may be enrolled in one or more colleges of the DCCCD as long as the total number of hours meets the part-time requirement.

Performance grade: A grade of "A," "B," "C," "D" or "F". This does not include the grades of "W", "I," "E" or "WX". See Grades & Transcripts for more on grades and grade point averages.

Prerequisite: A requirement that must be met before registering for a specified course. For example, the prerequisite for English 1302 is the successful completion of English 1301. A prerequisite may be another course (high school or college) or an appropriate assessment score.

Probation: A warning for a student whose academic work or behavior is unsatisfactory. Students on academic probation may be suspended if their academic performance does not improve.

Registration: The official process for enrolling in courses. This involves selecting classes with the help of an advisor, completing all registration forms and paying fees. Check the College's Class Schedule for registration dates.

Registration Number: A number indicating the course, day/evening, hour, room number and name of instructor for a particular course.

Semester: A term denoting the length of time a student is enrolled in a specific course. For example, there are two long semesters (fall and spring) that last approximately 16 weeks. There are two summer sessions or "semesters" (Summer I and Summer II) that last approximately 12 weeks.

Syllabus (Syllabi): An outline for a course of study. Students usually receive a syllabus from the instructor at the beginning of each course.

Technical/Occupational Courses: Courses that lead to a Certificate or Associate in Applied Sciences Degree in a technical or occupational program. These courses are designed to aid the student in developing entry-level skills to be used in the job market. Consult an advisor regarding transferability if you plan to attend a four-year institution.

Tech-Prep: An educational process where the college and the public high school districts cooperatively develop and implement a planned sequence of course work to prepare students for technologically advanced careers. Tech Prep programs are endorsed and approved by the Texas Education Agency (TEA) and the Texas Higher Education Coordinating Board (THECB). Through the Tech Prep process students earn college credit while in high school and advance to college programs after graduation.

Telecourse: The telecourse allows the student to work and learn independently, with college-based requirements including orientations, testing and review sessions. The course includes a pre-produced video series with print materials. Class interaction is offered through the telephone, fax, and mail. Students may view video lessons either through a local cable system, by purchasing videocassettes or viewing them on campus, or by purchasing videostreaming.

Telecourse Plus Courses: The Telecourse Plus course incorporates the use of video and the online classroom. The course includes a pre-produced video series with print materials. Students may view video lessons either through a local cable system, by purchasing videocassettes or viewing them on campus, or by purchasing videostreaming. Students are also required to have reliable Internet access and the latest version of Internet browser software for the online instruction.

Telephone registration: Touch-tone telephone registration is available during registration for those who meet eligibility criteria. The telephone number for touch-tone telephone registration is 972-613-1818.

Transfer courses: Courses that are designed to transfer to other colleges and universities. Students need to consult with a registration advisor or check on college website about the transferability of specific courses. Because a course will transfer does not mean it will apply toward a specific major or degree at a four-year college or university.

Transcript: An official copy of a student's academic record that can be obtained through the Admissions Office. An official transcript must have the seal of the college affixed and the signature of the Registrar.

TSI: Texas Success Initiative; See TSI and Assessment.

Withdrawal: The act of ending enrollment in classes. A student withdrawing must go through a formal procedure. It is the student's responsibility to withdraw officially by the appropriate date. See the Academic Calendar in this catalog or in the College Class Schedule for the "Last Day to Withdraw." Effective with the Fall 2004 Semester, students may have to pay a higher rate of tuition for the third or more times they attempt a course. Students should take care in withdrawing from a course as any future retake of that course may result in a higher rate of tuition.

Getting Started

How to Enroll

1. Complete an Application for Admission. Applications are also available from any Admissions Office and on the Internet at https://www1.dcccd.edu/stuapp/.
2. Submit all of the following with your Application for Admission:

- Proof of Texas residency (for those who wish to be considered residents for tuition purposes,
- Scores from college entrance exams (SAT, ACT) taken in the last five years,
- Scores from the Texas Assessment of Academic Skills Program (TAAS) taken in the last three years,
- Scores from the Texas Assessment of Knowledge and Skills (TAKS) taken in the last three years,
- Approved Texas Success Initiative (TSI) program test scores from ACCUPLACER, ASSET, COMPASS, or THEA (Texas Higher Education Assessment). TASP scores will still be honored even though the TASP test is no longer made available.
- GED certificate (required for students who taken the GED exam,
- Official transcripts from high school are recommended for students with no college experience,
- Official transcripts from all colleges previously attended (required for students with college experience).

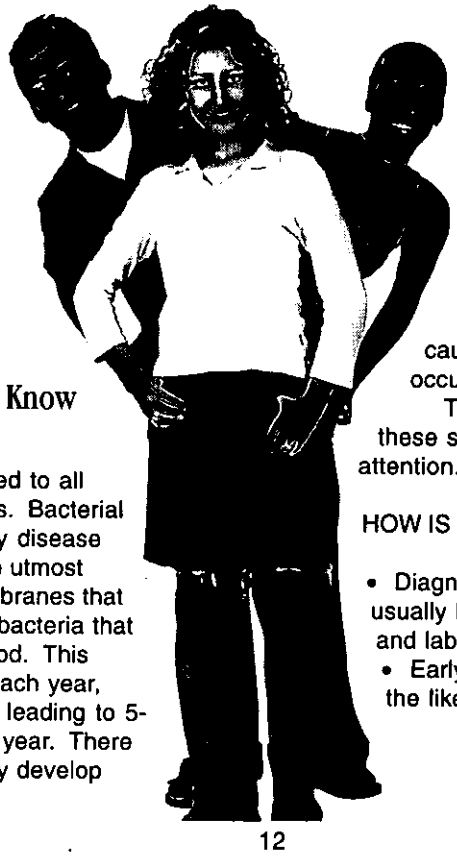
After you are admitted, but prior to registration, you must either present scores from ACCUPLACER, ASSET, COMPASS or THEA (Texas Higher Education Assessment).

If you are TSI (Texas Success Initiative) exempt or TSI waived, you are still required to meet all course prerequisites. Currently, the colleges of the DCCCD offer ACCUPLACER and ASSET state approved assessment instruments. Please see your advisor to determine your testing requirements.

Please refer to the college credit class schedule for registration dates.
"Extended" registration opportunities may be limited.

Immunizations

The college does not require proof of immunizations for admission to most programs. However, all prospective students should have adequate immunization for bacterial meningitis, diphtheria, rubeola, rubella, mumps, tetanus and poliomyelitis (See Texas Department of Health's Recommended Adult Immunization Schedule.) Some health-related programs require specific immunizations prior to admission; that information is outlined in student orientations for those programs.



Important Information You Need To Know About Bacterial Meningitis

This information is being provided to all new college students in the state of Texas. Bacterial Meningitis is a serious, potentially deadly disease that can progress extremely fast - so take utmost caution. It is an inflammation of the membranes that surround the brain and spinal cord. The bacteria that causes meningitis can also infect the blood. This disease strikes about 3,000 Americans each year, including 100-125 on college campuses, leading to 5-15 deaths among college students every year. There is a treatment, but those who survive may develop severe health problems or disabilities.

WHAT ARE THE SYMPTOMS?

- High fever
- Severe headache
- Rash or purple patches on skin
- Vomiting
- Light sensitivity
- Stiff Neck
- Confusion and sleepiness
- Nausea
- Lethargy
- Seizures

There may be a rash of tiny, red-purple spots caused by bleeding under the skin. These can occur anywhere on the body.

The more symptoms, the higher the risk, so when these symptoms appear seek immediate medical attention.

HOW IS BACTERIAL MENINGITIS DIAGNOSED?

- Diagnosis is made by a medical provider and is usually based on a combination of clinical symptoms and laboratory results from spinal fluid and blood tests.
- Early diagnosis and treatment can greatly improve the likelihood of recovery.

HOW IS THE DISEASE TRANSMITTED?

- The disease is transmitted when people exchange saliva (such as by kissing, or by sharing drinking containers, utensils, cigarettes, toothbrushes, etc.) or come in contact with respiratory or throat secretions.

HOW DO YOU INCREASE YOUR RISK OF GETTING BACTERIAL MENINGITIS?

- Exposure to saliva by sharing cigarettes, water bottles, eating utensils, food, kissing, etc.
- Living in close conditions (such as sharing a room/suite in a dorm or group home).

WHAT ARE THE POSSIBLE CONSEQUENCES OF THE DISEASE?

- Death (in 8 to 24 hours from perfectly well to dead)
- Permanent brain damage
- Kidney failure
- Learning disability
- Hearing loss, blindness
- Limb damage (fingers, toes, arms, legs) that requires amputation
- Gangrene
- Coma
- Convulsions

Get an early start... Don't wait until the last minute to apply and register.

CAN THE DISEASE BE TREATED?

- Antibiotic treatment, if received early, can save lives and chances of recovery are increased. However, permanent disability or death can still occur.
- Vaccinations are available and should be considered for:
- Those living in close quarters
- College students 25 years old or younger
- Vaccinations are effective against 4 of the 5 most common bacterial types that cause 70% of the disease in the U.S. (but does not protect against all types of meningitis).
- Vaccinations take 7-10 days to become effective, with protection lasting 3-5 years.
- The cost of vaccine varies, so check with your health care provider.
- Vaccination is very safe - most common side effects are redness and minor pain at injection site for up to two days.
- Vaccination is available at Dallas County Health Department, phone 214-819-2000.

HOW CAN I FIND OUT MORE INFORMATION?

- Contact your own health care provider
- Contact Student Health Center at:
  Brookhaven —972-860-4195
  Cedar Valley —972-860-8277
  Eastfield —972-860-7190
  El Centro —214-860-2113
  Mountain View — 972-860-8699
  North Lake — 972-273-3170
  Richland — 972-238-6135
- Contact your local or regional Texas Department of Health office at 817-264-4551
- Contact web sites: www.cdc.gov/ncidod/dbmd/diseaseinfo and www.acha.org

Student Identification

When you apply, you are asked to furnish a Social Security number. This number ensures the accuracy of your student records. If you do not have a Social Security Number, or do not choose to use the Social Security Number, the college will assign you a student identification number other than your Social Security Number. Each student will be assigned a student identification number. It is your responsibility to report any changes in your name, address, or email address to Admissions Office.

Admission Requirements

If you wish to be classified as a resident and have the benefit of paying lower tuition than non-residents, you must prove you lived in Texas for the 12 months immediately prior to the semester in which you enroll. If you cannot provide proof of residency, you will be classified as a non-resident and required to pay non-resident tuition. For specific information about required documentation, contact the Admissions Office.

Some admission requirements vary depending on a variety of factors. Determine which one or more of the following categories best describes you, then read the corresponding information below:

- First time student
- Student concurrently enrolled in high school & DCCCD
- High school student enrolled in dual credit programs
- Transfer student
- Former student
- Undocumented student who is a resident of Texas
- International student

First time students

You may apply as a beginning freshman if you meet *one* of these standards:

- You are a graduate of an accredited high school.
- You are a graduate of an unaccredited high school and are 18 years of age or older.
- You earned a General Education Diploma (G.E.D.).
- You are at least 18 years of age and do not have a diploma or G.E.D (may be admitted by individual approval).
- If you are under the age of 18, are no longer enrolled in high school of any kind, and do not have a diploma or a G.E.D., you may be admitted by *one* of the following:
- A written recommendation of the principal or superintendent of the last high school you attended, *or*
- Show results indicating you have the ability to benefit from the college's programs through performance on an assessment test associated with the Texas Success Initiative (TSI) program. These tests are the ACCUPLACER, ASSET, COMPASS or Texas Higher Education Assessment (THEA). ACCUPLACER and ASSET are available at the college.
- If you are 16, did not graduate from an accredited school, but did graduate from a non-accredited high school, or were schooled in a non-traditional setting (i.e., home-schooled), you may be admitted if you meet *all* of the following conditions:

- Present a written recommendation of the principal or superintendent of the last school you attended, or TSI approved test results indicating you have the ability to benefit from the college's programs; *and*
- Present a notarized record of the high school equivalent work completed and the date of successful completion; *and*
- Complete the enrollment agreement noting you understand and accept that academic freedom and the collegiate environment is supported in all courses within the college, *and*
- Agree to limitations on conditions of admission established by the college.

After you are admitted, but prior to registration, you must have test scores on file from a TSI approved test.

Students Concurrently Enrolled in High School and the College

If you are still enrolled in high school you may be admitted under the following conditions:

- If you have completed your junior year in an accredited high school, you may be admitted with your high school principal's written recommendation. You must also present scores on one of the following tests: ACCUPLACER, ASSET, COMPASS or Texas Higher Education Assessment (THEA), with results indicating your ability to complete college-level work. ACCUPLACER and ASSET are available at the college. Generally, you may take no more than two courses each semester. The college-vice president or designate will have a conversation with prospective students under the age of sixteen (16) and their parents so that expectations of college readiness issues of the students, parents, and college are clarified. These issues will be considered in determining readiness for college level course work.

- If you have not completed your junior year at an accredited high school, you may be admitted upon meeting *all* of the following conditions:
  - Submit your high school principal's written recommendation;
  - Present scores on ACCUPLACER, ASSET, COMPASS, or Texas Higher Education Assessment (THEA) with results indicating your ability to do college-level work;
  - Receive approval from the college Vice President of Instruction or designate. Upon approval, you may take no more than two courses each semester. However, if you meet specific conditions, you may be permitted to enroll for three courses.
- The college-vice president or designate will have a conversation with prospective students under the age of sixteen (16) and their parents so that expectations of college readiness issues of the students, parents, and college are clarified. These issues will be considered in determining readiness for college-level course work.

- If you are enrolled in non-accredited high schools or educated in a non-traditional setting (i.e., home-schooled) and have completed the equivalent of the junior year (16 units) in high school, you may be admitted by meeting *all* the following conditions:
  - Provide a notarized record of the school subjects completed (consistent with the Texas Education Agency minimum requirements);
  - Present scores on ACCUPLACER, ASSET, COMPASS, or Texas Higher Education Assessment (THEA) with results indicating your ability to do college-level work;
  - Complete the enrollment agreement noting you understand and accept that academic freedom and the collegiate environment is supported in all courses within college;
  - Agree to limitations on conditions of admission. You may take no more than two courses each semester. However, students meeting specific conditions may be permitted to enroll for three courses.
  - Receive approval from College's Vice President of Instruction or designate.
- The college-vice president or designate will have a conversation with prospective students under the age of sixteen (16) and their parents so that expectations of college readiness issues of the students, parents, and college are clarified. These issues will be considered in determining readiness for college-level course work.

- If you are enrolled in non-accredited high schools or educated in a non-traditional setting (i.e., home-schooled) and have not completed the equivalent of the junior year (16 units) in high school, you may be admitted by meeting all the following conditions:
  - Provide a notarized record of the school subjects completed (consistent with the Texas Education Agency minimum requirements);
  - Present scores on ACCUPLACER, ASSET, COMPASS, or Texas Higher Education Assessment (THEA) with results indicating your ability to do college-level work;
  - Complete the enrollment agreement noting you understand and accept that academic freedom and the collegiate environment is supported in all courses within the college.
  - Agree to limitations on conditions of admission. You may take no more than two courses each semester; *and*
  - Receive approval from the Vice President of Instruction or designate.
- The college-vice president or designate will have a conversation with prospective students under the age of sixteen (16) and their parents so that expectations of college readiness issues of the students, parents, and college are clarified. These issues will be considered in determining readiness for college-level course work.

- High school students are generally not admitted into developmental courses unless a contract for such services exists between the college and the school.
  Most financial aid programs are available only to students who have either graduated from high school or have a G.E.D. Please see the Financial Aid section of the catalog.

High School Students Enrolled in Dual Credit Programs

Dual Credit Programs are instructional partnerships between a public school district, a private secondary school or a home school and the college. Course credit is provided to high school students for both high school and college credit. College credit may be for certificate or associate degree programs. Financial Aid is generally limited to those who have either graduated form high school or have a G.E.D.

Eligibility requirements for Dual Credit:

- To enroll in courses for an associate degree or level-two certificate (TSI eligible) program, you must present a passing score on the ACCUPLACER, ASSET, COMPASS or Texas Higher Education Assessment (THEA) in at least one area (reading, writing, or math) as deemed applicable by the college for the intended course in which you wish to enroll. ACCUPLACER and ASSET are available at the college. If you are exempt from TSI, you are also exempt from local assessment for the purposes of dual course credit. Public school students wishing to enroll in level–one certificate (TSI waived) programs must have met TAAS/TAKS standards by passing all sections of the exit-level TAAS/TAKS or through end-of-course exams.
- High school students are generally limited to enrolling in two dual credit courses per semester. You may be permitted to enroll in more than two courses if recommended to do so by your high school principal or appropriate home school "official" *and* under one of the following conditions:
- Achieve a minimum GPA of 3.00 on at least two college courses taken in previous semesters; *or*
- Prove you have passed all sections of TSI tests; or
- Prove your eligibility to be TSI exempt based upon TAAS, TAKS, ACT, or SAT as approved by the Texas Higher Education Coordinating Board. (Note: these score standards are often altered by the THECB and the currently approved scores must be used.)
- High school students must meet all appropriate admissions criteria to the college.
- High school students must fulfill all prerequisite requirements to enrolling in a dual credit course.

The college-vice president or designate will have a conversation with prospective students under the age of sixteen (16) and their parents so that expectations of college readiness issues of the students, parents, and college are clarified. These issues will be considered in determining readiness for college-level course work.

Transfer Student

If you wish to transfer college credit, you are eligible for admission for enrollment from an accredited collegiate institution as defined in the *Acceptance of Credit in Transfer* section (next) if you meet the following conditions:

- You must present a complete transcript bearing the seal and signature of college/university official of each institution attended. Transcripts must be submitted before you enroll and should include the previous admission record and evidence of honorable dismissal. If you do not submit transcripts prior to enrolling, you can be blocked from a number of courses that require taking certain prerequisites. Transcripts received become the permanent property of the college. If you have earned a baccalaureate and/or graduate degrees from accredited colleges and universities, you may submit a copy of a college/university diploma in lieu of transcripts. However, transcripted documents of prerequisites for specific courses must still be provided. If you are transferring from another college, you are not at liberty to disregard your collegiate record by applying as a beginning student. The college reserves the right to review academic credentials and/or transcripts from other higher education institutions for the purposes of evaluating the acceptability of credits. If you do not report all accredited college/university course work, you will be subject to disciplinary action, including expulsion and possible loss of credit for subsequent course work taken at the college.
- You must meet the minimum academic standards of the college. If another institution enforced scholastic withdrawal or suspension, and you meet the minimum academic standards of the college, you may petition for admission to the designated school official or admissions committee. Admission may be provisional, and credit hours and course work may be limited.
- You must meet all TSI requirements, as follows, after you are admitted:
- If you are transferring from another Texas public college or university, you must present ACCUPLACER, ASSET, COMPASS, or THEA scores if you wish to enroll in any college-level coursework. If you are TSI exempt, you are still required to meet course prerequisites. (TASP scores will still be honored even though the TASP test is no longer made available) *and*
- If you are transferring from a private and/or out-of-state college or university, you must present assessment scores associated with the Texas Success Initiative (TSI) program. See TSI section in the catalog.

Acceptance of Credit in Transfer

Credit for courses in which a passing grade ("D" or better) has been earned may be transferred to the college from colleges and universities accredited through one of the following associations: *Middle States Association of Colleges and Schools/Commission on Higher Education *New England Association of Schools and Colleges *North Central Association of Colleges and Schools *Northwest Association of Colleges and Schools/Commission on Colleges *Southern Association of Colleges and Schools/Commission on Colleges *Western Association of Schools and Colleges/Accrediting Commission for Senior Colleges *Western Association of Schools and Colleges/Accrediting Commission for Community and Junior Colleges

It is the college's responsibility not to transfer credits received from any United States institution not so accredited except where signed agreements between the college and other institutions exist. However, if you have gained proficiency through completing coursework from non-accredited institutions, you may receive college credit through credit-by-

examination and, in some circumstances, credit by experience. Appropriate Dallas County Community College personnel will complete course-by-course evaluation as needed for degree or program planning. The institution will inform transfer students of the amount of credit that will transfer prior to the end of the first academic term in which they are enrolled. Once the student has been notified that the credits have been evaluated, the student may look at the results at http://econnect.dcccd.edu

Individual courses transferred will not be posted to the student's record. Official transcripts from all higher education institutions must be on file in the Registrar's Office. Generally, the college will not accept junior and senior level coursework as transfer credit unless there is an approved articulation agreement with the specific four-year college or university. Credits earned through other education programs—such as credit-by-examination, military experience, and the U.S. Armed Forces Institute—are reviewed by the Registrar and credit may be granted if applicable. You must submit all official transcripts from all higher education institutions and a request for a degree plan evaluation to the Registrar's Office before an evaluation can take place. Any questions concerning the validity of the document(s) will result in the need to have an official transcript(s) sent directly from the other institution(s) to the Registrar's Office. If you are admitted with a grade point deficiency, you cannot graduate until you have cleared the deficiency by earning additional grade points.

Texas Success Initiative (TSI) questions? See your college TSI advisor or go online to www.thecb.state.tx.us

Academic Forgiveness Policy

In keeping with SB1321 passed into legislation in 1993, any Texas state resident may elect not to have the college utilize college credits on courses which are ten (10) years or older. If you elect this option, no college courses or credits ten (10) years or older will be evaluated for credit. You may not selectively choose courses ten (10) years or older to be utilized. This provision does not relieve you from notifying the college of attendance at previous institutions nor of the need for you to submit transcripts indicating all previous course work attempted. If you elect this option, you must notify the Registrar's Office when you submit your Application for Admission. You must have all official transcripts on file before meeting with a designated official to review all official college transcripts before the Academic Forgiveness Policy is granted. **The Academic Forgiveness Policy does not apply toward eligibility issues for federal financial aid.**

Former Students

If you were formerly enrolled in this college or any college of the DCCCD, but have not attended a DCCCD college for more than one year, you must update your Application for Admission. If you have unsettled financial debts or your record is blocked for any other reason at this or any DCCCD College, you will not be allowed to register until the record is cleared.

Undocumented Student who is a Resident of Texas

Texas State Law states that you can be admitted to the college and be considered a resident of Texas if you resided with a parent, guardian, or conservator at least part of the time while you attended a public or private high school in Texas and met all the following conditions:

- Graduated from a Texas public or private high school or received the equivalent of a high school diploma in Texas;
- Resided in Texas for at least three years as of the date you graduated from high school or received the equivalent of a high school diploma;
- Have not registered as an entering student at any college or university prior to the Fall Semester of 2001, and
- Sign the affidavit provided by the college that states you will file an application to become a permanent resident at the earliest opportunity you are eligible to do so.

The Matricular Consular I.D. Card can be utilized as an I.D. for admissions purposes. Students who are undocumented and of Mexican decent are eligible to apply for the Matricula Consular I. D. Card. To read more about this card, go to http://www.sre.gob.mx/dallas/english/idcards.htm.

International Students

The college is authorized under federal law to enroll non-immigrant students carrying valid visas. International students are admitted once all admission requirements are complete. If you are an international student seeking F-1 visa status, you must:

- Contact the college to request international student admission information;
- Provide an official TOEFL (Test of English as a Foreign Language) score of 530 or higher on the paper/pencil version or a TOEFL score of 197 or higher on the computerized version to meet the English proficiency requirement for college level classes. Intensive English students are recommended to have at least 430 or higher on the paper/pencil version of TOEFL or 117 or higher on the computerized version of TOEFL. The TOEFL requirement may be waived for the intensive English programs of the DCCCD through approved methods as outlined by the college. If you meet one of the following criteria, you will be excused from the TOEFL requirement for admissions to college level courses:
  - You are a graduate of an accredited U.S. college or university; or
  - You are a native speaker of English from a country in which English is the primary language of the majority as documented by the Cambridge Encyclopedia of Languages. See international admissions advisor for list of approved countries);or
  - You have an official transcript from an accredited college or university in the United States showing a grade of C or better for English 1301 or the equivalent; or
  - You have an institutional TOEFL score of 530 or higher on the paper/pencil version or TOEFL score of 197 or higher on the computerized version from the University of North Texas, the University of Texas at Arlington, or University of Texas at Dallas; or

* You have successfully completed the final level of an intensive English program of the DCCCD; or
* You can present documented completion of the final level of an intensive English language program that is approved by the DCCCD through an established agreement.

- Show documented evidence of sufficient financial support for the academic year,
- International students must provide official written medical proof of freedom from tuberculosis through either a negative Mantoux tuberculin skin test or chest X-ray that was given in the United States within the last one (1) year. Out-of-country students must undergo testing for freedom from tuberculosis upon arrival in the United States before registration in classes is allowed. The DCCCD does recommend that all prospective students have adequate immunization for bacterial meningitis, diphtheria, rubeola, rubella, mumps, tetanus and poliomyelitis (see Texas Department of Health's Recommended Adult Immunization Schedule).
- Submit official transcripts from each high school, college or university previously attended with a minimum of "C" average;
- Fulfill all admission requirements before the deadline designated by the college for international students and receive approval for admission from international admissions advisor.
- In addition to the requirements stated above, if you are an international student wishing to transfer from another U.S. institution, you must also:
  * Present documentation indicating valid non-immigrant status;
  * Provide official transcripts or documented proof verifying that you are "in-status" and have been pursuing a full course of study during the term immediately preceding the transfer from the institution last authorized by INS for attendance. International students are subject to the requirements of the Texas Success Initiative (TSI) program.
- Upon admission, students must present all original immigration documents including a valid I-94 arrival/ departure record and an unexpired passport to be copied and kept on file. F-1 students must receive and secure the Form I-20AB from each new school attended. F-1 students must enroll in a minimum of 12 credit hours and maintain full-time enrollment during each regular semester in order to maintain visa status. It is strongly recommended that F-1 students obtain health insurance for the duration of their studies in the college. After admission, international students must present TSI scores unless otherwise exempt. If adequate English proficiency is not demonstrated through this assessment, placement in additional English language and/or Math courses will be required.

Evaluation of Foreign Credentials

Coursework completed at colleges and universities outside the United States will be considered for transfer on an individual basis. All foreign credentials submitted to the college must include the original plus a certified English translation.

An official course-by-course evaluation of foreign credentials must be completed before transfer credit will be considered. You, the student, are responsible for arranging for the course- by-course credential evaluation. A partial list of acceptable professional evaluation services is available at the Admissions Office and the International Student Advisor's Office. You, the student, are expected to pay all costs of translation and/or evaluation of foreign credentials.

Evaluations of foreign credentials completed by individuals and/or by professional evaluation services are subject to review and approval by the head of Admissions and/ or the college Registrar.

Texas Success Initiative (TSI) Program

After you are admitted, but prior to registration, you must either present scores from an assessment test associated with the Texas Success Initiative (TSI) program or be exempt. See exemptions from TSI Requirements in this section to determine if you are exempt or waived from TSI requirements. Assessment is not used to determine admission except for students wishing to enroll in "special admissions" programs.

The Texas Success Initiative (TSI) Program is required by state law to ensure students enrolled in Texas public colleges possess the academic skills needed to perform effectively in college-level coursework. TSI includes a testing component designed to identify and provide information about your reading, writing, and math skills. You are expected to consult with the college TSI Coordinator in order to meet the TSI requirements. It is your responsibility to be aware of all TSI regulations. For more information, visit www.thecb.state.tx.us/

TSI Requirements

Effective fall 2003 the Texas Higher Education Coordinating Board (THECB) implemented the Texas Success Initiative (TSI) for Texas public institutions of higher education, a program to replace the former TASP program. It is the intent of the Texas Higher Education Coordinating Board that Texas public institutions of higher education use the flexibility and responsibility of TSI rules to improve individualized programs to ensure the success of students in higher education. The Dallas County Community College District (DCCCD) makes every effort to ensure that students have equal opportunity for success in their academic coursework. In order to facilitate their college readiness for such coursework, the District assesses students with a TSI required assessment instrument and places them based on their assessment results. DCCCD students must be assessed on TSI Reading, Writing and Math. TSI Standards in Reading, Writing and Math must be met with required course prerequisites.

TSI Assessment Instruments

TSI approved test instruments are ACCUPLACER, ASSET, COMPASS and Texas Higher Education Assessment (THEA), formerly known as TASP. Even though the TASP test is no longer administered, previous TASP scores will continue to be honored as directed by the THECB.

The colleges administer ACCUPLACER or ASSET, both of which are TSI state approved assessments.

Exemptions/Waivers

You must have TSI assessment scores on file prior to enrolling for college-level courses. If you meet any of the following conditions, you are exempt or waived from the TSI requirements.

1. For a period of five years from the date of assessment, a student who is tested and performs at or above the following standards is exempt: (Scores for exemption must be attained in one sitting.) DCCCD course prerequisite requirements will be maintained.
   ACT: English = 19, Math = 19, Composite = 23
   SAT: Verbal = 500, Math = 500, Combined = 1070
2. For a period of three years from the date of assessment, a student who is tested and performs on the Texas Assessment of Academic Skills (TAAS) with minimum, scaled scores of 1770 (Writing), 89 (TLI-Reading), and 86 (TLI-Math) is exempt. Since the TAAS test is administered over several days, students who miss a day of testing due to illness or emergency are allowed to make up the missed sections of the test and have the aggregate results count as a single sitting of the test. DCCCD course prerequisite requirements will be maintained.
3. For a period of three (3) years from the date of testing, a student who is tested and performs on the **Eleventh grade exit-level** Texas Assessment of Knowledge and Skills (TAKS) with a minimum scale score of 2200 on the math section and a minimum scale score of 2200 on the English Language Arts section with a writing subsection score of at least 3, shall be exempt from assessment required under this title for those corresponding sections. DCCCD course prerequisite requirements will be maintained.
4. A student who has graduated with an associate or baccalaureate degree from a regionally accredited institution or from a recognized international institution and submits appropriate documentation of degree and official transcript is exempt. DCCCD course prerequisite requirements will be maintained.
5. A student who transfers to the DCCCD from a regionally accredited private or independent institution of higher education or a regionally accredited out-of-state institution of higher education and who has satisfactorily completed at least 3 hours college-level core-related coursework with a grade of "C" or better is exempt. The transferred college-level core-related coursework will be evaluated to determine which component area(s) reading, writing or math will have been met. An official transcript must be submitted. DCCCD course prerequisite requirements will be maintained.
6. A student who has previously attended any accredited institution of higher education and has been determined to have met readiness standards by that institution is exempt. An official transcript must be submitted. DCCCD course prerequisite requirements will be maintained.
7. A student who is enrolled in a certificate program of one year or less will be **waived** of TSI requirements (Level-One certificates, 42 or fewer semester credit hours). DCCCD course prerequisite requirements will be maintained.
8. A student who is serving on active duty as a member of the armed forces of the United States, the Texas National Guard, or as a member of a reserve component of the armed forces of the United States and has been serving for at least three years preceding enrollment is exempt. DCCCD course prerequisite requirements will be maintained.
9. A student who on or after August 1, 1990, was honorably discharged, retired, or released from active duty as a member of the armed forces of the United States or the Texas National Guard or service as a member of a reserve component of the armed forces of the United States is exempt. DCCCD course prerequisite requirements will be maintained.
10. A non-degree-seeking or non-certificate-seeking student is **waived** from TSI requirements. DCCCD course prerequisite requirements will be maintained.

Minimum Passing TSI Standards

Students who meet the TSI State standard for reading and writing will be able to enroll into college level courses that require college level readiness in reading and writing skills. Students who meet the minimum TSI State standard for math must still score at a higher level to meet college level readiness standard as required for enrolling into college level math. The Texas Higher Education Coordinating Board acknowledges that colleges and universities can require a higher TSI cut score for enrollment into college level math courses since the TSI State standard for mathematics does not meet the college level math readiness standard (see grid below). Level II Certificates and Associate in Applied Sciences degrees that do not require college-level math will have the passing standard for mathematics as required by the state's TSI math readiness standard. Associate in Arts, Associate in Sciences, Associate in Applied Sciences, and Level Two Certificates that require college level math will have the passing standard for mathematics as required by the state's TSI math standard plus successful completion of **required** DCCCD course prerequisites or by appropriate test score (see grid below). The DCCCD will use the following minimum passing standards to determine a student's readiness to enroll in freshman-level academic coursework:

Instrument	Reading	Writing WS=writing sample	State TSI Math standard for degrees not requiring math nor college level math	DCCCD TSI standard for degrees requiring college level math
ACCUPLACER	78	80 w/WS=5, OR	63	Ele Alg (M2)=69, AND Intermd Alg (CLM)=41
THEA	230	220	230	270
ASSET	41	40 w/WS=5, OR WS=6	38	Ele Alg (M2)=38, AND Intrmd Alg (M3)=41
COMPASS	81	59 w/WS=5, OR	39	Algebra=70

ADVISEMENT AND PLAN FOR ACADEMIC SUCCESS

For each student who fails to meet the minimum passing standards, the DCCCD shall:

- Advise the student regarding developmental education necessary to ensure the readiness of that student in performing freshman-level academic coursework.
- Provide a plan, working with the student, for academic success, which shall include developmental education and may include provisions for enrollment in appropriate non-developmental coursework.
- Each plan for academic success shall:

  * Be designed on an individual basis to provide the best opportunity for each student to succeed in performing freshman-level academic coursework.

  * Provide to the student a description of the appropriate developmental education considered necessary to ensure the readiness of that student to perform freshman-level academic coursework.

  * Provide to the student an appropriate measure for determining readiness to perform freshman-level academic coursework, which shall be a grade of "C" or better in the terminal course, or appropriate scores on developmental education exit exams.

Students with Disabilities

The DCCCD shall consider all federal laws pertaining to individuals with disabilities when assessing and advising such students. The Disability Services Office on each DCCCD campus will identify and provide, on an individualized basis, appropriate accommodations for assessment of students with disabilities. The Disability Services Office will also determine, in conjunction with campus TSI coordinators, when a student with a learning disability has completed remediation requirements to the satisfaction of the institution and "met" TSI standards. Such determination will be based on, among other factors, appropriate and sufficient documentation of a student's disability.

DETERMINATION OF READINESS TO PERFORM FRESHMAN-LEVEL ACADEMIC COURSEWORK

The DCCCD shall determine when a student is ready to perform freshman-level academic coursework on an individual basis according to the needs of the student. As indicators of readiness, the DCCCD institutions shall consider, as appropriate:

- Performance in developmental education by earning a grade of "C" or better in the highest level of remediation for each failed area;
- Performance in appropriate non-developmental coursework;
- Performance on an approved assessment instrument (described in "Assessment Instruments" above);
- Performance on appropriate developmental exit exams used by the institution; and
- Performance in core-related courses transferred in from other accredited institutions of higher education, met by earning a grade of "C" or better.

TSI Retest Requirements

In compliance with Section 4.59 (c), a student is required to retake an assessment instrument after successfully completing all developmental education if the student did not initially perform at or above the following scores:

Instrument	***Reading Comp***	***Writing Skills***	***Mathematics***
ASSET	35	35 (objective)	Ele Alg = 30
COMPASS	64	44 (objective)	Algebra = 23
ACCUPLACER	61	62 (sentence skills)	Ele Alg = 42
THEA	201	205	206

TSI Retest Options

In extenuating circumstances, a student may retake an assessment instrument after waiting at least forty-eight hours after initial testing. The student must submit a written appeal to the Director of Advising to retest. Upon official notification and if approved, the student must take the re-test within two weeks of the approval and prior to enrolling in classes.

Additional institutional re-testing with ACCUPLACER, ASSET, or Quick THEA, to determine the student's readiness to perform freshman-level academic coursework, shall be allowed once per term district wide, starting in the next term after the initial term of enrollment.

DCCCD may require students to pay for re-testing services by fall 2004.

COURSE PREREQUISITES

All courses in the DCCCD core curriculum and other courses require documented college-level readiness in the appropriate area before enrollment. In compliance with the work of the Curriculum Committees for courses, the DCCCD catalog will identify, and the Course Master will regulate, prerequisites for these courses. No student shall be exempt or waived from prerequisites without evidence of academic readiness. Students who have met all of their TSI standards, course prerequisite requirements, and all other graduation requirements will be awarded their certificate or degree. The DCCCD transcript will indicate a student's readiness in reading, writing and mathematics.

Transferring Assessment Scores

If you take a TSI approved assessment test, accumulate any collegiate hours, and later transfer to another Texas public college or university, the receiving institution shall honor your officially transcripted scores. If you transfer from another Texas public college or university to this college, the college will honor your officially transcripted TSI approved assessment scores.

TSI Assistance

The college TSI Coordinators can assist you with information about TSI requirements:

- Brookhaven College: Brenda Dalton (972) 860-4677
- Cedar Valley College: Carolyn Ward (972) 860-8204
- Eastfield College: Jennie Banks (972) 860-7028
- El Centro College: Jim Handy (214) 860-2073
- LeCroy Center: Lakendra Higgs (972)-669-6417
- Mountain View College: Kathy Taylor (214) 860-8557
- North Lake College: Deena Reeve (972) 273-3127
- Richland College: Teddy Krekula (972) 238-6115

Additional TSI information can be found at the Texas Higher Education Coordinating Board's web site: www.thecb.state.tx.us.

And remember TSI rules are always subject to change. For the latest TSI information, see the college TSI Coordinator.

Money Matters

Tuition

Tuition is the dollar amount a student pays for his or her academic instruction. It is based on credit hours and place of legal residence. Tuition rates are subject to change, without notice, by DCCCD's Board of Trustees and by the State of Texas.

Category of Tuition	*Dallas County Residents*	*Other Texas Residents (Out of County Residents)*	*Out of State/ Out of Country*
Full Tuition	$30 per credit hour with a $30 minimum	$50 per credit hour with a $50 minimum	$80 per credit hour with a $200 minimum

Texas residents, who own property subject to ad valorem taxation by the DCCCD, or dependents of such persons, may pay tuition at the rate of residents of Dallas County. If a senior citizen (person 65 years or older) who resides in or owns property subject to ad valorem taxation in Dallas County enrolls in credit courses, DCCCD colleges will waive a maximum of six hours tuition each semester or summer session if space is available.

An individual who has moved to Texas and enrolled before having resided here for 12 months immediately preceding registration, and his or her dependents, may be entitled to pay the tuition required of Texas residents. Such an individual 1) must be an employee of a business or organization that is part of Texas' economic development and diversification program, and 2) must file with the college a letter of intent to establish residency in Texas.

Residency

The residency status of each student is determined during the admissions process, based upon documentary evidence available to make that decision. If the college later determines that a student was not entitled to resident status at the time of his or her registration, the student shall pay the college the amount he or she should have paid as a non-resident. If the student fails to pay as required, he or she is not entitled to receive a transcript or to receive credit for the courses taken while falsely registered as a resident student.

State law requires that students sign an oath of residency. The oath of residency is not and may not be substituted for documentary evidence.

Provided they established legal residence in the state of Texas, the county of residence for a student under 18 years of age is the county in which his or her parents or legal guardian resides. Students who are 18 years of age and older are deemed to be residents of the county in which they reside.

Students less than 18 years of age whose family resides in another state or whose family has not resided in Texas for twelve months immediately preceding the date of registration are classified as out-of-state residents. Students 18 years of age or older who have not been residents of the state twelve months following their 18th birthdays or for the twelve months immediately preceding the date of registration are also classified as out-of-state residents.

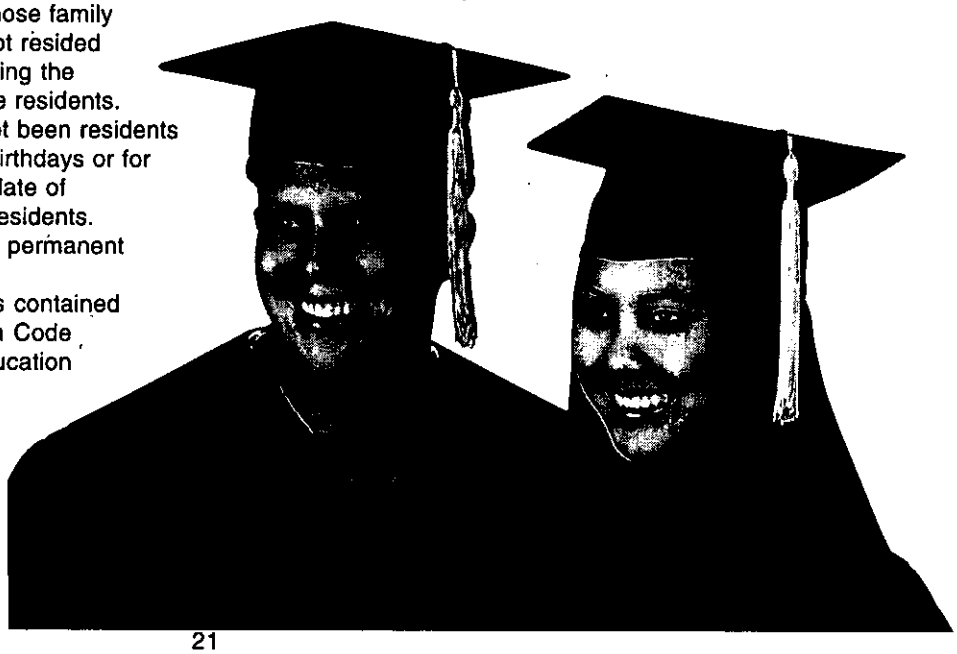
A foreign national on any other than a permanent resident visa must pay out-of-country tuition.

The descriptions of residency statuses contained above are generally applicable. The Education Code (Section 54.052), rules of the Texas Higher Education Coordinating Board, and judicial and/or administrative interpretations specifically govern residency status. In the case of conflict between the above-noted descriptions and the latter authorities, the latter shall govern. Questions concerning residency should be directed to the admissions office.

Tuition Installment Pay Plan (TIPP)

Students may elect to pay tuition in installments during the fall and spring semesters. The following conditions apply.

- A nonrefundable, $15 charge is due when the installment plan is initiated, which must be before the first day of classes.
- Tuition for flexible-entry courses may not be paid in installments unless registered for prior to the official certification date of the term in which the pay plan is initiated.
- Course credit may be denied if payment in full has not been made by the end of the semester.
- A promissory note must be signed when the first payment is made.
- If courses are dropped, the refund (if any) is applied to the balance due.
- If courses are dropped and no refund is due, the balance must still be paid in full.



- A $10 late charge is applied to a late payment (maximum of $20 per pay plan).
- Payment due dates and amounts are ½ before the official institutional first day of classes, ¼ before start of the 6th class week, and the final ¼ before start of the 11th class week.

Reciprocal Tuition Agreements
(See next page for chart)

HOPE Scholarship and Lifetime Learning Tax Credits

The Taxpayer Relief Act of 1997 (TRA) provides education tax incentives in the form of the Hope Scholarship Credit and the Lifetime Learning Credit. These benefits allow taxpayers to reduce their federal income tax based upon qualified tuition and fees paid, assuming the taxpayer meets TRA requirements.

The Hope Scholarship Credit is for students who are enrolled at least half-time in one of the first two years of post-secondary education and are pursuing an undergraduate degree, certificate or other recognized credential. The Lifetime Learning Credit is available to qualifying individuals who may not otherwise qualify for the Hope Scholarship. For more information about these education tax incentives, call the Internal Revenue Service at 1-800-TAX-1040 or visit their Web site at www.irs.gov.

For purposes of filing tax returns, 1098-T forms indicating amount of tuition paid and financial aid received during the tax year are mailed to taxpayers by January 31 of each year. There is a telephone number on the form to call if any of the information appears incorrect. Students may view their 1098-T online after January 31 through the web site www.1098t.com

Tuition Rebate Program

Students who graduate with a baccalaureate degree from a Texas public university may qualify to receive $1,000 from the baccalaureate-granting institution if they meet the following criteria:

- Must have enrolled in a Texas public institution of higher education in fall 1997 or thereafter;
- Must have been a resident of Texas and entitled to pay in-state tuition at all times while pursuing the degree;
- Must have received a baccalaureate degree from a Texas public university; and
- Must have **attempted** no more than three hours in excess of the minimum number of semester hours required to complete the degree in the catalog under which graduated. Hours attempted includes transfer credits, course credits, earned exclusively by examination, courses that are dropped after official census date, and for-credit developmental/remedial courses. The college has academic advisors to help students plan their course of study at the community college to maximize their chances of qualifying for this rebate when they graduate from a university with a baccalaureate degree.

Refund of Tuition

To be considered officially withdrawn from one or more classes and eligible for a refund, a student must have the appropriate form with the college within the refund period. Refunds for flexible-entry classes are prorated based on the number of weeks each class spans. Refund period for fall, spring, and summer semesters are the following:

Amount of Refund	***Fall and Spring (16-week semesters)***	***Summer (5-week semesters)***
100%	Prior to the 1st class day of the semester	Prior to the 1st class day of the semester
70%	During the first 15 class days of the semester	During the first 5 class days of the semester
25%	During the 16th-20th class days of the semester	During the 6th class day of the semester
None	After the 20th class day of the semester	After the 6th class day of the semester

The amount of refund may be reduced for federal financial aid recipients who have not completed 60% of the enrollment period for which they have received aid. The 1st class day is the official institutional first day of classes; it may precede a student's actual first day of class. Refunds are based on net charges for classes dropped and added if occurring prior to the date the college must report official enrollment.

Refunds are made to credit cards (if tuition was paid by credit card) or by check mailed to the student's address on file with the college. Refunds are not issued in cash. Tuition paid directly to the college by a sponsor, donor, employer or scholarship is refunded based on the terms stipulated by the funding source. Processing a refund check normally requires a minimum of one month from the date of approval.

A student who wishes to appeal for a greater refund may do so by submitting a petition and explanation of any extenuating circumstances to the college refund petitions committee. If the committee approves the petition, the college will notify the student and issue a refund accordingly.

Reciprocal Tuition Agreements

Courses in certain associate degree programs offered by DCCCD colleges may be taken by Collin and Tarrant County residents at in-county tuition rates (see table below). Residents of Cooke, Denton, Ellis, Grayson, Hill and Weatherford counties may also take courses in the construction technology program at in-county tuition rates.

Program	*DCCCD College(s)*	*In-county Tuition*	
		Collin	*Tarrant*
Air Conditioning and Refrigeration—Residential	Cedar Valley,	•	
	Eastfield	•	
Air Conditioning and Refrigeration Technology	Eastfield	•	
Apparel Design	El Centro	•	•
Auto Body Technology	Eastfield	•	
Automotive Technology	Brookhaven,		
	Cedar Valley, Eastfield	•	
Automotive Technology—			
Dealership-sponsored Technician	Brookhaven, Eastfield	•	•
Aviation Technology: Air Cargo • Aircraft Dispatcher		•	
• Airline Management • Fixed Base Operations		•	
• Professional Pilot	Mountain View	•	•
Biotechnology	El Centro, Mountain View	•	•
Commercial Music	Cedar Valley	•	•
Construction Management and Technology	North Lake	•	
Construction Technology	North Lake	•	•
Diagnostic Medical Sonography	El Centro	•	•
Digital Imaging Technology	Eastfield	•	
Echocardiology Technology	El Centro	•	•
Educational Personnel	El Centro, Richland	•	•
Electrical Technology	North Lake	•	•
Electronic Commerce	Brookhaven, Eastfield		•
	Mountain View, North Lake,		•
	Richland		•
Engineering Technology	Richland		•
Food and Hospitality Service	El Centro	•	•
Horticulture	Richland	•	•
Hospitality Management	North Lake		•
Interior Design	El Centro		•
International Business and Trade	Richland	•	•
Invasive Cardiovascular Technology	El Centro	•	•
Medical Laboratory Technology	El Centro		•
Medical Staff Services	El Centro	•	•
Medical Transcription	El Centro	•	•
Mortgage Banking	North Lake	•	•
Pattern Design	El Centro	•	•
Plumbing and Pipefitting Construction	North Lake	•	•
Radiologic Sciences	Brookhaven, El Centro	•	
Social Work Associate—Generalist	Eastfield	•	
Substance Abuse Counseling	Eastfield	•	
Travel, Exposition and Meeting Management	Richland	•	•
Veterinary Technology	Cedar Valley	•	•
Video Film Technology	North Lake	•	
Visual Communications	Brookhaven		•
Vocational Nurse	El Centro	•	•
Welding Technology	Mountain View	•	

Returned Checks

When the Business Office receives returned checks, it notifies students in writing. You must pay the amount of the check plus a check fee with cash or a cashier's check within the time limits prescribed by the notification letter you receive. (A returned check fee of $20 will be charged for each returned item except in case of bank error. If the bank for any reason returns a check for tuition, the College Business Office may submit the check to the Justice of the Peace for appropriate legal action and collection. The Vice President of Student Development may also implement disciplinary procedures. You may be dropped from courses if check(s) are returned. Additionally, you may be blocked from further enrollment until all costs are paid.

Additional Charges

Some classes may use facilities or services for which students pay a third party, such as for scuba gear rental or bowling alley admission. The college levies a service charge for administering tests that establish credit-by-exam; the charge may change without prior notice. Out-of-state students who receive all instruction remotely through DCCCD's "Virtual College" pay $55 per credit hour for distance learning services. (This charge may be adjusted depending on contracted services with distance learning partners.) Graduating students pay for cap and gown rental. The cost for auditing a course is the same as if taking the course for credit.

Dallas County Community College District

Tuition—All Semesters

Semester Credit Hours	DALLAS COUNTY Registration Tuition	OUT-OF-DISTRICT Registration Tuition	OUT-OF-STATE OR COUNTRY Registration Tuition
1	$30	$ 50	$200
2	60	100	200
3	90	150	240
4	120	200	320
5	150	250	400
6	180	300	480
7	210	350	560
8	240	400	640
9	270	450	720
10	300	500	800
11	330	550	880
12	360	600	960
13	390	650	1,040
14	420	700	1,120
15	450	750	1,200
16	480	800	1,280
17	510	850	1,360
18	540	900	1,440
19	570	950	1,520
20	600	1,000	1,600

*A distance learning fee of $55 per credit hour, a minimum of $165 for a 3-credit-hour course, **shall be charged only to out-of-state students** who receive all services remotely through the District's "Virtual College." This fee may be adjusted, depending on contracted services with distance learning partners.*

Please discuss any questions regarding proper tuition classification with admissions office personnel.

The Chancellor shall be authorized to set the fees and charges for specialized services and programs provided by the District colleges. Other special fees may be assessed as new services or programs are developed with special laboratory costs. These fees will be kept to a basic, practical minimum for the program or service involved.

Tuition for all semesters is as follows:

1. **Dallas County Residents** $30.00 per credit unit or a minimum of $30.00
2. **Out-of-District Residents** $50.00 per credit unit or a minimum of $50.00
3. **Out-of-State Residents** $80.00 per credit unit; minimum of $200.00
4. **Out-of-Country Residents** $80.00 per credit unit; minimum of $200.00

The charge for auditing a course is the same as taking the course for credit.

Effective Date: Summer, 2003

Provided they established legal residence in the State of Texas, a student's county of residence is the county in which their legal guardian resides, if they are under 18 years of age. Students 18 years of age and older are deemed to be residents of the county in which they reside.

"Out-of-State Residents" are defined to be students of less than 18 years of age, living away from their family and whose family resides in another state or whose family has not resided in Texas for twelve months immediately preceding the date of registration; or students 18 years of age or older who have not been residents of the state twelve months subsequent to their 18th birthdays or for the twelve months immediately preceding the date of registration.

The description of resident and non-resident status contained above are generally applicable, but the determination of residence status for tuition purposes is specifically governed by the provisions of V.T.C.A. Education Code, Section 54.052, the rules and regulations of the Coordinating Board, Texas College and University System, and judicial and/or administrative interpretations thereof. In the event of conflict between the above-noted descriptions and the latter authorities, the latter shall govern.

A foreign national on any other than a permanent resident visa must pay out-of-country tuition and fees.

The tuition schedule above is subject to change without notice by action of the District Board of Trustees or the State of Texas.

By law (TEC: section 4, subchapter B. chapter 54; sec. 54.0521, 1985), the STATE OF TEXAS requires that the OATH OF RESIDENCY be signed.

The law states that if the institution later determines that the individual was not entitled to be classified as a resident at the time of the individual's registration, the individual shall pay to the institution the amount the individual should have paid as a non-resident. **If the individual fails to make a timely payment as required, the individual is not entitled to receive a transcript or to receive credit for courses taken during the time the individual was falsely registered as a resident student.**

THE OATH OF RESIDENCY IS NOT ACCEPTABLE IN LIEU OF DOCUMENTARY EVIDENCE.

Pursuant to the authorization contained in the Education Code, Section 130.0032, the Board authorizes a person who resides outside the District, but is a state resident and who owns property subject to ad valorem taxation by the District, or a dependent of the person, to pay tuition at the rate that applies to a student who resides in the District.

An individual who has come from outside the state of Texas and registered with a college before having resided in the state for a 12-month period immediately preceding the date of registration and his or her dependents are entitled to pay the tuition and other fees required of Texas residents if the individual has located in Texas as an employee of a business or organization that became established in this state as part of the state's economic development and diversification program authorized by the constitution and laws of the this state and if the individual files with the college a letter of intent to establish residency in Texas.

Financial Aid

The colleges of the Dallas County Community College District recognize that many students who wish to attend college do not have the financial resources available to pay the cost of higher education. Each college operates an Office of Financial Aid to assist students seeking a degree or certificate by making their educational goals possible financially. The primary purpose of financial aid is to assist students who, without such aid, would be unable to attend college. The college financial aid office administers various types of financial aid programs including grants, loans, scholarships and part-time employment. To learn more about student financial aid programs, visit www.students.gov (federal programs), www.collegefortexans.com (state programs), and www.dcccd.edu (college, district, and community programs).

No person shall be excluded from participation in, denied the benefits of, or subject to discrimination under any program administered by DCCCD on any basis prohibited by applicable law, including but not limited to, race, color, age, national origin, religion, sex, disability or sexual orientation.

Most financial aid is awarded on the basis of need. In addition, most financial aid programs require annual applications. The Office of Financial Aid will make every effort to assist the student in meeting his/her need using all resources available. Each student has certain rights and responsibilities in the financial aid application process. Therefore, it is important to read all information carefully to ensure compliance with regulations governing receipt and maintenance of financial aid funds. Failure to comply with regulations may result in loss of funding and/or eligibility.

Eligibility Requirements for Financial Aid

In general, a student is eligible for financial aid if he or she meets the following requirements:

- Be a U.S. citizen or an eligible non-citizen;
- Have a demonstrated financial need;
- Be making satisfactory academic progress (as defined by the college) in the course of study;
- Not be in default on a Federal Perkins Loan, Federal Stafford Loan, or Federal PLUS Loan;
- Be enrolled at the college for the purpose of obtaining a degree or certificate;
- Have a high school diploma or G.E.D., or meet special ability-to-benefit requirements;
- Be registered with the selective service if required to do so; and
- Not owe a refund on a Federal Pell Grant or Federal Supplemental Educational Opportunity Grant.

Eligibility Requirements for Texas Residents Who Are Non-Citizens

The Texas State legislature extended eligibility for state student financial aid programs to certain non-citizens in the 2001 legislative session. This legislation is known as HB 1403 or the "Noriega Bill". To receive assistance from state aid programs the student must:

- Have resided with the individual's parent, guardian, or conservator while attending a public or private high school in this state, and
- Have lived in Texas at least three years as of the date of the GED or high school graduation, and
- Have earned the GED or graduated from a public or private high school in Texas, and
- Be registered as an entering student in an institution of higher education not earlier than the 2001 fall semester.

In addition, these individuals must sign an affidavit in the college's admissions office stating that they will apply for permanent resident status when they are eligible.

Do you need financial aid?

The time to apply is right now!

Types of Aid Available

Financial Aid is categorized into two types: Gift Aid and Self-Help Aid. Gift Aid includes grants and scholarships that do not have to be repaid. Self-Help Aid includes Student employment and Student loans. Student loans must be repaid with few exceptions. In all cases, students should make themselves completely familiar with the terms and conditions of financial aid they receive. Brief descriptions of the most common programs are given below. For more detailed information, please visit the websites listed on the previous page. Since most programs have limited funding, it is important to apply as early as possible each year. A list of priority processing dates is listed later in this section. Funds for applications received after these dates may be limited.

Federal Pell Grant

Pell Grants are awarded to undergraduate students who have not earned a bachelor's or professional degree. For many students, Pell Grants provide a foundation of financial aid to which other aid may be added. Eligibility requirements include enrollment for at least 1 credit hour during an eligible enrollment period.

Federal Supplemental Educational Opportunity Grant (FSEOG)

The Federal Supplemental Educational Opportunity Grant program is for undergraduates with exceptional financial need—that is, students with the lowest Expected Family Contributions (EFC). Federal regulations give priority to students who receive federal Pell Grants. Eligibility requirements include enrollment for at least 3 credit hours.

Texas Public Educational Grant (TPEG)

Texas Public Educational Grants are for students enrolled in credit and certain continuing education courses whose educational costs are not met in whole or in part from other sources. TPE Grants may be used to assist students who have demonstrable financial need but may be ineligible for other aid programs. Eligibility requirements include enrollment for at least 3 credit hours.

Toward EXcellence, Access and Success (TEXAS) Grant

TEXAS Grants are for well-prepared, eligible graduates (no earlier than 1998) from public or accredited high schools in Texas. In addition to satisfying general eligibility requirements, recipients of these grants:

A student who:

- Is a Texas resident;
- Has financial need and an expected family contribution (EFC) of no more than $8,500;
- Has applied for any available financial aid or assistance;
- Has not been previously granted a baccalaureate degree;
- Enrolls at least ¾ time in an undergraduate degree or certificate program at a Texas non-profit college or university;
- Has not been convicted of a felony or a crime involving a controlled substance; and
- Graduated from an accredited high school in Texas no earlier than the 1998-1999 school year;
- Completed the recommended or distinguished achievement high school curriculum or its equivalent (1), and
- Enrolls in an eligible Texas college or university within 16 months of high school graduation; OR

A student who:

- Is a Texas resident;
- Has financial need and an expected family contribution (EFC) of no more than $8,500;
- Has applied for any available financial aid or assistance;
- Has not been previously granted a baccalaureate degree;
- Enrolls at least ¾ time in an undergraduate degree or certificate program at a Texas non-profit college or university;
- Has not been convicted of a felony or a crime involving a controlled substance;
- Received his/her first associate degree in May 2001 or later, and
- Enrolls in a higher level undergraduate program within 12 months of receiving the AD.

Academic performance and other requirements must be met for students to receive continuing eligibility.

Toward EXcellence, Access and Success (TEXAS) Grant II (TGII)

The TEXAS Grant II program provides aid to financially needy students enrolled in Texas public two-year colleges. In addition to satisfying general eligibility requirements, recipients of these grants:

A student who:

- Is a Texas resident;
- Shows financial need;
- If applying for a first-time award, has a family contribution of no more than $2,000;
- Registers for the Selective Service or is exempt from this requirement;
- Is enrolled at least ½ time (6 semester credit hours) in the first 30 hours (or their equivalent) in an associate's degree or certificate program at a public two-year college in Texas;
- Has not been granted an associate's or a bachelor's degree, and
- Has not been convicted of a felony or a crime involving a controlled substance.

Academic performance and other requirements must be met for students to receive continuing eligibility.

Leveraging Educational Assistance Partnership Program (LEAP, formerly SSIG) and Special Leveraging Educational Assistance Partnership Program (SLEAP)

LEAP and SLEAP are federally funded programs that provide grant assistance to financially needy students who are Texas residents and who receive state grant funds. Eligibility requirements include enrollment for at least 6 credit hours.

Rising Star Program

Each year, the Rising Star Program makes the following promise to graduating seniors in many Dallas County high schools. If you graduate from high school, demonstrate a modest level of academic potential, and have specific financial need, the DCCCD Foundation, Inc. guarantees you the opportunity to earn an associate's degree or job certification from any of the seven DCCCD colleges. The message that college is possible through the Rising Star program is an important one to send to students in Dallas County. The DCCCD Foundation is building a special endowment to make this a permanent opportunity for elementary and junior high school students who get the message early. Rising Star scholarships cover all direct costs, up to $4,000, for tuition, books, and other charges associated with enrollment at a DCCCD college. For more information, visit www.dcccd.edu/fdn

Academic eligibility requirements for the Rising Star program are 1) graduation from a Dallas County public high school or Dallas CAN! Academy, and 2) ranking in the top 40% of the graduating class OR having at least a "B" average in a standard high school curriculum OR passing the Texas Success Initiative (TSI) approved tests and meeting course prerequisites before enrolling in college classes. Financial eligibility is based on number of people in the household and the annual family income.

Foundation and College Scholarships

Through the generosity of individuals, businesses, foundations, and many community professional and service organizations, the DCCCD Foundation and colleges have an array of student scholarships. Visit the college financial aid office to obtain a complete listing and application, or on the web at www.dcccd.edu/fdn/scholarships/scholarships.html. The colleges of the district have been given the authority and discretion to award Foundation scholarships within the guidelines of the general scholarship and award packaging policies of each school.

Stafford and PLUS Loans

Stafford Loans to students are either subsidized or unsubsidized. A subsidized loan is awarded on the basis of financial need. The borrower is not charged any interest before beginning repayment or during authorized periods of deferment. The federal government "subsidizes" the interest during these periods.

An unsubsidized loan is not awarded on the basis of need. The borrower is charged interest from the time the loan is disbursed until it is paid in full. If the borrower allows interest to accumulate, it will be capitalized—that is, the interest will be added to the principal amount of the loan and additional interest will be based upon the higher amount. The borrower can receive a subsidized loan and an unsubsidized loan for the same enrollment period. A student must be enrolled in at least six credit hours to be eligible to borrow from the Stafford Loan Program.

Students planning to become teachers may be interested in Stafford Loan cancellation for teachers. Borrowers may be able to cancel up to $5,000 of their Stafford Loans if they are teaching in a low-income school. To qualify, the borrower must work as a full-time teacher for five consecutive years in an elementary or secondary school that has been designated as a "low-income" school. The U.S. Department of Education each year designates low-income elementary and secondary schools, and a list of these schools, by year, is posted on the department's website. A full list of qualifying conditions and other information concerning repayment of loans may be found at www.ed.gov/offices/OSFAP/Students/ or from the college financial aid office.

PLUS loans enable parents with good credit histories to borrow for the education expenses of each child who is a dependent undergraduate student enrolled at least half time. The yearly limit on a PLUS loan is equal to the student's cost of attendance minus any other financial aid he or she receives. Eligibility requirements include enrollment for at least 6 credit hours.

Emergency Short-term Loans

The college has limited funds available for short-term loans to meet emergency needs of students. Loans are usually limited in amount, bear no interest, and must be repaid within 60 days of the date of the loan or the end of the term, whichever comes first. A late charge of $10 and collection costs is added for payments made after the due date. To qualify, applicants must be making satisfactory academic progress (as defined by the college) and not have any debts or blocks on their college record.

Tuition Installment Pay Plan

See the "Money Matters" section of this catalog for information about paying tuition in installments.

Part-time Employment

The Federal College Work-Study Program (FCWS) is a need-based financial aid program that provides part-time (not to exceed 18.5 hours per week) employment for eligible students. To be considered, students should indicate their interest in work-study employment on the financial aid application they submit each year. The average wage for the FWCS positions is $7.00 per hour.

The college also provides a limited number of part-time employment opportunities for students who do not demonstrate financial need. In some cases, the college may be able to help students find employment off-campus.

Tuition Exemptions

The State of Texas offers a number of exemptions for various categories of students. For example, exemptions are available to:

- Aid for Dependent children (AFDC) students,
- American (other than U.S.) hemisphere students,
- Blind or deaf students,
- Children of disabled firemen and peace officers,
- Children of prisoners of war or persons missing in action,
- Early high school graduation students,

- Salaried Fire fighters enrolled in fire science courses,
- Foster-care students,
- Highest ranking high school graduate,
- ROTC/National Guard students,
- Senior citizens, and
- Veterans and dependents

For a full list and the criteria for eligibility, visit or contact the Texas Higher Education Coordinating Board at 1-800-242-3062.

Vocational Rehabilitation

The Texas Rehabilitation Commission offers tuition assistance to students who are vocationally challenged as a result of a physically or mentally disabling condition. This assistance is generally limited to students who are not receiving other forms of financial aid. For information, contact the Texas Rehabilitation Commission at 1-800-634-2616.

American Indian/Native American Students

The Bureau of Indian Affairs offers educational benefits to American Indian/Native American students. For information, contact the Oklahoma Area Education Office at 405-945-6051 or 405-945-6052.

Veterans' Educational Benefits

The college assists veterans with completing proper forms and coordinating the certification procedures for monthly benefits administered under the auspices of the U.S. Department of Veterans Affairs (VA). The college veterans' affairs office may also provide information about VA educational benefits and assist with accomplishing enrollment and arranging tutoring services. (The VA website is www.va.gov.)

VA regulations are subject to change without notice. Contact the college veterans' affairs office for information about current regulations and procedures. Direct questions about specific financial benefits to the VA Regional Office at 1-800-827-1000.

Under the Hazlewood Act, certain Texas veterans who have exhausted their educational benefits from the VA can attend Texas public colleges and have tuition waived. To be eligible, the student must:

- Have been a resident of Texas at the time he or she entered the service,
- Have an honorable discharge,
- Must currently be a Texas resident,
- Must have exhausted any federal grant eligibility,
- Not be in default on any federal educational loans.

Financial Aid Application Process

To apply for financial aid in the DCCCD, applicants must complete the following items in a timely manner. In general, all application materials must be fully completed no later than 30 days before registration. Otherwise, the student will be expected to make payment arrangements with the Cashier's Office using personal resources at the time of registration. Late aid applications will be processed after registration for aid as it becomes available. Most scholarship programs have individual deadlines that must be met in order to be considered for an award from that particular scholarship program.

1. The *Free Application for Federal Student Aid* (FAFSA) is available upon request from the college financial aid office or from a local high school. Applicants should complete information on themselves and their spouses or parents (if applicable), and obtain the appropriate signatures as outlined in the directions for the FAFSA. The FAFSA can be filed with the government processor in one of the following ways:
   - By mail: This method will require four to six weeks to receive a Student Aid Report (SAR); or
   - By FAFSA on the web: Submitting the FAFSA to the government processor can be done over the Internet. The address to the website is http://www.fafsa.ed.gov. This method can take less than a week for the government to process.
2. Financial Aid awards will be made only after the FAFSA results have been sent to the college by the government processor and the entire financial aid application process has been completed. If a student's record is selected for verification (a review of the FAFSA data), all required documentation and corrected FAFSA information must be received before the application process is complete.
3. An Award Notification Letter is sent to each student who completes the application process and for whom aid eligibility can be determined. The Award Notification Letter contains the names and amounts of the financial aid awards that the student is eligible to receive. The letter also contains important information about restrictions and conditions that can affect the ability of the student to receive the amounts awarded.
4. Financial aid awards will be disbursed by the Business Office of each college according to the regulations of each award program. Please refer to the "Money Matters" section of this catalog for information on how and when aid is disbursed during each award period.

Release of Financial Aid Disbursements

The Business Office of the college cannot disburse financial aid awards until the student is enrolled in an eligible program of study as required by the guidelines of each applicable aid program. Some programs require attendance in all enrolled classes before aid may be released.

In general, aid may be applied to applicable tuition and fees no earlier than ten days prior to the start of classes each semester. Any excess amounts of awards, up to $500, remaining after tuition and fees are paid that can be allowed to pay for textbooks and supplies will be released to eligible students no earlier than ten days prior to the start of classes, also.

The remainder of unpaid awards that are eligible to be released to the student for the semester will be disbursed by the Business Office within fourteen days after the certification date of the semester. Disbursement will be made by a deposit to a student check card or by paper check issued to the student.

Priority Processing Dates

SARS received by (date)	*For the period of*
April 1	The next summer sessions
May 1	The next academic year
October 1	The next spring semester

Continuing students should file a FAFSA as soon as possible after January 1 of each year if they want to receive aid the next academic year.

Class Registration Deadlines

Financial aid programs require enrollment and attendance in class in order for financial aid awards to be paid toward educational expenses. An eligible enrollment is determined by validation that the student is registered in the required number of credit hours and in the correct program of study on the twelfth class day of the semester in which aid is to be paid. The official academic calendar of the college will be used to determine the official date of enrollment. If the student withdraws from the class after aid has been paid, he or she may be required to return a portion of the financial aid received for the term. Please read the following section, "Return of Federal Title IV funds Policy."

Return of Federal Title IV Funds Policy – Effective Date August 21, 2000

Colleges of the Dallas County Community College District return unearned funds received from Federal student assistance programs to the proper program accounts or lenders in accordance with Federal Title IV student assistance regulations, as amended, under 34 CFR, section 668.22(d) of the Reauthorization of the Higher Education Act of 1965, with rules of the Texas Higher Education Coordinating Board and with district board policies.

The student receiving assistance from Federal Title IV programs is required to complete a minimum number of hours for which assistance was received. If the student completely withdraws from school during the semester, or quits attending, but fails to officially withdraw, the student may be required to return the unearned part of the funds which were received to help pay educational expenses for the semester. Liability for return of Federal Title IV funds will be determined according to the following guidelines:

1. If the student remains enrolled and attends class beyond the 60% mark of the semester in which aid received, all federal aid is considered earned and not subject to this policy.
2. If the student completely withdraws from all classes before completing 60% of the semester, a *pro-rated* portion of the federal aid received must be returned to the federal aid programs equal to the percentage of the semester remaining.
3. If the student does not officially withdraw from classes, and stops attending all classes, a *pro-rated* portion of the federal aid received, based on the documented last date of attendance, must be returned to the federal aid programs. If the college is unable to document the last date of attendance, one-half of all federal aid received during the semester must be returned to the federal aid programs.

Return of Federal Title IV funds will be distributed according to statutory regulations. Worksheets provided by the U.S. Department of Education or calculations produced through the Datatel/Colleague Return of Funds (ROF) subroutine will be used to determine the amounts and order of return. If a student's share of the return amount exists, the student will be notified and allowed 45 days from the date of determination to return the funds to the business office of the college for deposit into the federal programs accounts. If the student does not return the amount owed within the 45 day period, the amount of overpayment will be reported to the U.S. Department of Education (USDE) via the National Student Loan Database (NSLDS) and the student will be referred to the USDE for resolution of the debt.

Examples of how this policy is applied are available upon written request to Dallas County Community College District, Office of Financial Aid, 701 Elm Street, Dallas, Texas 75202.

Distance Learning

In most cases, federal and state agencies award financial aid similarly for traditional on-campus and distance education classes. However, students should be careful to adhere to the rules and regulations that apply to distance education where financial aid is concerned. For more information, visit **www.telecollege.dcccd.edu**.

Don't wait until the last minute to apply for financial aid. Early application is essential to ensure all paperwork arrives in the right place at the right time.

Standards for Satisfactory Academic Progress (SAP)

Colleges of the DCCCD are required by law to formulate standards to gauge the progress of students receiving financial assistance through federal, state, or institutional student aid programs by applying both qualitative and quantitative measurements to academic work. [34 CFR 668.16(e)] A maximum time limit for the completion of a degree, a comparison of attempted to completed credit hours, and a minimum cumulative grade point average (CGPA) are used by the DCCCD to measure satisfactory academic progress. Satisfactory progress is reviewed at least once per academic year, at the end of the spring semester. Students who do not meet either the qualitative or quantitative standards at the end of the spring semester will be placed on suspension for the next award year in which they enroll. An exception to this rule is for students who exceed the overall time limits for program completion. Once the maximum time frame is reached, the student is suspended from receiving additional financial assistance to complete that program at the end of that particular academic term.

(Note: Some non-federal student aid programs (i.e., state and private foundations) have specific SAP requirements unique to the individual program. In those instances, the program requirements will supercede the general SAP policy stated here. It is the student's responsibility to understand the requirements of each financial aid program from which aid is received.)

Quantitative Progress

Federal student aid regulations state that student eligibility cannot extend past 150% of the stated length of a student's program of study. Associate degree programs in the DCCCD generally require up to 66 semester credit hours for completion. Therefore, a student who is working toward an associate degree must complete that program within 99 attempted semester credit hours (66 hrs. x 1.5). The maximum time frame for a certificate program would be similarly calculated.

A student's entire enrollment history is considered when evaluating academic progress within the established time frame, whether or not aid has ever been received. An otherwise eligible student may receive financial aid for a maximum of 30 attempted credit hours in developmental/ remedial course work. Once the 30 credit hour maximum is reached, additional developmental credit hours will not be used to calculate the award amount, but will continue to count toward the overall maximum time frame.

As indicated in the above paragraph, at the end of the academic term in which the maximum number of allowed hours has been attempted, the student loses eligibility for financial assistance to complete that program.

A financial aid recipient must also be making progress toward completing his or her program by successfully completing at least a minimum number of the hours attempted. The table below indicates the minimum number of hours that must be successfully completed before the end of the spring semester each year for the applicable enrollment level.

Requirements for Hours Completed

Hours Attempted	*Hours Required to Complete with a Passing Grade*
24 or more	18
18-23	12
12-17	9
6-11	6
5 or less	Must complete all

Courses with a recorded grade or mark of "F", "W", "WX", "E", or "I" are not considered successfully completed. Repeated courses will be included in the total number of attempted enrollments used in measuring the overall time frame for completion of a program. **Only courses attempted within the DCCCD will be considered in measuring the completion rate for academic progress.** Courses transferred from other institutions outside the DCCCD will be considered only for monitoring the overall time frame for completion of a student's program of study.

Qualitative Progress

Each financial aid recipient's academic record is reviewed at the end of the spring semester to measure the student's qualitative academic progress. Students are expected to maintain a minimum cumulative grade point average (CGPA) of 2.00 while they are enrolled within the DCCCD. Only courses attempted within the DCCCD will be considered in measuring the CGPA for academic progress. **The GPA on transfer work will not be considered in computing the CGPA for financial aid satisfactory academic progress.**

A student falling below this minimum CGPA at the end of the spring semester will be placed on financial aid suspension.

Reinstatement Procedures

The college will review academic records at the end of the spring semester each year and determine each student's compliance with SAP. Students who fail to satisfy SAP will be placed on financial aid suspension for the next award year in which they enroll. To regain eligibility, a student must pay the expenses related to enrollment from the personal resources until the student has satisfied the minimum standards of SAP. If a determination is made that the student is qualified for reinstatement, the upgrade status will become effective with the start of the next period of enrollment. Financial aid will be terminated for students who receive three suspensions for failure to meet standards of SAP.

Appeals Procedures

The DCCCD recognizes that students sometimes encounter circumstances beyond their control that can adversely affect their academic progress. Any student subject to suspension of financial aid eligibility may appeal to the Office of Financial Aid for a review of the decision.

The appeal must be made to the director at the college where the student is planning to enroll. The appeal must be submitted in writing and must include an explanation and documentation of the reason(s) why the minimum academic standards required by this policy were not achieved, and that the adversity has been resolved.

All appeals must be attached to an Appeal of Financial Aid Suspension form that can be obtained from the Financial Aid Office. The Financial Aid Officer will review the appeal and the student will be notified by the Financial Aid Office, in writing, within five working days after the appeal decision is made.

All documents pertinent to the appeals process become part of the student's financial aid record. If the petition is denied, the student has the right to request that the appeal decision be reconsidered by the college administrator to whom the financial aid office reports. The decision of the supervising administrator is final. The administrator shall also have the authority to place conditions upon the receipt of any financial aid for those cases in which aid is reinstated.

Students whose financial aid eligibility has been terminated after being suspended for the third time will forfeit their right of appeal and reinstatement to eligibility.

State-Mandated Standards of Satisfactory Academic Progress (TXG-SAP) for the TEXAS Grant

The Texas state legislature has included specific standards of Satisfactory Academic Progress for students receiving TEXAS Grants. As with the general SAP policy, the TXG-SAP has both a quantitative and qualitative standard that must be achieved each year to renew the award. The qualitative standard of 2.50 cumulative grade point average (CGPA) must be met by the end of the second year after the first grant was received. Texas law requires that the CGPA calculation must include all coursework taken for college credit from all institutions from prior semesters regardless of whether financial aid was received during that time. The quantitative standards limit the student to 150 credit hours or 6 years whichever comes first. In addition, the student must successfully complete at least 75% of the hours attempted during the last academic year.

Reinstatement Procedures

Students may appeal to the Office of Financial Aid for reinstatement to the TEXAS Grant Program. If the suspension is due to an insufficient CGPA the student may request in writing that the hours taken in the following summer be included in the calculation. If the new calculation achieves a CGPA above 2.50, and the student is otherwise eligible, then the student may be reinstated to eligibility. If the suspension is due to a deficient completion rate (below 75%), the student must complete a full academic year and attain a completion rate of 75% or better in the following year in order to be reinstated to eligibility.

Students' Rights and Responsibilities

- *You have the right to know...*

- What financial aid programs are available in the Dallas County Community College District
- The deadline for submitting applications for each of the programs.
- How financial aid will be distributed, how decisions on distributions are made, and the basis for these decisions.
- How your financial aid was determined. (Costs for tuition, fees, room, board, travel, books, supplies, personal and miscellaneous expenses are considered in your budget)
- What resources (your current assets, parental contribution, other financial aid, etc.) were considered in the calculation of your need.
- How much of your financial need as determined by the college has been met.
- The details of the various programs in your student aid package.
- What portion of the financial aid you received must be repaid, and what portion is grant aid. If the aid is a loan, you have the right to know the interest rate, the total amount that must be repaid, the payback procedures, and the length of time you have to repay the loan, and when the repayment is to begin.
- How DCCCD determines if you are making satisfactory progress and what happens if you are not.

- *In accepting your responsibilities you must...*

- Complete all application forms accurately and submit them on time to the proper place.
- Provide correct information. In most instances, mis-reporting information on financial aid application forms is a violation of law and may be considered a criminal offense that could result in an indictment under the U.S. Criminal Code.
- Return all additional documentation, verification, corrections, and/or new information requested by either the Office of Financial Aid or the agency to which you submitted your application.
- Be responsible for reading and understanding all forms that you are asked to sign, and for keeping copies of them.
- Live up to all agreements that you sign.
- Perform the work agreed upon in accepting a work/study award.
- Be aware of and comply with deadlines for application or reapplication for aid.
- Be aware of the DCCCD refund procedures.
- Be aware that early withdrawal from the term may result in a *pro rata* reduction of financial aid eligibility. Such a reduction may require that you repay money that you received to attend school.
- Report change in name, address, e-mail address and telephone number to the Office of Financial Aid and Registrar Office.

Registering For College

How to register

When you are admitted, you will receive notification about when you can register for classes. Class schedules made available each semester and summer session outline the courses that are planned. As students register, some class sections reach capacity, making them unavailable to more students. You may select classes available at the time you register.

Registration for specific courses takes place throughout the academic year. Refer Flexible Entry Courses in this section and/or contact the Advising/Registration Offices for additional information.

Follow these steps:

1. After receiving notification that your Application for Admission has been accepted, ask the Admissions Office staff what assessment steps are required for you.
2. Obtain a schedule for the semester or summer session for which you are enrolling. Schedules are available at the college and online.
3. Meet with an advisor to determine the courses you wish to take. You may be eligible for online or telephone registration if you meet specific eligibility criteria. Refer to *Recommended Academic Load* in this section.
4. Register for classes.
5. Pay for your classes by the designated due date on your registration summary.

Assessment Procedures

Our assessment services evaluate your readiness for certain college courses and determine whether you are likely to be successful in those courses. The college offers an assessment and advisement program for entering students that is a required part of the enrollment process.

The assessment program is comprised of several parts. You complete a questionnaire that documents information about your career and work plans, previous academic achievement and other relevant information. Your basic skills in reading, writing and mathematics are also assessed; this information may come from ACT, SAT, previous college-level work or from scores on the standardized tests administered at the college. If you have previously taken any of the Texas Success Initiative (TSI) state approved tests, you will also need these scores. *You should have official copies of ACT, RSAT, SAT, THEA, TAAS, or TAKS scores and transcripts mailed to the Admissions Office or make them available when you apply for admission. It is your responsibility as a student to have these available when you enroll.*

The assessment program provides you and your academic advisor the information you need to make informed decisions. Information about your skills, abilities, career plans, educational background, life experiences and motivation is important in helping you make selections from the many educational options available.

Students may be required to assess by taking one of the TSI state approved assessments prior to enrolling in classes that have prerequisite skills in reading, writing, or math.

The college reserves the right to advise students in the appropriate remediation if assessment results indicate a need for improving skills in reading, writing, and/or mathematics. No student shall be exempt or waived from prerequisites without first evidence of academic readiness.

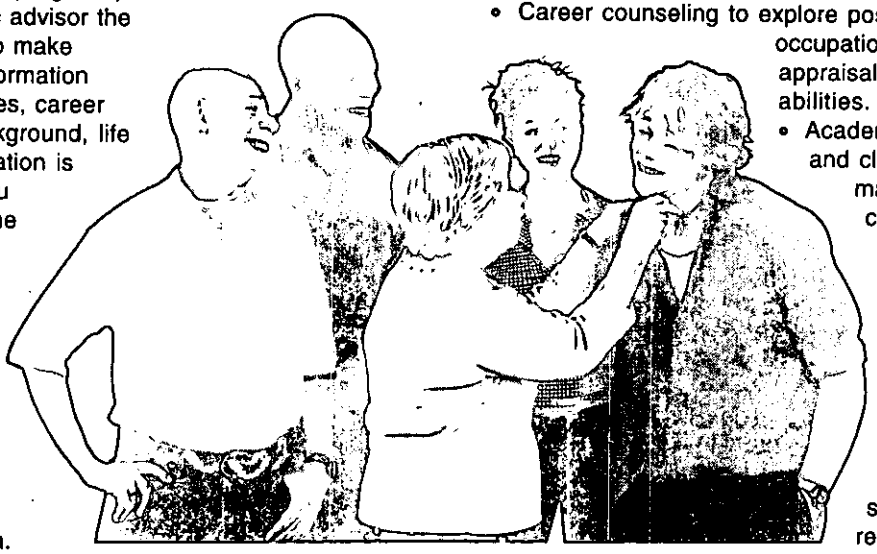
Details of assessment and advisement procedures are available through the college Counseling/Advisement Center or in the college class schedule, published each semester.

Counseling & Advisement Services

The college offers valuable resources in the Counseling/Advisement Center to help you plan each semester of study.

Our counselors and academic advisors can assist you in selecting courses of study, determining transferability of courses, choosing or changing careers, gaining independence, and confronting problems of daily living. Counseling and advising staff provide assistance in the following areas:

- Career counseling to explore possible vocational directions, occupational information, and self-appraisal of interest, personality and abilities.
- Academic advisement to develop and clarify educational plans and make appropriate course choices.
- Confidential counseling sessions to assist you in managing the academic environment and dealing with issues that may hinder success.
- Small group discussions led by counselors focusing on such areas as interpersonal relationships, test anxiety,



and assertiveness. Counselors will consider forming any type of group for which there is a demand.

- Crisis intervention and referral sources to provide in-depth assistance for such matters as legal concerns, financial aid, tutoring, job placement, medical problems, or emotional problems.

Among the Counseling/Advisement Center's resources are computerized transfer guides, a large collection of senior institution catalogs and bulletins, senior college admission application forms, and other specialized brochures and information.

You can also take advantage of several computer resources to help you clarify goals, identify career and occupational interests, and research information about senior institutions.

The college also plans events especially for students who plan to transfer. These activities include College Days where officials from senior institutions visit on campus to talk directly with you, special transfer workshops and seminars, and events designed to assist students in making career decisions. Many other materials are available to help you if you plan to transfer, including Transfer Guides and Course-by-Course Equivalency Guides.

Flexible Entry Courses

In keeping with its commitment to meet individual educational needs, the college offers flexible entry courses. These courses are often self-paced, allowing you to work at your own speed. You should be aware of the time specified by the college that course requirements need to be completed. You should check with the Registrar to determine times for registration in these courses. You must obtain approval to enroll in these courses.

Recommended Academic Load

The maximum academic load is 18 credit hours of course work per semester or five classes plus physical education. You must receive permission from the appropriate college official to carry a heavier load. If you are employed and carrying a full load (12 credit hours or more), it is recommended that you not work more than 20 hours per week. If you work more than 20 hours, you should consider reducing your academic load proportionately.

The recommended load limit for day or evening students who are employed full-time is six credit hours. The recommended load limit in a six-week summer session is six credit hours. For shortened terms, you may not enroll for more credit hours than the total number of weeks the class meets; i.e. for a 3 week term, you may register for no more than 3 credit hours. Contact your college advisor for specific information.

Change of Schedule

You should pay close attention to the days and meeting times for your classes. If you must request a class change, contact the Advising/ Registration Offices during the time specified in the current Class Schedule. No change is complete until it has been appropriately processed through the registration system.

Classification of Students

Freshman:	A student who has completed fewer than 30 credit hours.
Sophomore:	A student who has completed 30 or more credit hours.
Part-time:	A student carrying fewer than 12 credit hours in a fall or spring semester.
Full-time:	A student carrying 12 or more credit hours in a fall or spring semester.

Learner Services

Student Programs and Resources

Recent research in higher education indicates that for many students involvement is an important contributor to academic success. That's why the college plans activities to encourage your involvement in college life.

SPAR staff plans and presents a variety of programs and activities for students and the surrounding community. These programs may include but not limited to lectures, art gallery visits/receptions and performance events to provide students with a stimulating co-curricular education. Programs often are coordinated with the various instructional divisions to provide you with valuable educational experiences. Leadership conferences, retreats, diversity training, and volunteer opportunities offer you opportunities to develop skills that enrich your quality of life.

The institution invites you to take an active role in your college experience. You have many opportunities to become involved in the decision-making processes for the college. You may want to join a student club, participate in student government/ambassador activities, or serve on one of several committees engaging in real decision making for the college. You may be able to become involved regularly in decisions regarding:

- Improvements for an aspect of the college (facilities, services provided, instruction, etc.);
- programming speakers and special events offered to the student body;
- student disciplinary hearings;
- conducting (or completing) surveys and questionnaires designed to gather information about your college experiences; *and/or*
- The selection process of new college administrators.

Assessment/Testing Center

The Assessment/Testing Center offers a variety of testing services that meet the expressed needs of students, staff and the community. Assessment/Testing Centers provide these services:

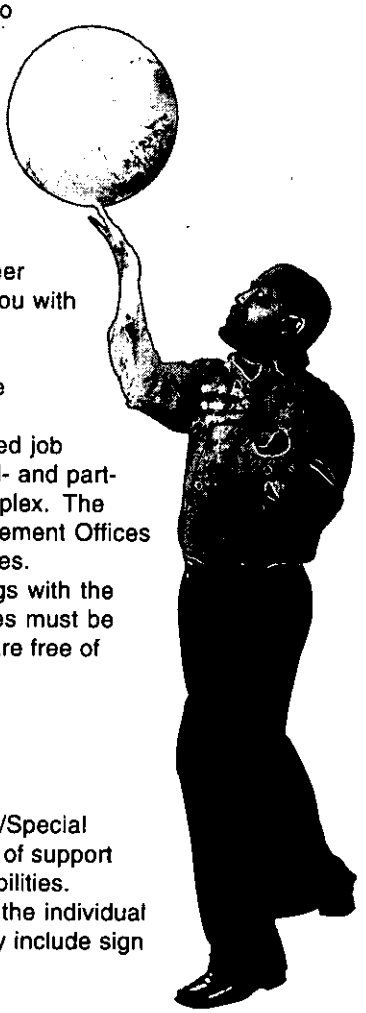
- Academic testing (instructors' tests, make-up exams, self-paced exams and distance education testing)
- Assessment testing that meets both TSI and placement requirements.
- Standardized exams (national and state exam programs such as: ACT, SAT, CLEP, GED, THEA, etc.)
- Psychometric Testing (assessment of personality, vocational interests, aptitude, etc.); you must be referred by a counselor or appropriate faculty member for psychometric testing.

Before taking a test in the one of the Assessment/Testing Centers, you must provide photo identification. Some centers may also require a student identification card. There is a charge for some test services. For additional information, please contact the college Assessment/Testing Center.

The Code of Student Conduct provisions regarding disruptive behavior and/or academic dishonesty apply equally to Assessment/Testing Centers and classrooms. Irregularities will be referred to the proper authorities for disciplinary action.
See the *Code of Student Conduct.*

Career Planning and Job Placement Services

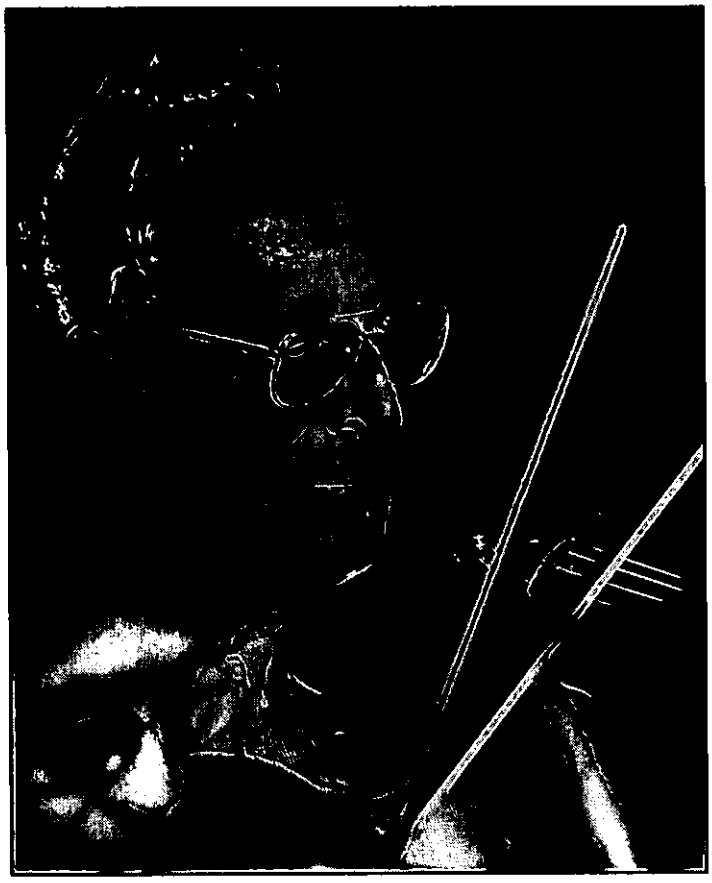
The college provides career planning and job placement services free of charge to students, alumni, former students and those in the process of enrolling. The Career Planning and Job Placement Office may provide opportunities for you to learn job search skills, such as how to establish employment contacts, complete an application, write a resume and cover letter, and interview for a job. In addition, the college may offer services such as career testing and computerized career guidance programs to assist you with choosing a college major and making career decisions.



Job listing services are provided at the college, and it participates in an Internet-based job listing service that contains full- and part-time opportunities in the Metroplex. The Career Planning and Job Placement Offices strictly adhere to EEO guidelines. Employers posting job openings with the college Job Placement Services must be EEO employers. All services are free of charge to you.

Disability Services/ Special Services Offices

The Disability Services/Special Services Offices offer a variety of support services for students with disabilities. Services are coordinated to fit the individual needs of the student. They may include sign



language interpreting, computer-aided real-time translation (CART), note-taking, tutoring, reader/scribe services, use of assistive technology, loan of specialized equipment, and providing large print materials. Academic and career advisement services, special testing arrangements, priority registration, and extensive information and referral services are also available.

Students requesting services are responsible for providing current educational or psychological/medical documentation from a qualified professional verifying the disability and the need for services. New students are encouraged to contact the Disability Services/Special Services Office at least one month prior to registration.

Students with disabilities attending the college have a right to appeal decisions concerning physical and academic accommodations by submitting a written petition to the designated Americans with Disabilities Act (ADA) Compliance Officer of the college.

For additional information, contact the Disability Services/Special Services Office at the college or see http://www.dcccd.edu/access/.

Health Services and Insurance

The Health Center is a multi-purpose facility that promotes health, wellness, and preventive care for the college community. Registered nurses coordinate and provide the health services that include:

- First aid for accident, injury or illness;
- Health information and brochures;
- Some over-the-counter (non-prescription) medicines such as Tylenol, aspirin and antacids;
- Referral information for community health services;
- Selected health education and screening programs;
- Confidential health counseling; and
- A rest area.

Health services are available to current students and staff. You do not need to be sick to come to the Health Center. Health questions and concerns are welcome. Students with chronic health problems should visit the Health Center to discuss any special concerns with the nurse before attending classes or whenever problems arise. No information about your health will be released without your written permission unless required by law.

We recommend that all prospective students have adequate immunization for bacterial meningitis, diphtheria, rubeola, rubella, mumps, tetanus and poliomyelitis. See the **Texas Department of Health's Recommended Adult Immunization Schedule** at https://www1.dcccd.edu/catalog/admiss/immune.cfm

Optional student health insurance, with optional coverage for spouse and children, is available through outside vendors. These limited coverage policies are administered by insurance companies at a cost as outlined by these companies. Students may acquire a list of vendors from their college Health Center, International Student Advisor Office or at https://www1.dcccd.edu/catalog/ss/sd/insurance.htm

Housing

The college does not operate dormitories of any kind nor maintain listings of available housing for students. If you do not reside in the area, you must make your own arrangements for housing.

Library

The college libraries are information centers which support academic transfer programs and technical/occupational programs through classroom instruction and distance learning. Each college library, http://library.dcccd.edu/, maintains a substantial collection of books, journals, and electronic resources on a variety of subjects. Additionally, there are special collections available for career materials, pamphlets, newspapers, popular magazines and technical periodicals. Other resources provided may include slides, tapes, compact discs, computer software, videotapes, films, digital videodisks, links to websites, electronic books, and online databases.

The college librarians orient users to the information environment and introduce them to the tools needed to

navigate an increasingly complex world of information resources. Through orientation and research classes, librarians provide information skills to help the users achieve academic goals.

Willful damage to library materials (or property) or actions disturbing other library users may lead to the loss of library privileges. Damage cases are referred to the appropriate authorities for further action. All books and other library materials must be returned before the end of each semester. Student transcripts will not be issued until all library records are cleared.

College Police Departments

Campus safety is provided within the framework of state law to protect and police buildings and grounds. All state laws apply to the campus community. College Police Department officers are licensed Peace Officers of the State of Texas; they are specifically trained and educated to protect life and both college and personal property. These officers are vested with full authority to enforce all Texas laws and rules, regulations, and college policies, including the Code of Student Conduct.

The college complies with the provisions of the *Campus Security Act of 1990*, Public Law 101-542. Copies of the document for each campus are available upon request through the College Police Department.

Student Organizations

Information about participation in any organization may be obtained through the Student Programs and Resources (SPAR) Office. The development of student organizations is determined by student interest. Categories of organizations include:

- Co-curricular organizations pertinent to the educational goals and purpose of the institution;
- Social organizations to provide an opportunity for you to make friends and establish a sense of community with fellow students;
- Service organizations to promote your involvement in the community; *and*
- Pre-professional and academic organizations to contribute to your career development.

Tutoring Services

The college may provide individual and small group tutoring as an academic support service for students needing extra help with coursework and/or study skills. You should seek these services early in the semester.

Athletics

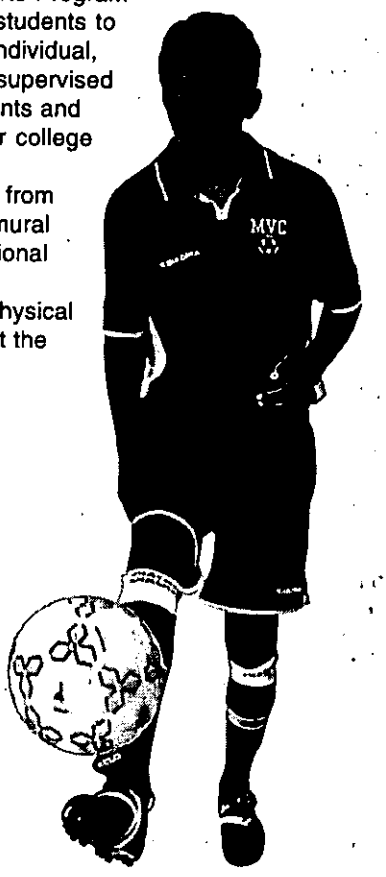
Intercollegiate Athletics

The intercollegiate athletic program provides student athletes opportunities to compete in sports in an educational environment. Bringing together those students with motor skills beyond the level of the college physical education class and/or intramural offerings, the program promotes physical fitness, intellectual development, social interaction, sportsmanship and team commitment.

The athletic program strives to bring together both participants and spectators of diverse ethnic and cultural backgrounds. Participation on athletic teams is voluntary on a non-scholarship basis for women and men meeting requirements established by the Metro Athletic Conference and the National Junior College Athletic Association (N.J.C.A.A.). Most teams are associated with the N.J.C.A.A., and our conference champions compete at regional, district and national tournaments. In the last several years, the college teams have been the N.J.C.A.A. Division III national champion in baseball and numerous sports. For more information regarding eligibility, rules, standards, and sports offered contact the school Athletic Department or Physical Education Office.

Intramural Sports

The Intramural Sports Program provides opportunities for students to participate in a variety of individual, dual and team sports in a supervised recreational setting. Students and employees can enrich their college life, have fun, make new acquaintances and benefit from exercise through the Intramural Sports Program. For additional information, contact the intramural director in the Physical Education Office, or contact the Student Programs and Resources (SPAR) Office.



—Academic Information—

Degree Requirements

The college confers the Associate in Arts Degree, Associate in Sciences Degree, the Associate in Applied Sciences Degree, the Associate of College/University Transfer Degree, Certificates and Fields of Study awards to students who have completed all stated requirements.

If you are seeking a certificate or associate degree, you must submit official transcripts of all previous work attempted before a certificate or degree will be awarded. If you fail to submit official transcripts from other institutions you have attended, you will not receive a degree or certificate.

Students must meet all Texas Success Initiative (TSI) standards in order to receive a degree from the college.

To qualify for a second degree or certificate, you must fulfill the residence requirement and must complete all required courses in the plan for the second degree or certificate.

For any degree or certificate earned in the college a student must earn at least 25% of the credit hours required for graduation through instruction (not credit-by-examination) by the college of the DCCCD granting the award. The degree must be awarded by a college that offers the program in which you majored. The Registrar must approve correspondence work for graduation credit. If you qualify for a degree from more than one college of the DCCCD, you must indicate which college is to award the degree. The following courses will not be counted toward any degree requirements: Courses numbered below 1000, ARTS 1170, MUSI 9176, and DRAM 1170.

Associate in Arts and Associate in Sciences Degrees

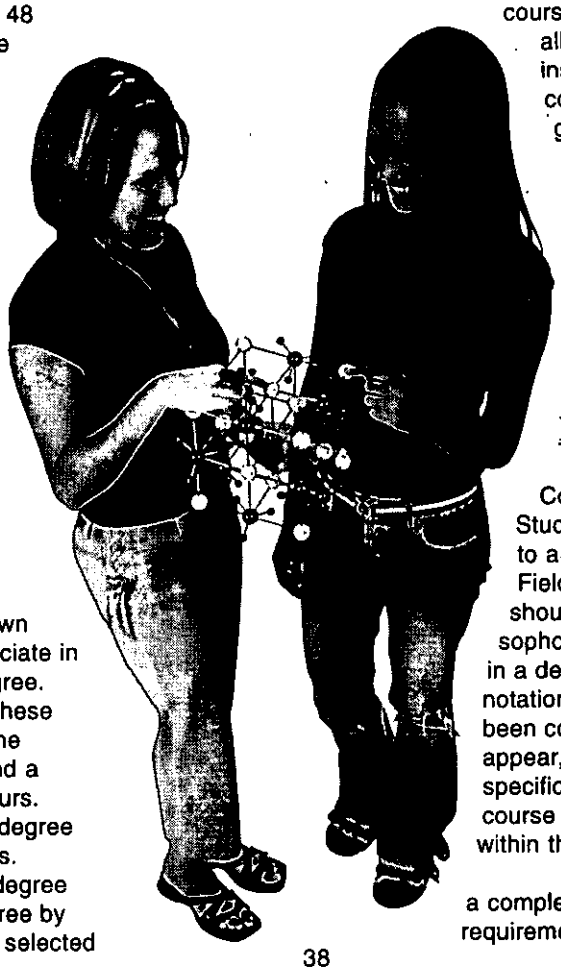
These degrees are designed as the equivalent of the first half of a baccalaureate degree. Both are general plans and may or may not satisfy the requirements of a specific transfer university. Students desiring to transfer should seek one of these degrees after consultation with the college Counseling/Advising Center. However, in keeping with Texas State law, students who complete the 48 hour credits of the core curriculum are assured that the core should transfer to any Texas public college or university; in such instances, the core should be substituted for the core requirements of the receiving institution. Therefore, in pursuing a degree, students are encouraged to complete the entire core within the college. However, care should be taken in the selection of math and science courses to ensure that those courses also meet requirements of the proposed major at the transfer institution.

Students transferring from another Texas public college or university who have completed that institution's core requirements are assured that DCCCD will accept the completion of that core in lieu of its own toward the requirements for the Associate in Arts or the Associate in Sciences degree.

In order to receive either of these degrees, students should complete the college's 48- hour core curriculum and a minimum of 13 additional elective hours. Students should look and follow the degree outline for those degree requirements.

The Associate in Sciences degree differs from the Associate in Arts degree by requiring an additional 3 hours to be selected from a course with the prefix of BIOL, BCIS, COSC, CHEM, MATH, PHYSICS, or GEOL. Students are not eligible to receive both degree titles.

A maximum of four physical education activity hours may be counted as credit toward requirements for graduation. The GPA for graduation is based on the credit earned for all courses taken in colleges of the DCCCD and for all credit which is transferred from other institutions. The following courses will not count toward graduation nor the GPA for graduation: Courses numbered below 1000, ARTS 1170, MUSI 9176, and DRAM 1170.



Students who wish to complete a degree totally through distance learning courses should read the section entitled Distance Learning Program and consult the degree plan outline located elsewhere in this catalog.

Fields of Study

The Texas Higher Education Coordinating Board has created Fields of Study designed to transfer as a block of credit to any Texas public college or university. Such Fields of Study comprise the courses a student should complete at the freshman and sophomore level that will lead to a specific major in a degree. Students' transcripts will include a notation indicating a specific Field of Study has been completed. In order for such a notation to appear, students must successfully complete specific courses within each Field of Study. No course substitutions, other than those shown within the degree plan, will be permitted.

In addition, students may wish to combine a completed Field of Study with the core curriculum requirements to complete the appropriate

Associates degree. In order to do so, students should complete the courses indicated in the degree plans located elsewhere in this catalog. However, care must be taken as in some instances students may have to make a choice between pursuing the degree or the official Field of Study because of the number of hours required. As additional Fields of Study are made available, information may be located on the college web page.

At the time of printing this catalog, the following Fields of Study, or majors, are available:

Field of Study Degrees

- Associate in Sciences Degree with a Field of Study in Business
- Associate in Sciences Degree with a Field of Study in Computer Science
- Associate in Arts Degree with a Field of Study in Criminal Justice
- Associate in Sciences Degree with a Field of Study in Engineering Technology—Computer Engineering Technology
- Associate in Sciences Degree with a Field of Study in Engineering Technology—Electrical Engineering Technology
- Associate in Sciences Degree with a Field of Study in Engineering Technology—Electronics Engineering Technology
- Associate in Arts Degree with a Field of Study in Mass Communications-Advertising & Public Relations
- Associate in Arts Degree with a Field of Study in Mass Communications-Broadcast Journalism
- Associate in Arts Degree with a Field of Study in Mass Communications-Journalism
- Associate in Arts Degree with a Field of Study in Music
- Associate in Arts Degree with a Field of Study in Teacher Preparation for Pre-K - Grade 4
- Associate in Sciences Degree with a Field of Study in Teacher Preparation for Grades 4-8 Certification

Associate in Arts/Associate in Sciences "Emphasis" Degrees

In addition, the college offers a number of "emphasis" degrees in specific majors. An "emphasis" degree is one designed by the college. It includes the core curriculum required in all degrees plus courses within the student's desired major. Students pursuing an "emphasis" degree should work closely with an advisor to ensure all courses will transfer and count toward the major at the selected institution to which the student plans to transfer. An "Articulated Emphasis" degree is one that will transfer to specified universities. As additional Emphasis Degrees are made available, information may be located on the college web page. At the time of printing this catalog, the following Emphasis Degrees are available:

Emphasis Degrees

- Associate in Arts Degree with an Emphasis in Art
- Associate in Arts Degree with an Emphasis in Bilingual Teacher Preparation for Early Childhood Pre-K – Grade 4
- Associate in Sciences Degree with an Emphasis in Bilingual Teacher Preparation for Early Childhood Pre-K – Grade 4
- Associate in Sciences Degree with an Emphasis in Bilingual Teacher Preparation, Grade 4-8
- Associate in Arts Degree with an Emphasis in Early Childhood Education – Grade 4 Teacher Preparation
- Associate in Sciences Degree with an Emphasis in Electrical Engineering
- Associate in Arts Degree with an Emphasis in Humanities
- Associate in Sciences Degree with an Emphasis in Mathematics
- Associate in Arts Degree with an Emphasis in Peace Studies
- Associate in Arts Degree with an Emphasis in Photographic/Imaging
- Associate in Arts Degree with an Emphasis in Teacher Preparation—Teacher Preparation General Education
- Associate in Arts Degree with an Emphasis in Teacher Preparation—Urban Education

Associate in College/University Transfer Degree

Only students who plan to transfer to a private or out-of-state college or university may earn an Associate in College/University Transfer through an individually-negotiated degree plan that incorporates those elements of the Associate in Arts or Associate in Sciences Degree that fall within the student's transfer plan. Students must have completed a minimum of 61 credit hours; earned a grade of "C" or better in English 1301, the selected college level math course, and speech (if required); a grade point average of at least "C" (2.00) based upon GPA (2); and have met all TSI standards (if students are not TSI exempt) to receive this degree. These 61 hours may be earned at any college of the DCCCD and must include:

- History 1301 and 1302 (6 credit hours)
- Government 2301 and 2302 (6 credit hours)
- English 1301 (3 credit hours)
- A **college-level** math course numbered 1300 or above (3 credit hours)
- Either Speech 1311 or 1315 (3 credit hours)
- 3 credit hours to be selected from Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; or Music 1306, 1308, 1309

The remaining hours will be comprised of courses equivalent to those designated by the student's selected private or out-of-state transfer institution as being applicable to the baccalaureate degree being sought. In no case will course prerequisites be waived. Students who qualify for an Associate in Arts or the Associate in Sciences degree will be granted that degree rather than the Associate in College/University Transfer degree. Students who qualify for the Associate in Arts or the Associate in Sciences degree are not eligible for the Associate in College/University Transfer degree.

Students who wish to transfer to another Texas public college or university should follow the Associate in Arts/ Associate in Sciences degree plans because those degree patterns includes the 48 credit hour core requirements. Such students are not eligible to apply for an Associate in College/ University Transfer degree.

Associate in Applied Sciences Degree

This degree is designed to teach specific career/ technical skills. The requirements for each major in the Associate in Applied Sciences Degree are clearly shown in the curriculum patterns in this catalog. Students seeking such a degree should become familiar with the specific required courses in the appropriate curriculum pattern.

Students must have a minimum of 60 credit hours with a grade of "C" or better in each of the following three general education courses: English 1301 *or* English 1302, (whichever is required), Speech 1311 or 1315 (whichever is required), *and* Mathematics 1314 or higher ***or*** Science (whichever is required). Each Associate in Applied Sciences Degree requires students to take three credit hours from the general education categories of Humanities or Fine Arts and three credit hours from Social Sciences or Behavioral Sciences (the specific curriculum pattern will cite what students must take to meet these requirements). Additionally, each student must earn a grade point average of at least 2.00 ("C"), based on GPA # 2, and meet all TSI standards in Reading, Writing, and Mathematics. The GPA is based only on the credit hours used to meet degree requirements and the following courses will not count toward graduation or the GPA for graduation: Courses numbered below 1000, Arts 1170, Drama 1170, and Music 9176.

Specific degree requirements for each career and technical program can be found in this catalog. For some programs, more than 60 credit hours are required. All prescribed requirements for the specific program degree in which the student is enrolled must be completed. These programs may also have other criteria in addition to degree requirements. See the Career and Technical Programs section of this catalog for a more detailed explanation.

Certificate Program Requirements

Certificate Programs are part of the Career and Technical Program offerings. In order to be awarded a certificate, you must complete all program course requirements with a grade point average of 2.00 ("C") or better. Only the grades for the specific courses required in the certificate program will be used in calculating the GPA to determine eligibility for these awards.

Some certificate programs do not require you to meet TSI standards, but course prerequisite requirements for such certificates must be met. When you seek a TSI waiver based upon participation in one of these certificate programs, you may not enroll in any course other than those required for completing the certificate program requirements. If you attempt other coursework, your TSI waived status will end and you must meet the TSI standards that apply to students not enrolled in a TSI waived certificate program.

The specific requirements for each certificate program are outlined within each technical specialization. See *Career and Technical Programs.*

Older Course Work Taken

Some course descriptions have a statement that indicates a course formerly was known as "Prefix and Number." While this often means the new course replaces the former course, this is not true in all cases. For example, if the new course has a different amount of credit hours, a different course title, or the same course number is listed under one or more courses, the newer course will not automatically replace the former course in the records of students. Students who wish to use the older course to fulfill a degree plan requirement will need to contact the college Admissions Office or appropriate division office to process a substitution form.

Course Prerequisites

Course prerequisites must be met at the point of registration. Students are expected to take either courses or meet assessment standards in order to meet the course prerequisites. The college reserves the right to administratively withdraw students who have not met the specific course prerequisites. In such cases, students will be notified and given the opportunity to register for a replacement course.

STUDENTS WHO PLAN TO TRANSFER

Core Curriculum

Every Texas public college and university is required by Texas law to have a core curriculum that, if completed at one institution, should transfer and take the place of the core at the receiving institution. Therefore, if your plans include transferring to a Texas public university, it is to your distinct advantage to complete the core at this college since the core should transfer as a block of credit to the receiving university. In addition, the core is the very basis of the Associate in Arts or Associate in Sciences degrees. If you complete the core of 48 hours, you need only an additional 13 hours in order to receive a degree.

If you take some of the college's core but do not complete it, you are assured that core courses will transfer and apply to the receiving institution's core. Most universities will not accept a grade of D in transfer as meeting core requirements. In addition, you should take care in the selection of math and science courses to ensure they are applicable to the major you wish to pursue.

The core curriculum is predicated on the judgment that series of basic intellectual competencies—reading, writing, speaking, listening, critical thinking, and computer literacy—are essential to the learning process in any discipline. Although students can be expected to come to college with some experience in exercising these competencies, they often need further instruction and practice to meet college standards and, later, to succeed in both their major field of academic study and their chosen career or profession. Therefore, the following 6 intellectual competencies can be found throughout the college core:

- READING: Reading at the college level means the ability to analyze and interpret a variety of printed materials—books, articles, and documents. A core curriculum should offer students the opportunity to master both general methods of analyzing printed materials and specific methods for analyzing the subject matter of individual disciplines.

- WRITING: Competency in writing is the ability to produce clear, correct, and coherent prose adapted to purpose, occasion, and audience. Although correct grammar, spelling, and punctuation are each a sine qua non in any composition, they do not automatically ensure that the composition itself makes sense or that the writer has much of anything to say. Students need to be familiar with the writing process including how to discover a topic and how to develop and organize it, how to phrase it effectively for their audience. These abilities can be acquired only through practice and reflection.
- SPEAKING: Competence in speaking is the ability to communicate orally in clear, coherent, and persuasive language appropriate to purpose, occasion, and audience. Developing this competency includes acquiring poise and developing control of the language through experience in making presentations to small groups, to large groups, and through the media.
- LISTENING: Listening at the college level means the ability to analyze and interpret various forms of spoken communication.
- CRITICAL THINKING: Critical thinking embraces methods of applying both qualitative and quantitative skills analytically and creatively to subject matter in order to evaluate arguments and to construct alternative strategies. Problem solving is one of the applications of critical thinking, used to address an identified task.
- COMPUTER LITERACY: Computer Literacy at the college level means the ability to use computer-based technology in communicating, solving problems, and acquiring information. Core-educated students should have an understanding of the limits, problems, and possibilities associated with the use of technology, and should have the tools necessary to evaluate and learn new technologies as they become available.

Perspectives in the Core Curriculum

The objective of disciplinary studies within a core curriculum is to foster multiple perspectives as well as to inform and deliver content. An imperative of a core curriculum is that it contain courses that help students attain the following perspectives:

1. Establish broad and multiple perspectives on the individual in relationship to the larger society and world in which he or she lives, and to understand the responsibilities of living in a culturally and ethnically diversified world;
2. Stimulate a capacity to discuss and reflect upon individual, political, economic, and social aspects of life in order to understand ways in which to be a responsible member of society;
3. Recognize the importance of maintaining health and wellness;
4. Develop a capacity to use knowledge of how technology and science affect their lives;
5. Develop personal values for ethical behavior;
6. Develop the ability to make aesthetic judgments;
7. Use logical reasoning in problem solving; and
8. Integrate knowledge and understand the interrelationships of the scholarly disciplines.

Disciplinary courses within a core curriculum should promote outcomes focused on the intellectual core competencies, as well as outcomes related to establishing perspectives, and the basic concepts in the discipline. The DCCCD core curriculum includes courses that satisfy specific exemplary educational objectives.

COMPONENT AREA OF COMMUNICATION

The objective of a communication component of a core is to enable students to communicate effectively in clear and correct prose in a style appropriate to the subject, occasion, and audience. The exemplary educational objects are:

- To understand and demonstrate writing and speaking processes through invention, organization, drafting, revision, editing, and presentation.
- To understand the importance of specifying audience and purpose and to select appropriate communication choices.
- To understand and appropriately apply modes of expression, i.e., descriptive, expositive, narrative, scientific, and self-expressive, in written, visual and oral communications.
- To participate effectively in groups with emphasis on listening, critical and reflective thinking, and responding.
- To understand and apply basic principles of critical thinking, problem solving, and technical proficiency in the development of exposition and argument.
- To develop the ability to research and write a documented paper and/or to give an oral presentation.

The following courses include the above objectives in the college core: English 1301, English 1302, and one of the following: Speech 1311, Speech 1315, any Foreign Language course 1311 or higher, or American Sign Language course. (NOTE: Students seeking an Associate in Arts or Associate in Sciences must select Speech 1311 or Speech 1315.)

COMPONENT AREA OF MATHEMATICS

The objective of the mathematics component of the core is to develop a quantitatively literate college graduate. Every college graduate should be able to apply basic mathematical tools in the solution of real-world problems. The exemplary educational objectives are:

- To apply arithmetic, algebraic, geometric, higher-order thinking, and statistical methods to modeling and solving real-world situations.
- To represent and evaluate basic mathematical information verbally, numerically, graphically, and symbolically.
- To expand mathematical reasoning skills and formal logic to develop convincing mathematical arguments.
- To use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results.

- To interpret mathematical models such as formulas, graphs, tables, and schematics, and draw inferences from them.
- To recognize the limitation of mathematical and statistical models.
- To develop the view that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines.

The following math courses include the above exemplary educational objectives: Math 1314, 1324,1332, 1333, 1348, 1414, 2342, 2412, or 2442 or higher level math.

COMPONENT AREA OF NATURAL SCIENCES

The objective of the study of a natural sciences component of a core curriculum is to enable the student to understand, construct, and evaluate relationships in the natural sciences, and to enable the student to understand the bases for building and testing theories. The exemplary educational objectives are:

- To understand and apply method and appropriate technology to the study of natural sciences.
- To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
- To identify and recognize the differences among competing scientific theories.
- To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
- To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

The following science courses include the above exemplary educational objectives: Biology 1406, 1407, 1408, 1409, Chemistry 1405, 1407, 1411, 1412, Geology 1401, 1403, 1404, 1445, Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, and 2426.

COMPONENT AREA OF HUMANITIES AND VISUAL AND PERFORMING ARTS

The objective of the humanities and visual and performing arts in a core curriculum is to expand students' knowledge of the human condition and human culture, especially in relation to behaviors, ideas, and values expressed in works of human imagination and thought. Through study in disciplines such as literature, philosophy, and the visual and performing arts, students will engage in critical analysis, form aesthetic judgments, and develop an appreciation of the arts and humanities as fundamental to the health and survival of any society. Students should have experiences in both the arts and humanities. The exemplary educational objectives are:

- To demonstrate awareness of the scope and variety of works in the arts and humanities.
- To understand those works as expressions of individual and human values within an historical and social context.
- To respond critically to works in the arts and humanities.
- To engage in the creative process or interpretive performance and comprehend the physical and intellectual demands required of the author or visual or performing artist.
- To articulate an informed personal reaction to works in the arts and humanities.
- To develop an appreciation for the aesthetic principles that guide or govern the humanities and arts.
- To demonstrate knowledge of the influence of literature, philosophy, and/or the arts on intercultural experiences.

The following humanities and visual performing arts courses include the above exemplary educational objectives: Arts 1301, 1303, 1304, Dance 2303, Drama 1310, 2366, Humanities 1301, Music 1306, 1308, 1309, English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333, Cultural Studies 2370, History 2321, 2322, 2380, 2381, Philosophy 1301, 2306, 2307, 2316, 2317, and Religion 1304.

COMPONENT AREA OF SOCIAL AND BEHAVIORAL SCIENCES

The objective of a social and behavioral science component of a core curriculum is to increase students' knowledge of how social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events, and ideas. Such knowledge will better equip students to understand themselves and the roles they play in addressing the issues facing humanity. The exemplary educational objectives are:

- To employ the appropriate methods, technologies, and data that social and behavioral scientists use to investigate the human condition.
- To examine social institutions and processes across a range of historical periods, social structures, and cultures.
- To use and critique alternative explanatory systems or theories.
- To develop and communicate alternative explanations or solutions for contemporary social issues.
- To analyze the effects of historical, social, political, economic, cultural, and global forces on the areas under study.
- To comprehend the origins and evolution of U.S. and Texas political systems, with a focus on the growth of political institutions, the constitutions of the U.S. and Texas, federalism, civil liberties, and civil and human rights.
- To understand the evolution and current role of the U.S. in the world.
- To differentiate and analyze historical evidence (documentary and statistical) and differing points of view.
- To recognize and apply reasonable criteria for the acceptability of historical evidence and social research.
- To analyze, critically assess, and develop creative solutions to public policy problems.
- To recognize and assume one's responsibility as a citizen in a democratic society by learning to think for oneself, by engaging in public discourse, and by obtaining information through the news media and other appropriate information sources about politics and public policy.
- To identify and understand differences and commonalties within diverse cultures.

The following social and behavioral science courses include the above exemplary educational objectives: History 1301, 1302, Government 2301, 2302, Anthropology 2346, 2351, Economics 1303, 2301, 2302, 2311, Psychology 2301, 2314, 2316, Sociology 1301, 1306, and 2319.

The DCCCD core of 48 credit hours is composed of the following courses:

COMMUNICATIONS – 9 credit hours *(Select each of the following)*
- English 1301: *A grade of "C" or better required.*
- English 1302, and **one** of the following:
- Speech 1311*, Speech 1315*, any Foreign Language Course 1311 or higher, or an American Sign Language course.

*Students must select Speech 1311 or 1315 if seeking an AA or AS degree. *A grade of "C" or better is required if you select Speech 1311 or Speech 1315.*

MATHEMATICS – 3 credit hours *(Select one from the following)*
- Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, 2412, 2442, or higher level. *A grade of "C" or better required.*

LAB SCIENCES – 8 credit hours *(Select two from the following)*
- Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426.

Note: This requirement cannot be met by using the following combinations:
- Biology 1406 and 1408;
- Chemistry 1405 and 1411;
- Physics 1401 and 1405;
- Physics 1401 and 2425;
- Physics 1405 and 2425.

SOCIAL/BEHAVIORAL SCIENCES – 15 credit hours *(Select each of the following)*
- History 1301, 1302;
- Government 2301, 2302

(Select one from the following)
- Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319

HUMANITIES/VISUAL AND PERFORMING ARTS – 9 credit hours *(Select one from each of the three groupings)*

I.
- Arts 1301, 1303, 1304
- Dance 2303
- Drama 1310, 2366
- Humanities 1301
- Music 1306, 1308, 1309

II.
- English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333

III.
- Cultural Studies 2370
- History 2321, 2322, 2380, 2381
- Philosophy 1301, 2306, 2307, 2316, 2317
- Religion 1304

OTHER– 4 credit hours
(Select each from the following)
- Physical Education 1164 *and*
- Computer Science 1300 *or* higher level COSC course.

Academic Transfer Programs

The college offers a broad range of educational opportunities for the student whose goal is to transfer to a four-year institution. In addition to offering a strong, creative foundation for the freshman and sophomore years, the academic transfer curriculum is coordinated with a number of Texas four-year institutions to ensure the transfer of credits. Although each four-year school is different, you may guarantee the transferability of your courses by being active and responsible in the advisement process. By consulting the four-year institution regularly and taking advantage of the resources available at the college, you may ensure that the transfer process is a positive experience.

Another means of ensuring success in transferring to a Texas public college or university is to complete the core curriculum at this college since the entire core should transfer as a block of 48 credits. In addition, if you complete a Field of Study Associate in Arts/Associate in Sciences degree, the curriculum should transfer and count toward the specific major at all Texas public institutions. To ensure guaranteed transfer, you are strongly encouraged to check with the university where you plan to transfer.

Earning an Associate Degree Prior To Transferring

You may elect to earn a two-year associate degree. The Associate in Arts and the Associate in Sciences degrees are designed specifically for those students who plan to transfer to a Texas four-year institution. Both of these degrees include the core curriculum. The flexibility of these degree programs also allows you to complete many of the introductory courses specifically related to your major field of study. You should also keep in mind the Associate in Arts/Associate in Sciences Field of Study degrees. The entire curriculum of the Field of Study degrees will transfer to all Texas public colleges and universities. However, in some cases students may have to select between completion of the core or the Field of Study in those instances when the combined total of hours exceeds 66 hours. In addition, the college offers "Emphasis" degrees that feature "majors" which are recommended to students transferring in a specific discipline. See degree plans in this catalog.

The Associate of College/University Transfer Degree is an individually negotiated degree designed to permit students to take only those courses that will apply toward a specific major only at a specific private or out-of-state college or university. Students should see an advisor at the college for more information.

Transfer Policy

The Texas Higher Education Coordinating Board (THECB) requires all public colleges and universities to accept transfer of credit for successfully completed courses as applicable to an associate or baccalaureate degree in the same manner as credit awarded to non-transfer students in that degree program.

Institutions are not required to accept in transfer more credit hours in the major area of a degree program than the number set out in any applicable Board-approved Field of Study Curriculum for that program. In any degree program for which there is no Board-approved Field of Study Curriculum, institutions are not required to accept in transfer more lower-division course credit in the major applicable to a baccalaureate degree than the institution allows their non-transfer students in that major. An institution of higher education may deny the transfer of credit in courses with a grade of "D" as applicable to the student's field of study curriculum courses, core curriculum courses, or major. No university shall be required to accept in transfer or toward a degree program, more than sixty-six (66) semester credit hours of lower-division academic credit. Universities, however, may choose to accept additional credit hours.

Transfer Dispute Resolution

If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied, and shall include in that notice the reasons for denying the credit. Attached to the written notice shall be the procedures for resolution of transfer disputes for lower-division courses as outlined in this section, accompanied by clear instructions outlining the procedure for appealing the decision to the Commissioner.

(1) A student who receives notice may dispute the denial of credit by contacting a designated official at either the sending or the receiving institution.

(2) The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Board rules and guidelines.

(3) If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the sending institution may notify the Commissioner in writing of the request for transfer dispute resolution, and the institution that denies the course credit for transfer shall notify the Commissioner in writing of its denial and the reasons for the denial.

The Commissioner or the Commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institution.

Source: http://www.thecb.state.tx.us/CBRules/tac3.cfm?Chapter_ID=4&Subchapter=B

For further information, please contact the DCCCD Office of Transfer Services and University Relations at:
Phone: 214-860-2185
Fax: 214-860-2677
E-mail: ags1132@dcccd.edu
Mail: DCCCD, 701 Elm Street, Dallas, Texas 75202

Choosing A Major and Developing An Educational Plan

You may be entering college with a clear idea of what major you will choose and which senior institution you plan to attend. But, if you are like many students, you may not know where you will transfer or in what discipline you may major.

If you are undecided about a major at the university, you are encouraged to take courses in the core curriculum as these will transfer to all Texas public universities. During the first semester, you should investigate your interests. By the second or third semester, you should begin to develop a clear sense of which senior institution you will attend and the requirements for your chosen degree program. Working closely with a counselor or advisor, and using current information from four-year institutions, you should follow the Associate in Arts/Associate in Sciences Degree plan because they incorporate the core curriculum. The counseling and advising personnel at the college can help you develop a degree plan for almost any major. Listed below are some of the four-year majors you can begin in the college:

Accounting
Advertising
Agriculture
American Studies
Anthropology
Architecture
Art
Biological Science
Botany
Business Administration
Chemistry
Computer Science
Dance
Dental Hygiene
*Dentistry
Dietetics
Drama
Economics
Engineering
English
Entomology
Finance
Fine Arts
Foreign Languages
Forestry
Geography
Geology
Health Sciences
History
Industrial Arts
Interior Design
Journalism
*Law
Legal Science
Liberal Arts
Life Sciences
Management
Legal Science
Liberal Arts
Life Sciences
Management
Marine Biology
Marketing
Mathematics
Medical Technology
*Medicine
Meteorology
Microbiology
Music
Music Education
Nursing
Occupational Therapy
Oceanography
Optometry
Pharmacy
Philosophy
Photojournalism
Physical Education
Physical Science
Physical Therapy
Physics
Political Science
Psychology
Public Relations
Radio/TV/Film
Recreation
Social Work
Sociology
Speech Communication
Speech Pathology
Teacher Preparation
Telecommunications
Theatre
*Veterinary Medicine
Wildlife Mgt.
Zoology

*These fields require study beyond the bachelor's degree.

Special Opportunities for Students Wishing to Transfer

The DCCCD Transfer Services and University Relations home page address is http://www.dcccd.edu/trans/

On this website, students will find:

- Tips on how to transfer successfully
- Answers to most commonly asked transfer questions
- Transfer guides to specific majors at approximately 30 Texas universities
- Transfer admission information for Texas universities
- Course-by-course equivalencies for college courses at Texas universities
- Details on the Transfer Guarantee Program
- Educational resources for students and counselors/ advisors.
- DCCCD – University Articulation Agreements

College Resources for Transfer Students

The college offers many resources designed specifically for those students planning to transfer to a university. You should take advantage of these resources early in your college experience, particularly if you have not chosen a major or have not selected a university. Many of the resources can assist you in making informed decisions when selecting courses, choosing a transfer institution, and completing all of the necessary steps in the transfer process.

Transfer Guides

Transfer Guides offer a listing of courses, by course numbers, necessary for a number of majors at many institutions throughout Texas. Transfer Guides may be available for the following majors:

Accounting
Advertising Art
Aerospace Engineering
Agriculture
Architecture
Art
Biology
Business Administration
Chemical Engineering
Chemistry
Civil Engineering
Computer Science
Criminal Justice
Dental Hygiene
E-Commerce
Economics
Electrical Engineering
English
Exercise and Sports Studies
Fashion Design
Fashion Merchandising
Finance
Foreign Languages
Geography
Geology
History
Motel & Restaurant Management
Industrial Engineering
Interior Design
Kinesiology (Exercise and Sports Science)
Legal Science
Management
Marketing
Mathematics
Medical Technology
Music
Music Education
Nursing
Occupational Therapy
Pharmacy
Photojournalism
Physical Education
Physical Therapy
Physician Assistant
Physics
Political Science
Pre-Law
Pre-Medicine
Pre-Veterinary Medicine
Psychology
Radio/TV/Film
Social Work
Sociology
Speech
Speech Pathology/ Audiology
Teacher Preparation
Theatre
Undecided

Although officials at the various universities have reviewed the information in these guides, the content is subject to change. It is the student's responsibility to verify the accuracy of this information with the receiving institution. Counselors and academic advisors can also assist students in preparing for majors other than those listed above.

Course-by-Course Equivalency Guides

Equivalency Guides offer a listing of how every course transfers to each specific senior institution. This information can be helpful to you if you have selected a senior institution but have not chosen a major yet. You should note that the transfer equivalencies shown on these guides offer information on how, or if, courses are generally accepted by the senior institution, and do not indicate how these courses will apply toward a particular major or degree program. A counselor or advisor can assist you in determining whether courses apply to a particular major.

Common Course Numbering System

To help meet your transfer needs, the college is a member of the Texas Common Course Numbering System Consortium. All Texas community/junior colleges participate in this system. Most universities are cooperating with this new numbering system indicating courses equivalent to the common course system. By Fall 2005, many state universities may have adopted this same numbering system.

Colleges teach courses similar in nature, and these courses have been designated by a common number. The common number facilitates the transfer of these courses between and among the participating institutions. Further in this catalog you will find course descriptions for every course offered in the college. Course descriptions will indicate if a course has been assigned a common course number. You should not assume that only courses with common course numbers will transfer.

Choosing A Catalog Year

The college catalog has any degree or certificate program requirements of 5 years. This means you are expected to complete within five (5) years as outlined in the catalog in effect at the time of your entrance to the college. You may elect to utilize a more recent catalog year in which you were enrolled, provided the degree requirements are met during that 5-year period and the requisite courses are still offered. If you plan to transfer, you should keep a copy of the catalog dated at the time you entered college, the catalog year you followed for your graduation requirements, a copy of degree plan from the DCCCD web page, the catalog of the university to which you wish to transfer, and the transfer guide valid at the time you enrolled at the college. You may wish to maintain a copy of all course syllabi, particularly if you plan to transfer to either a private university or one located out of state.

Other Things to Consider

During the time you are enrolled in the college, you should begin to determine the necessary steps for completing the transfer admission process. The process may require a great amount of preparation, and you should be certain you understand all of the requirements for admission, such as:

- Application deadlines,
- Minimum grade-point average requirements,
- Limits on the number of credit hours that are acceptable in transfer,
- Policies regarding acceptance of repeated courses,
- Housing information, and
- Financial aid application procedures.

Of equal importance is a personal visit to the chosen institution. Many senior institutions plan special activities and campus visitation periods where you can meet with representatives from all areas of the institution.

There is a limit on the number of hours taken by any one student in which the state of Texas will reimburse universities. By law, some Texas public universities may charge a higher rate of tuition to students who exceed the limit. Contact the college or university to which you plan to transfer and obtain more information concerning tuition fees.

Other Educational Programs

American English and Culture Institute

The Dallas County Community College District offers an intensive English program called the American English and Culture Institute (AECI) for international students preparing to study in American colleges and universities or planning to work in fields where English is the primary language. The AECI is a year-round program of English and culture study that is offered in ten-week sessions and divided into proficiency levels of one through four. Students who score higher than 117 but less than 197 on the computer-based TOEFL or who score higher than 430 but less than 530 on the paper-based TOEFL will be considered for the AECI.

Career and Technical Programs

You can prepare for a career as a skilled employee after one or two years of college study if you enroll in one of our many Career and Technical Programs. These programs are established after studies verify that related employment opportunities exist in business and industry. With the assistance and cooperation of representatives from local business, industry, and public agencies, the Career and Technical Programs are designed to meet increasing local and regional workforce needs. These programs provide you with the opportunity to develop the necessary competencies to meet the demands of area employers.

Career and Technical courses are accredited college courses that lead to a Certificate or an Associate in Applied Sciences Degree. We offer placement assistance to you as you complete course work in our Career and Technical Programs. We maintain a continuous relationship with local and regional industries to keep you informed of employment opportunities.

In addition to classroom instruction, the college offers external learning experiences programs. These are competency-based learning experiences provided at a work site which enhance lecture and laboratory instruction. See External Learning Experiences for Career and Technical Programs.

Certificate and associate degree Career and Technical Programs are designed for you to complete within one or two years. The Bill Priest Institute offers certificate programs designed to be completed in less than one year.

The College offers a Guarantee for Job Competency for all students who earn a certificate or an Associate in Applied Sciences Degree.

Credit-By-Examination

If you think you already meet the requirements of a course by experience or previous training, you may request credit-by-examination. You may not request credit-by-examination for courses in which you are currently enrolled. The Registrar's Office has information about the courses for which credit-by-examination is available. The examination may be an approved subject examination (not a general examination) of the College-Level Examination Program (CLEP), Advanced Placement Exams (CEEB), Defense Activity for Nontraditional Education Support (DANTES), or an instructor-made test, depending on the course. You should ensure college acceptance of specific national exams *prior* to taking them. Scores for national testing programs, such as CLEP, AP, and DANTES, will be valid for 10 years.

You must pay a test administration service charge for each course examination. This service charge must be paid prior to taking the examination and is not refundable. Final acceptance of credit-by-examination for specific degree purposes is determined by the degree-granting institution. If you are planning to use credit-by-examination to meet degree requirements at other institutions, you should check the receiving institution's requirements.

You must be currently enrolled as a credit student at the college to receive credit-by-examination. Although your current enrollment in a course may normally make you ineligible for national testing programs, the Foreign Language Curriculum Committee permits an exception to this policy for students enrolled in foreign language courses. You may earn as many credits through examination as your ability permits and needs require, but at least 25% of the credit hours required for graduation must be taken through instruction and not through credit-by-examination.

Credit-by-examination may be attempted only one time in any given course, and a minimum score must be earned in order for credit to be recorded. Those who successfully complete an approved credit-by-examination may choose to have either the grade earned, if it is made available, or "CR" recorded on the transcript. Only letter grades of A, B, or C for credit-by-exam will be calculated into the GPA. If a student chooses "CR" for a credit-by-exam or if "CR" is the only option available to students, the "CR" cannot be calculated into the GPA. **Students who meet the minimum passing standard on Computerized CLEP exams will be awarded "CR". The option for a letter grade is currently not available.**

As of the publication date of this catalog, the following national tests are approved for credit-by-examination procedures:

CLEP Computerized Test Subject Exams

(CLEP General Exams are NOT approved)
*See Advisement for test limitations for these computerized CLEP exams

Test Name	*Minimum Score*	*Credits*	*Course(s)*
Principles of Accounting	50	6	ACCT 2301, 2302
Principles of Management	50	3	BMGT 1303
General Biology	50	8	BIOL 1406, 1407
Introductory Business Law	50	3	BUSI 2301
General Chemistry	50	8	CHEM 1411, 1412
Principles of Macroeconomics	50	3	ECON 2301
Principles of Microeconomics	50	3	ECON 2302
English Literature	50	6	ENGL 2322, 2323
American Literature	50	6	ENGL 2327, 2328
College Level I French Language	50	8	FREN 1411, 1412
College Level II French Language	62	14	FREN 1411, 1412, 2311, 2312
College Level I German Language	50	8	GERM 1411, 1412
College Level II German Language	63	14	GERM 1411, 1412, 2311, 2312
*American Government	50	3	GOVT 2302
History of U.S. I	50	3	HIST 1301
History of U.S. II	50	3	HIST 1302
Western Civilization I	50	3	HIST 2311
Western Civilization II	50	3	HIST 2312
Principles of Marketing	50	3	MRKG 1311
College Algebra	50	3	MATH 1314
Trigonometry	50	3	MATH 1316
Calculus with Elementary Functions	50	5	MATH 2513
Introductory Psychology	50	3	PSYC 2301
Human Growth and Development	50	3	PSYC 2314
Introductory Sociology	50	3	SOCI 1301
College Level I Spanish Language	50	8	SPAN 1411, 1412
College Level II Spanish Language	66	14	SPAN 1411, 1412, 2311, 2312

CLEP Paper/Pencil Exams

(CLEP General Exams are NOT approved). Paper/pencil CLEP Tests are no longer administered, but the required scores, from such tests, taken within the past ten years can be utilized. *See College Testing Center for test limitations on these CLEP tests.

Test Name	*Minimum Score*	*Credits*	*Course(s)*
Intro Accounting (version retired in 7/95)	47	6	ACCT 2301, 2302
Principles of Accounting	45	6	ACCT 2301, 2302
Intro Management (version retired in 7/94)	47	3	BMGT 1303
Principles of Management	46	3	BMGT 1303
General Biology	46	8	BIOL 1406, 1407
Intro to Business Law	51	3	BUSI 2301
General Chemistry	47	8	CHEM 1411, 1412
Intro. Macroeconomics (version retired in 7/94)	48	3	ECON 2301
Intro. Microeconomics (version retired in 7/94)	47	3	ECON 2302
Principles of Macroeconomics	44	3	ECON 2301
Principles of Microeconomics	41	3	ECON 2302
English Literature	46	6	ENGL 2322, 2323
American Literature	46	6	ENGL 2327, 2328
College French 1 and 2 (version retired 7/97)	39	8	FREN 1411, 1412
College Level French Language	42	8	FREN 1411, 1412
College German 1 and 2 (version retired 7/95)	40	8	GERM 1411, 1412
College Level German Language	36	8	GERM 1411, 1412
College Level German Language	42	14	GERM 1411, 1412, 2311, 2312
*American Government	47	3	GOVT 2302

**In order to receive credit for GOVT 2301, students must take a departmental test on Texas Government. The departmental GOVT 2301 test may be given only to students who have also received credit for Government 2302 via CLEP*

American History I (version retired 7/96)	45	3	HIST 1301
History of U.S. I	47	3	HIST 1301
History of U.S. II	46	3	HIST 1302
Western Civilization 1	46	3	HIST 2311
Western Civilization 2	47	3	HIST 2312
Principles of Marketing	50	3	MRKG 1311
College Algebra (version retired 7/94)	45	3	MATH 1314
College Algebra	46	3	MATH 1314
Trigonometry	50	3	MATH 1316
Calculus w/ Elem. Functions (version retired 7/95)	47	5	MATH 2513
Calculus w/ Elem. Functions	41	5	MATH 2513
Intro. Psychology	47	3	PSYC 2301
Human Growth and Development	45	3	PSYC 2314
Intro. Sociology	47	3	SOCI 1301
College Spanish 1 and 2 (version retired 7/96)	41	8	SPAN 1411, 1412
College Spanish 1, 2, 3 and 4 (version retired 7/96)	50	14	SPAN 1411, 1412, 2311, 2312
College Level Spanish Language	45	8	SPAN 1411, 1412
College Level Spanish Language	50	14	SPAN 1411, 1412, 2311, 2312

AP Advanced Placement

Test Name	*Minimum Score*	*Credits*	*Course(s)*
Art History	3	6	ARTS 1303, 1304
Biology	3	8	BIOL 1406, 1407
Calculus AB	3	5	MATH 2513
Calculus BC	3	9	MATH 2414, 2513
Chemistry	3	8	CHEM 1411, 1412
English - Language and Comp	3	6	ENGL 1301, 1302
*French - Language	3	8	FREN 1411, 1412
*French - Language	4	11	FREN 1411, 1412, 2311
*French - Language	5	14	FREN 1411, 1412, 2311, 2312
*German - Language	3	8	GERM 1411, 1412
*German - Language	4	11	GERM 1411, 1412, 2311
*German - Language	5	14	GERM 1411, 1412, 2311, 2312
Government & Politics - US	3	3	GOVT 2302
Government - Comparative and Politics	3	3	GOVT 2371
History - European	3	6	HIST 2311, 2312
History - US	3	6	HIST 1301, 1302
Macroeconomics	3	3	ECON 2301
Microeconomics	3	3	ECON 2302
Music Theory	3	3	MUSI 1311
Physics B	3	8	PHYS 1401, 1402
Psychology	3	3	PSYC 2301
*Spanish - Language	3	8	SPAN 1411, 1412
*Spanish - Language	4	11	SPAN 1411, 1412, 2311
*Spanish - Language	5	14	SPAN 1411, 1412, 2311, 2312
Studio Art-Drawing	3	3	ARTS 1316

*Students taking Advanced Placement Exams have a choice of receiving a grade or "CR" for credit, except for the AP language exams for which only "CR" may be granted. For all but the AP language exams, a score of 3 equals C; a score of 4 equals B; a score of 5 equals A. If you take any of the tests listed above, you should check with the Registrar's Office to ensure these tests will be accepted in lieu of coursework. You should do this *prior* to taking the test as the previous list may change. You may challenge courses not on this list by taking an instructor-made examination. If you are interested in this method, contact the appropriate academic division office.

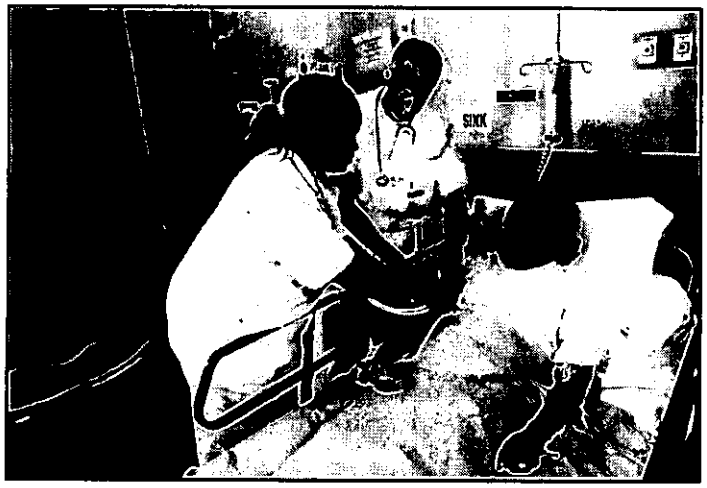
DANTES

Test Name	*Minimum Score*	*Credit*	*Course(s)*
Principles of Financial Accounting	49	3	ACCT 2301
Introduction to Business	46	3	BUSI 1301
Lifespan Developmental Psychology	46	3	PSYC 2314

CERTIFIED PROFESSIONAL SECTRETARY (CPS) EXAM

Students who can provide documentation from the Institute for Certifying Secretaries that they have passed all sections of the CPS should be granted credit for 15 hours from the courses listed below. Such students must complete 12 college level hours within the DCCCD and at least two courses must be completed in Office Technology with a grade of C or better. Credit earned through the CPS is applicable **only** to the Associate of Applied Sciences in Office Technology program. The student may select no more than 15 hours for the list below and ACR@ should be shown on transcript.

Before WECM	**2001 WECM Course Name**	**Hours**
OFCT 1373	POFT 1309	3 hours
OFCT 1376	POFT 2301	3 hours
OFCT 1377	POFI 1301	3 hours
OFCT 1378	No Course Available	3 hours
OFCT 1380	POFI 1345 or POFI 1349	3 hours
OFCT 2370	POFT 1302	3 hours



Continuing Education Programs

Within the college, continuing education programs deliver flexible, diverse, visionary instruction responsive to the needs of public, private, and corporate citizens. Continuing Education programs provide workforce training, personal and professional development courses and other outreach programs to enhance individual, community and economic development including customized training for business and industry.

Continuing education instructors are professionals from the community chosen for their knowledge, expertise and experience in their fields. Training and instruction are offered as courses, programs, seminars, workshops and distance learning opportunities. Registration is continuous, convenient and customer-oriented with new classes starting throughout the year on weekdays and weekends both during the day and evening hours. Continuing education classes are offered at the college and in a variety of locations throughout the community. For specific information on public course offerings, contact college and request a current Continuing Education Schedule or find it online at www.dcccd.edu.

A variety of student services are available for Continuing Education students including financial aid, library privileges, job placement assistance, tutoring and academic/ career advising. Some scholarship and grant funds may be available for specific non-credit programs and courses. To apply for these funds, contact the College's Continuing Education or Financial Aid Office.

Continuing Education Units

Continuing Education Units (CEUs) are transcripted upon successful completion of all requirements, competencies and learning outcomes for approved workforce education courses. In all recognized educational circles, one CEU is equal to 10 contact hours of participation in an organized continuing education or extension experience. The CEU is a means of recording and accounting for continuing education activities and meeting the certification requirements of certain professional organizations.

Credit for Experiential Learning

Because individuals learn in a variety of ways and through a multitude of experiences, the college has established a means by which students may earn credit for college-equivalent education acquired through earlier schooling, work or other life experiences. In order to petition for experiential learning the student must be currently enrolled in the college assessing the learning experiences.

A student may be able to transcript college credit based on recommendations of the College Credit Recommendation Service of the American Council on Education. Such credit is granted as "CR." Evaluation and awarding of credit is the responsibility of the college where the student is enrolled.

A student may also petition for credit for other experiential learning. Portfolio assessment is one method by which the prior learning may be documented. Currently enrolled students may petition for credit by developing a portfolio that describes and documents pertinent learning comparable to that available in a specified college course. A faculty member in the appropriate program or discipline area evaluates the portfolio and determines commensurate credit. Credit is recorded as "CR." A second method is for the student to enroll in an existing section of a course (after consultation with the instructor) and develop an individualized plan for participation and testing based on the instructor's evaluation of skill and experience levels. Completion of this method results in the award of a letter grade. Finally, any district curriculum committee has the option of designing a program unique to their discipline.

The number of equivalent credits awarded may not exceed 25% of the total number of credits required for the specific degree or certificate. The number of equivalent credits awarded may not exceed the total number of credits required for the students specific associate degree or certificate objectives. No graduation, residency, degree or certificate program requirements will be waived as a result of credits earned through this process.

Developmental Education

Developmental education courses are designed to provide students with academic skills necessary for success in college-level courses and to fulfill the Texas Success Initiative (TSI) standards. Many levels of developmental reading, writing, and math classes are offered to enable students to complete the required prerequisites for college-level work and to satisfy TSI standards. Developmental courses are listed in the catalog as DREA for developmental reading, DWRI for developmental writing, and DMAT for developmental math. These courses carry institutional credit but do not count toward a degree or certificate. Students who wish to improve skills in reading, writing, and math may also enroll in developmental courses even if not required because of low test scores. Instructional formats vary and may include computer-based, self-paced, lecture, and online offerings.

The State of Texas financially subsidizes the education of college students. In other words, the tuition paid by any student represents only a portion of the real costs of any developmental education courses. As the State of Texas will pay for only 27 hours of attempted Developmental Studies courses, students may be required to pay a higher rate of tuition for any developmental hours beyond the 27 hour limit. Developmental courses are ANY courses numbered 0099 and below. These courses include Developmental Reading, Developmental Math, Developmental Writing, English for Speakers of Other Languages (ESOL) and others.

eConnect

The Dallas County Community College District offers to students, eConnect, a web interface that provides online student services. The Student Menu allows you to:

- Complete your admissions application
- Search, register and pay for credit classes
- View your credit class schedule and grades
- Access your financial information
- Buy your books online
- Access your student records
- Ad/change your email address
- Fill out your Student Information Profile
- Request privacy of your directory information
- Request a transcript

For more information on the latest enhancements and added features, please see what's new and improved at eConnect at http://econnect.dcccd.edu

English for Speakers of Other Languages (ESOL)

English for Speakers of Other Languages (ESOL or ESL) courses are offered to provide academic English skills to students whose first or native language is other than English. Besides preparing students for the college learning experience in the areas of oral communication, reading, writing, and grammar, these courses teach students the skills needed to meet the requirements of the Texas Success Initiative (TSI, formerly TASP). Non-native English speaking students who wish to enroll in college-level courses, but who have not met language-related TSI standards or DCCCD prerequisites for doing so, may be expected to enroll in ESOL courses to meet those requirements. Appropriate tests or methods may be used to determine students' skill levels for ESOL course placement as well as to meet TSI requirements.

All non-native English speakers are welcome to study in the Dallas County Community College District, regardless of language level, background, or residency status. Because those students do have a wide variety of language experiences and needs, oral communication, reading, writing, and grammar courses are offered at various levels. This allows each student to focus on his or her areas of English language learning need and helps to ensure individual success in college studies. In addition, a selection of learning modes may be available for students to choose from, including lecture, online instruction, computer-aided instruction, fast-track, learning community, and intensive formats.

Evening & Weekend College

Most courses offered during the day are also available in the evening or on the weekend. Courses are offered both on campus and at selected community locations.

Evening and weekend courses offer high quality instruction and excellent facilities. Student services, including advisement, health, library, bookstore, food services, financial aid, and recreation may be available. Instructors are selected from the full-time college staff, from out-standing Dallas-area educators, and from other professional specialists. To enroll in evening and weekend courses, contact the college Admissions Office.

External Learning Experiences for Career and Technical Programs

An external learning experience for Career and Technical Programs is a competency-based learning experience, paid or unpaid, that enhances lecture and laboratory instruction, and is provided at a work site appropriate to the program. An external learning experience allows you to have practical, hands-on training and to apply learned concepts and theories in a workplace setting. Four types of external learning experiences are available: co-ops, practica, internships and clinicals. Clinical experiences must take place in a health care setting and you must not be paid for the learning experience.

External Learning Experience work sites must be approved by the college, and employers must be willing to enter into training agreements with the college and the student/employee. The college will assist you in seeking approved employment, if needed. Career and Technical Programs that include external learning experiences are indicated in this catalog. Prior to enrolling in one of these courses, you must consult with the program's External Learning Experience Coordinator. External Learning Experience Student Handbook can be found at http://www.dcccd.edu/vcea/workf/ele_student_handbook.htm.

Human Development Courses

The Human Development curriculum is comprised of several courses providing a theoretical and practical foundation in human growth and development across the life span. These courses are organized around different topics including educational and career/life planning; interpersonal communication; personal and social growth; learning theory and study skills; and success in college. The college may offer special sections of Human Development courses that emphasize various issues such as understanding multi-cultural concepts, making life transitions, and appreciating gender differences for special populations including women returning to school, adults making career or job changes, at-risk students, young adults, or academically under-prepared students.

Some Human Development courses transfer to colleges and universities as elective credit. These courses use an experiential model that allows for the use of a variety of teaching and learning strategies including small group work, journal writing, mini-lectures, selected readings, classroom discussion, team teaching, peer teaching, outside guest speakers, psychometric testing, and volunteer experiences in the community.

International Studies/Study Abroad Opportunities

An important part of the commitment of the colleges of the DCCCD to enhancing student appreciation and understanding of diverse cultures is its international studies and study abroad programs. Therefore, any program offered by another college of the DCCCD is open to students of this college. These programs are available in a variety of countries during fall and spring semesters and in the summer and are available to students of this college. Semester-length programs may be currently available in England, France, Costa Rica, Spain, and Italy. In most programs, no prior knowledge of a foreign language is required. Many of the colleges also offer study-abroad opportunities during the summer sessions. College faculty teach these courses, which normally last two to four weeks. In previous years, these courses have been offered in Austria, Australia, China, Dominican Republic, France, Great Britain, Italy, Jamaica, Mexico, Portugal, Russia, Senegal, and Spain. For information about any of the semester or summer programs, contact the District Office of Student and Academic Programs 214-860-2410 or contact the study abroad advisor of the college. There are also other non-semester length courses offered during the year.

Texas residents enrolled in colleges that are members of the North Texas Community College Consortium may enroll in DCCCD international courses by paying "in-District" tuition. These colleges include: Brookhaven, Cedar Valley, Cisco, Collin County, Eastfield, El Centro, Grayson County, Hill, Kilgore, LeCroy Center, McLennan, Mountain View, Navarro, North Central Texas, Northeast Texas, North Lake, Panola, Paris, Priest Institute, Richland, Tarrant County, Texas State Technical at Marshall and Waco, Trinity Valley, Tulsa, Tyler, Vernon, Weatherford and the University of North Texas.

Make a difference for yourself & for your community. Participate in DCCCD Service Learning.

Non-Credit Student (Audit)

A person who meets the admission requirements may, with the consent of the division dean and instructor, enroll in a credit course as a non-credit student. As a non-credit student, you may attend class, but you will not receive a final grade or credit for the course. An instructor may give you exams if the instructor determines the examination is an essential component of the learning process. The college has the right to restrict registration in some courses for students wishing to audit.

Reserve Officers Training Corps

The college offers a Reserve Officers Training Corps (ROTC) program in cooperation with the University of Texas at Arlington. The ROTC program provides a unique opportunity for you to assess and develop your leadership skills by being exposed to a variety of leadership styles, techniques and tools. It also develops college-educated officers for the active Army and the reserve components, giving you the opportunity to pursue either a civilian or military career after completing college.

ROTC credits may be used to complete a college degree by applying them toward elective credit. Military science may be declared as a minor course of study in many degree programs at The University of Texas at Arlington. To be eligible, you must be enrolled in the ROTC program, must receive acceptance of military science as a minor from your major degree department, and must complete 18 hours of military science, 10 of which are advanced. If you participate in ROTC while enrolled in the college, you will be eligible to apply at UTA for ROTC scholarships to complete degrees at UTA. The U.S. Army Scholarship Program provides an excellent way for you to obtain assistance in financing a college education. Every scholarship provides for payment of all expenses incurred for fees and tuition, an allowance for books and supplies, and $200 a month for up to 10 months per year.

Service Learning

Service Learning combines academic instruction with active community service, utilizing critical, reflective thinking to examine the world around you and your civic responsibilities. It is a mutually beneficial partnership, allowing you to apply what you have learned in the classroom into the real world while developing new skills in a service position in the community. You get a chance to improve your critical thinking skills, explore career possibilities, and make a difference by meeting community needs and increasing community support. The colleges offer you an opportunity to serve at a wide variety of charitable and social agencies. The college is proud to be a member of both the Texas Campus Compact and the National Campus Compact, organizations which are strongly committed to the integration of Service Learning into college curriculum.

Servicemen's Opportunity College

In cooperation with other community colleges in the United States, the colleges participate in the Servicemen's Opportunity College. Through this program, you can plan an educational experience regardless of where the military requires you to serve. While military service, *per se*, carries no equivalent college credit, coursework earned in the military *may* result in equivalent college credit with appropriate documentation. For further information contact the Registrar's Office.

Tech Prep

Tech Prep is a college program that begins in high school; it is advanced placement for technical careers that prepares students for direct entry into the workplace upon completion of an associate degree or a post secondary certificate program.

College Tech Prep programs are sequences of courses developed cooperatively between school districts and DCCCD, and approved by both the Texas Education Agency (TEA) and the Texas Higher Education Coordinating Board (THECB).

High school students must follow these steps to participate in Tech Prep:

- Choose a Tech Prep career program offered at your high school after reviewing options with your high school counselor.
- Complete the suggested high school Tech Prep classes with a minimum overall average of 80.
- Ask the high school counselor to fill out a "Transfer of Tech Prep College Credit" form.
- *Within 15 months after high school graduation:*
- enroll at any DCCCD college
- meet with a Tech Prep advisor at the college
- declare a major and file a degree plan in any degree or certificate program.

For more information about current Tech Prep programs, contact your high school counselor or career and technology teacher or call the college's Tech Prep office. See this website for more information: www.dcccd.edu/vcea/dtechp/

Tomorrow's Teachers

Tomorrow's Teachers is a first-of-its-kind, collaborative initiative among Dallas County independent school districts, the college and area four-year universities. The overall objective of the kindergarten-through-college program is to transform Dallas-area students into Dallas-area public school teachers.

Tuition for college and Dallas-area state universities is very affordable, but even modest tuition can sometimes be a barrier to education. Tomorrow's Teachers tackles this issue head on. Traditional financial aid in the form of student loans and grants is available through the college and all area four-year universities. Special funding programs are available, such as Rising Star, which guarantees all qualifying Dallas County high school graduates the opportunity to attend the first two years of college tuition free, books and fees included. In addition, the Tomorrow's Teachers program is a clearinghouse for scholarships earmarked specifically for students entering the teaching profession. See http://www.dcccd.edu/vcea/partner/Teachers/index.html for more information about Tomorrow's Teachers.

Workforce Education Course Manual (WECM)

The Workforce Education Course Manual (WECM) is a statewide inventory of workforce education courses offered for semester credit hours and Continuing Education Units (CEUs). These courses are offered by the colleges to respond rapidly to the needs of business and industry. The WECM offers a means for the college to continually design and update high, quality workforce courses by receiving input from business and industry and community college faculty throughout Texas.

The Texas Higher Education Coordinating Board approves all courses cited in the WECM for use by all Texas public community and technical colleges. Therefore, if you earn semester credit hours and CEUs by successfully completing the requirements for the course(s), you will be able to transfer the credits or CEUs to another Texas public community or technical college that also offers the same course(s).

Student Obligations

Attending Classes

You are expected to attend regularly all classes in which you enroll. You have the responsibility to attend class and to consult with the instructor when an absence occurs.

Instructors are responsible for describing attendance policies and procedures to you. If you are unable to complete a course (or courses) in which you are enrolled, **it is your responsibility to withdraw from the course by the appropriate date. If you do not withdraw, you will receive a performance grade, usually a grade of "F."**

Under Texas Education Code, Section 51.911, all institutions of higher education shall excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. If a student and an instructor disagree about the nature of the absence being for the observance of a religious holy day, or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the President of the institution or his or her designee. The student and instructor shall abide by the decision of the chief executive officer or his/her designee.

Dropping A Course or Withdrawing from College

To drop a class or withdraw from the college, you must follow the prescribed procedure. **It is your responsibility as a student to drop or withdraw.** Failure to do so will result in your receiving a performance grade, usually a grade of "F." Should circumstances prevent you from appearing in person to withdraw from the college, you may withdraw by the following: Mail or FAX to the registrar indicating which courses and by including your social security number or college I.D. number and signature; through the college online registration system; or through the "telephone registration" system. A drop/withdrawal request by any means must be received in the Registrar's Office by the official drop/withdrawal deadline. No drop or withdrawal requests are accepted by telephone unless through the "telephone registration" system. If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a "W" (Withdraw) in each class dropped. The deadline for receiving a "W" is indicated on the academic calendar and the current class schedule. See Refund Policy for possible refund eligibility. Students who drop or withdraw should be aware of the course repeat policy in the next paragraph.

Repeating Courses

The State of Texas financially subsidizes the education of college students. In other words, the tuition paid by any student represents only a portion of the real cost of any credit and many Continuing Education courses since the State pays the remainder of the costs. The Texas State Legislature has

mandated that effective with the Fall 2002 Semester, most credit and Continuing Education courses may be attempted only two times; the State will no longer subsidize a student's enrollment for these courses for a third or subsequent attempt. Therefore, students may have to pay a higher rate of tuition or may be denied registration for a course for the third or subsequent time they attempt a course. Students should see an academic advisor to determine if they are repeating a course at least the third time. Students should carefully select courses. They should also take care in dropping a course as any future retake of that course may result in a higher rate of tuition or they may be denied registration for that course. See the following web page for information about courses exempt from this ruling and for cross-lists of both academic and continuing education courses: https://www1.dcccd.edu/catalog/ss/oep/repeating_courses.cfm.

Students Called into Active Duty

If you are called to report to active duty, please bring your official orders to the Admissions Office for processing. The Texas Higher Education Coordinating Board rules (chapter 21 Section 21.5) indicate, "If a student withdraws from an institution because the student is called into active military service, the institution, at the student's option, shall:

1. refund the tuition and fees paid by the student for the semester in which the student withdraws;
2. grant a student, who is eligible under the institution's guidelines, an incomplete grade in all courses by designating "withdrawn-military" on the student's transcript; or
3. as determined by the instructor, assign an appropriate final grade or credit to a student who has satisfactorily completed a substantial amount of course work and who has demonstrated sufficient mastery of the course material.

Grades & Transcripts

Grades and Grade Point Average

Final grades are reported for each student for every course according to the following grading system.

Grade	*Interpretation*	*Grade Point Value*
A	Excellent	4 points
B	Good	3 points
C	Average2 points	
D	Poor	1 point
E*	Effort	Not computed
F	Failing	0 points
I	Incomplete	Not computed
WX	Progress;	Not computed; re-enrollment required
W	Withdrawn	Not computed
CR	Credit	Not computed

*Used only with developmental studies courses.

Grade points earned for each course are determined by multiplying the number of points for each grade by the number of credit hours the course carries. For example, if you take a three-hour course and earn an "A" you will accumulate 12 grade points for that course. Your grade point average is computed by adding the total grade point values for all courses and dividing by the number of credit hours attempted during the same period. For example, if you take the following courses, you will earn the following grades and have a grade point average of 2.93:

Credit Hours	Grade	Grade Points
2-hour course	A	8
3-hour course	8	9
4-hour course	B	12
3-hour course	C	6
	Total Credit Hours: 12	
	Total Grade Points: 35	

35/12 = 2.93

Your transcript and grade reports will indicate two different Grade Point Averages, called GPAs. GPA (1) is based upon all courses completed in colleges of the DCCCD in which you received a performance grade of A-F. GPA (1) is used to determine Suspension/Probation status and athletic participation eligibility. GPA (2) is based upon grade points earned in all college-level courses taken at the college and all other colleges of the DCCCD in which you received a performance grade of A-F. Courses numbered below 1000, ARTS 1170, MUSI 9176, and DRAM 1170 are not used in the calculation of GPA (2). GPA (2) is used to determine eligibility for graduation, honor rolls, and eligibility in Who's Who in American Junior Colleges. It is also the GPA that may be considered by four-year institutions if you transfer.

For repeated courses, only the latest grade earned is included in cumulative grade point averages even if the latest grade is lower than a preceding grade. However, transcripts do indicate all work attempted and completed at all of the colleges of the DCCCD. When you withdraw from a course being

repeated, the cumulative grade point average is calculated by using the immediately preceding grade in the same course.

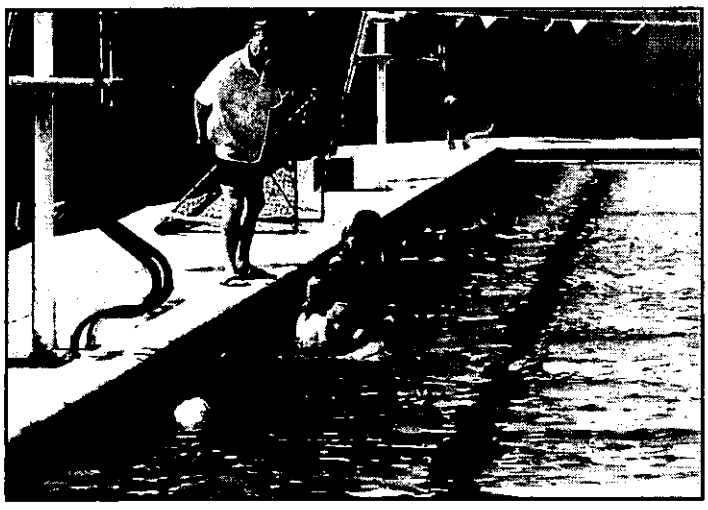
If you believe an error has been made in determining a course grade, you should contact the instructor or appropriate division office as soon as possible. For more information, see Grade Dispute Resolution in the section on College Policies and Procedures.

An incomplete grade of "I" may be given when an unforeseen emergency prevents you from completing the work in a course. The "I" must be converted to a performance grade (A-F) within 90 days after the first day of classes in the subsequent regular semester. If the work is not completed after 90 days, the "I" is converted to a performance grade, usually an "F".

An Incomplete Contract is used to assign an incomplete grade and states the requirements for the satisfactory completion of the course. The Incomplete Contract must be agreed upon and signed by the instructor, you, and the appropriate division dean and submitted with the final grade report. When an Incomplete Contract must be submitted without your signature, the instructor must include a statement indicating that you are aware of and agree with the contract.

If you do not complete course requirements, you may receive a "WX" grade when the instructor determines that reasonable progress has been made and when you can re-enroll for course completion prior to the certification date in the next regular semester. If you do not complete the course requirements, the "WX" is converted to a performance grade.

An "E" grade may be given when an instructor wishes to indicate that you have made progress in a developmental studies course. An "E" grade is non-punitive and is not computed. The "E" grade provides more flexibility for re-



enrollment, particularly for students who do not achieve a C-level grade in a course. An "E" grade indicates that you participated in a course according to TSI guidelines, but were unable to do C-level or passing work that would qualify you to enroll in transfer-level courses. The E grade indicates below college skill level work, but shows that you participated in and attended the class and attempted to do the work in the course.

Students on Federal Financial Aid should check with the Financial Aid Office concerning E grade(s) and any impact they have on benefits.

Acceptable Scholastic Performance

College work is measured in terms of credit hours. The number of credit hours offered for each course is listed with the course description in this catalog. In college-level courses (those numbered above 1000), the number of credit hours a course has is indicated by the second digit of the course number. A course numbered 1301 is a 3-hour credit course, one numbered 2401 is a 4-hour course, etc.

Acceptable scholastic performance is the maintenance of a grade point average, based on GPA (1), of 2.0 (on a 4.0 scale) or better. You may not be graduated from any degree or certificate program unless you have a cumulative grade point average of 2.0, based on GPA (2), or better. Grade points and hours earned in courses numbered below 1000, ARTS 1170, MUSI 9176, and DRAM 1170 cannot be used to meet graduation requirements.

Grade Reports

Grade reports are no longer mailed to students. Students may acquire their grades online through www.econnect.dcccd.edu or by telephone at 972-613-1818.

Transcript of Credit

The transcript of credit is a chronological listing of college credit classes attempted within the DCCCD seven-college system. The transcript is official if the document is embossed with the college seal and imprinted with the signature of the Registrar. It includes both GPA(1) and GPA(2).

Upon your written request, the Registrar's Office will send an official transcript to you or to any college or agency named. A minimum of two working days is required for processing. A transcript will be released only if all obligations to the DCCCD have been settled. Transfer credits from other institutions are not recorded on transcripts. **If you desire a transcript of work completed at another institution, you must secure it from that institution.**

Transcript Evaluations

If you have completed course work at a regionally accredited college or university, and you will be working toward an associate degree or a certificate at the college, you should contact the Registrar's Office to request a transcript evaluation. The college will inform transfer students of the amount of credit which will transfer, if not prior to your enrollment, but at least prior to the end of the first academic term in which you are enrolled.

Transcript Request

To request a free copy of your transcript, write or fax the Admissions Office at the college of the DCCCD you last attended. You can also make your request online through the DCCCD website. The registrar needs a dated and signed request that includes the following:

- Your name
- a copy of your driver's license
- your Social Security number (optional)
- when you attended
- where to send the transcript

Your signature is **REQUIRED.** The Registrar cannot fill the request without it. College addresses and telephone numbers can be found at http://www.dcccd.edu/maps/maps.htm.

Probation, Suspension & Dismissal

Scholastic Probation

If you have completed a total of nine (9) credit hours with a performance grade of "A," "B," "C," "D" or "F" and have a grade point average based on GPA(1) of less than 2.0, you will be placed on scholastic probation. While on scholastic probation, you may have coursework and total hours limited, but you may re-enroll at the college if you earn a minimum 2.0 grade point average based on GPA(1) in each semester or summer session. While on scholastic probation, if you fail to meet the above requirements in a semester or summer session, you will be placed on scholastic suspension and will not be allowed to register.

Scholastic Suspension

If you are on scholastic probation and become ineligible to re-enroll, you shall be suspended from the college for not less than one semester.

After you have served a first suspension, you may petition for readmission. If readmission is approved, you may then continue to re-enroll with completion of a semester or summer session with a GPA of 2.0 or greater.

Working toward an Associate Degree? File a degree plan in the Registrar's Office before the end of your freshman year.

Academic Dismissal

If you do not meet the required standards and are placed on continued scholastic suspension for a second time, you will be academically dismissed for a period of 12 months. Prior to applying for readmission, you must present to the admissions committee a written explanation of how you plan to improve the your academic standing. You may be readmitted on continued scholastic probation, and your coursework and total hours may be limited.

Indefinite Academic Dismissal

If you are readmitted after having been on scholastic suspension and academic dismissal, and subsequently fail to achieve a GPA (1) of 2.0 greater, you shall be placed on indefinite academic dismissal. After a period of more than 12 months, only the Vice President of Student Development or designee may recommend you for readmission.

It is your responsibility to understand and comply with the college's academic standards and procedures of the institution.

If you are on academic suspension or academic dismissal from another institution, you are ineligible for admission to the college unless you have met the academic standards required by the college.

Graduation Requirements

In addition to other graduation requirements, you are expected to complete within five (5) years the course and hour degree requirements as outlined in the catalog in effect at the time of your entrance to the college. You may have the option to select a more recent catalog year in which you were enrolled, provided the degree requirements are met within five (5) years of the catalog selected and the requisite courses are still offered.

To qualify for a second degree or certificate, you must fulfill the residence requirement and must complete all required courses in the plan for the second degree or certificate.

The college reserves the right to modify curricula or to make changes as appropriate.

You, the student, have the ultimate responsibility to select and register for courses meeting graduation requirements.

Associate Degree Plans

If you are seeking an associate degree, you should request a degree plan from the Registrar's Office no later than at the end of your freshman year and preferably sooner. Official transcripts of all previous college work must be on file at the time you request a degree plan. The application for the granting of the degree should be filed in the Registrar's Office prior to the deadline announced by the registrar.

Certificate Plans

If you are following a one-year certificate program, you should request an official plan during your first semester of enrollment. The application for the granting of the certificate should be filed in the Registrar's Office prior to the deadline announced by the Registrar.

Graduation Ceremony

An annual graduation ceremony is held at the conclusion of the spring semester. Participation is ceremonial only and confers on a student no rights to a degree. If you graduate in December, you may participate in the next commencement if you desire; likewise if you graduate in July or August, you may participate in the spring commencement if you desire, but you are not required to do so. You should notify the Registrar's Office if you wish to participate in the commencement ceremony. Instructions for graduation are mailed to all candidates prior to commencement. The college may schedule additional graduation ceremonies.

Waiving of Scholastic Deficiency for Graduation Purposes

Any student in an academic transfer program may transfer to an Associate in Applied Sciences Degree or certificate program. In such a case, you may choose to have any grades below "C" disregarded. The procedure for disregarding low grades below a "C" may only be exercised while you are in that career program. The GPA for an Associate in Applied Sciences Degree or certificate is based only on the hours used to meet degree requirements; however, the overall GPA (2) must still be 2.0 or above. If you change to an academic transfer program, the original conditions of the academic transfer program must be followed, including the calculation of a cumulative grade point average of all college credits earned. The procedure for waiving scholastic deficiency applies both to students of this college and to students transferring from other institutions. If you wish to use the procedure for waiving scholastic deficiency, you should indicate this in writing to the registrar prior to registration, and you should inform a counselor of your intentions during the pre-registration advisement session.

Academic Recognition & College Honors

Full-time students who complete at least 12 hours of college-level credit and earn a grade point average of 3.5-3.79 are listed on the Vice President's Honor Roll. Full-time students who complete at least 12 hours of college-level credit and average 3.8-4.0 are placed on the President's Honor Roll. Part-time students who take six to 11 college-level credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List. GPA (2) is used to determine academic recognition.

Phi Theta Kappa

Phi Theta Kappa is the international honor society for community colleges. Founded in 1918 to give prestigious recognition to students with excellent scholarship and character, Phi Theta Kappa has always maintained fidelity to its founders' commitment to provide enrichment in four hallmarks: scholarship, leadership, service, and fellowship. Phi Theta Kappa features some of the nation's finest educational programs for community college students. These programs form the cornerstone of the DCCCD's successes in nurturing intellectual curiosity, good citizenship, and leadership potential. Many scholarship opportunities are available including the USA All-American Scholarships and the Guistwhite Scholarship Program.

Who's Who Among Students in American Community Colleges

Selections to Who's Who Among Students in America Community Colleges are made each fall. Who's Who is a highly regarded honor reserved for outstanding second-year college students eligible for the program. In general, students are recognized at graduation and at convocation in the spring.

For more information on the Bill Priest Institute's numerous & varied offerings for businesses, call 214-860-5900.

Bill J. Priest Institute for Economic Development

Business and Industry Services

The DCCCD's Bill Priest Institute and seven colleges strive to meet the business community's training needs. The DCCCD offers credit and non-credit training, and frequently customizes training to meet the unique needs for specific businesses. Training is offered at the work site or at any DCCCD location, and trainers are industry-experienced experts who know their subjects well. For information about business and industry services at any DCCCD location, call (214) 860-2135.

Job Profiling and Matching

Using the Job Profiling and Matching services, the Bill Priest Institute can help your organization evaluate your hiring needs, profile your jobs and scientifically match those needs with qualified applicants.

ACT Center

Training employees to be productive and skillful is one of the most expensive problems facing companies. To help combat this, the Bill Priest Institute has partnered with ACT, best known for its college entrance exam, to be the Dallas headquarters for a testing and training center designed to help businesses and individuals achieve their goals while boosting the skills of our workforce. The Bill Priest Institute's ACT Center℠ offers convenient and affordable access to more than 2,000 high-tech, web-based job training and testing programs. The Act Center is an invaluable addition to the DCCCD. The ACT Center provides:

- Local training or distance learning (when appropriate technology is available).
- On-demand learning opportunities for individuals or groups.
- A backup source of training, even when training is typically conducted by training staff of the corporation.
- Individualized, self-paced courseware that will save time and money by not duplicating what employees already know.
- Latest state-of-the-art technology for delivering training, education, and assessments.

tompeters! Company

The Bill Priest Institute is the first Texas college to join the Tom Peters Alliance, a partnership between the tompeters company! and educational institutions nationwide designed to engage a dynamic delivery system for business performance improvement consultation and training programs. The training services, which are about bringing passion, caring and commitment to work, include: The Leadership Challenge™ Workshop; Leadership is Everyone's Business™ Workshop; Tom Peters WOW! Projects™ Workshop; and Brand You™ Inspire Performance Workshop.

ISO 9000 Implementation

Your competitors enjoy a preferred status with customers, have increased bid opportunities, and can more readily seek sales abroad. Many companies want ISO 9000 certification but have been discouraged by the high cost of using outside resources to become prepared. Others that try to prepare with internal resources have found the documentation process overwhelming. The Bill Priest Institute, in association with QRX Incorporated, the Texas Manufacturing Assistance Center and accredited registrars, offers a cost-effective ISO 9000 program to help you improve your company's competitive position. Combining training sessions and workshops, benchmarking with peer groups, coaching and feedback from internationally recognized ISO/QS 9000 experts, the program ensures measurable improvements in your company's processes - even before you gain certification. With no prior ISO 9000 experience, your company can become certified in less than one year.

Fast Track Business Software Workshops

The Bill Priest Institute offers Fast Track computer software workshops at the Universities Center at Dallas (UCD), conveniently located in downtown Dallas. Specially designed to meet business needs, individuals or small groups of employees learn the latest skills in the software applications they use the most while missing only one day of work.

Office Space and Services

Keeping overhead expenses to a minimum is critical to a start-up company's survival. That's why the Bill Priest Institute leases office space at affordable rates to small businesses at 1402 Corinth Street, conveniently located just south of downtown Dallas. The Business Incubation Center offers young, service-oriented companies the facilities and services necessary to thrive during the first four years of operation. Easy access to the Small Business Development Centers' on-site training and counseling is an added bonus. Finding assistance with creating your own marketing plan or obtaining a patent is as simple as walking down the hall to visit with one of the SBDC's counselors.

A variety of lease options is available—from single offices to four-office suites. Rates for office space are designed to provide maximum flexibility and diverse options. Space cost is based on actual square footage leased upon move-in. The following services are available:

* Daily office cleaning
* Fax machines
* Copiers
* Secure garage parking
* 24-hour security and access

Small Business Development Centers

The Small Business Development Centers (SBDCs) of the DCCCD are partnership programs with the U.S. Small Business Administration (SBA). SBDCs are dedicated to giving business owners free counseling and affordable training on a variety of important topics.

Experts assist you in getting your business off the ground by helping you write your business plan, acquire financing and market your products and services. If you're already in business and need help marketing on the Internet, getting a patent, obtaining government contracts, complying with environmental regulations, or entering international markets, our SBDCs can point you in the right direction. Nationally certified counselors address:

* Management issues
* Marketing
* Accessing capital
* Business expansion
* Buying or selling a business
* International trade
* Government contracting
* Patents, copyrights and trademarks
* Environmental regulation compliance
* Technology and manufacturing

North Texas Small Business Development Center

The Bill Priest Institute is home to the headquarters for the North Texas Small Business Development Center, which oversees the operation of 17 SBDCs throughout the 49-county North Texas area. The following SBDCs are hosted by DCCCD entities in partnerships with the SBA:

* Best Southwest SBDC, located at Cedar Valley College
* Dallas SBDC, located at the Bill Priest Institute
* Risk Management SBDC, located at the Bill Priest Institute
* International SBDC, located at the World Trade Center, hosted by the Bill Priest Institute
* Government Contracting SBDC, located at the Bill Priest Institute
* Technology Assistance SBDC, located at the Bill Priest Institute.

Distance Learning

Technology has revolutionized almost every aspect of our lives. We communicate, work and travel with greater speed and precision. We now use the Internet for everything from trading stocks to grocery shopping-so, it only makes sense that we would use technology for education and learning.

Imagine taking classes from the convenience of your home, office or wherever your laptop can take you. That's what the Dallas TeleCollege and distance learning is all about. The Dallas County Community College District (DCCCD) has been in the distance learning business for over 25 years. In 1991, the LeCroy Center for Educational Telecommunications (LCET) was established to house the rapidly growing and expanding distance learning and course development program. Today the DCCCD has over 15,000 distance learning enrollments every year.

Distance learning is a collaborative effort of all seven colleges of the DCCCD, each accredited by the Commission of Colleges of the Southern Association of Colleges and Schools. This program draws it strength from its faculty and the integrity of the course content, from technical to baccalaureate-transfer classes, offered by the colleges. Faculty ensure the continued success of distance learning courses by facilitating vigorous student interaction via multiple technologies.

Many aspects of the district-wide distance learning administration, technology infrastructure and instructional support service function are housed at the R. Jan LeCroy Center for Educational Telecommunications, located adjacent to the Richland College campus in North Dallas. In addition to Dallas TeleCollege, the LeCroy Center operates:

- Dallas TeleLearning (telelearning, dcccd.edu), one of the nation's premier producers of educational telecommunications and distance learning products;
- Dallas Teleconferences, award-winning producer of international teleconferences on topics supporting education and training for educational institutions, businesses and government agencies; and
- STARLINK, a Texas-statewide videoconference network that produces and distributes staff development programming primarily for 90-two year colleges, technical institutions, state agencies and other public entities.

DALLAS TeleCollege

The options for distance learning are accessible to students locally, nationally and internationally. DALLAS TeleCollege is the DCCCD's "virtual campus." This virtual campus gives students the ability to access to college courses without having to come to the campus location. DALLAS TeleCollege continuously increases access to DCCCD programs and courses offered via distance learning by coupling instruction that can be offered at a true-distance, without campus-based requirements, with an array of student services accessible to students anywhere, anyplace. Dallas TeleCollege offers everything you need, virtually.

Students may apply for the following degrees through distance education; the Associate of Arts Degree, the Associate of Sciences Degree, and the Associate in Business Degree.

Admissions

Dallas TeleCollege Admissions is located at the R. Jan LeCroy Center for Educational Telecommunications. Dallas TeleCollege admissions policies are those of the DCCCD. See Getting Started. Dallas TeleCollege is a collaborative effort of all seven DCCCD colleges.

You may apply for admissions to the DCCCD online, or for more information about Dallas TeleCollege Admissions contact the office directly at: www.telecollege.dcccd.edu.

Dallas TeleCollege Admissions
9596 Walnut St.
Dallas, TX 75243-2112
Phone: (972) 669-6414
If outside of Dallas: 1 (888) 468-4268

Registration

Dallas TeleCollege Online Registration is housed at the R. Jan LeCroy Center for Educational Telecommunications. All district policies and requirements apply to Dallas TeleCollege registrations.

Dallas TeleCollege class schedules are available online at the Dallas TeleCollege homepage at www.telecollege.dcccd.edu. Dalals TeleCollege offers regular semester (fall, spring and summer) courses, following the Academic Calendar of the DCCCD. In addition, the Dallas TeleCollege offers many courses through Open Enrollment. Open Enrollment sections are 16-week sessions that begin every month.

Students registering in Dallas TeleCollege sections (9000-level) may access online registration at the Dallas TeleCollege homepage at www.telecollege.dcccd.edu. For more information about Dallas TeleCollege Registration, contact the office directly at:

Dallas TeleCollege Registration
9596 Walnut St.
Dallas, TX 75243-2112
Phone: (972) 669-6414
If outside of Dallas, toll-free: 1 (888) 468-4268

Advising

Dallas TeleCollege makes academic advising accessible and convenient to students needing the flexibility of campus-free education and services. Distance learners in need of assistance with a variety of advising issues including degree planning, schedule building, determining TSI standards and course prerequisites may contact a Dallas TeleCollege Academic Advisor. The Dallas TeleCollege self assessment tool, "Is Distance Learning Right For Me", allows students to self-access whether they possess characteristics that would best position them for success in a distance learning environment. The tool is available on the Dallas TeleCollege website at www.telecollege.dcccd.edu.

Dallas TeleCollege Academic Advising is available online at the Dallas TeleCollege homepage at www.telecollege.dcccd.edu or by phone at (972) 669-6417, or if outside Dallas, toll-free at 1 (888) 468-4268.

Dallas TeleCollege Advising
9596 Walnut St.
Dallas, TX 75243-2112
Phone: (972) 669-6417
E-Mail: dtcadvisor@dcccd.edu
If out of Dallas, toll-free: 1 (888) 468-4268

Financial Aid

Financial aid is available for courses offered through Dallas TeleCollege, as it would be for the same courses offered through DCCCD colleges. All district and federal financial aid policies and requirements apply to Dallas TeleCollege students and courses. For more information regarding financial aid see the Financial Aid section of this catalog.

A Dallas TeleCollege Financial Aid Advisor is available to all Dallas TeleCollege students at the Dallas TeleCollege homepage, www.telecollege.dcccd.edu. Students utilizing financial aid interested in Dallas TeleCollege sections are encouraged to contact the Dallas TeleCollege Financial Aid Advisor. The site is also a rich resource of web-based information regarding financial aid, including links to online FAFSA (Free Application for Federal Student Aid) and other web-based resources.

Learning Resources

Dallas TeleCollege makes available and maintains various learning resources. The Dallas TeleCollege library is made possible through a partnership with Richland College. The online library makes available the latest in web-based library and reference tools including online databases, the DCCCD library catalog, online research assistance, an online "Ask a Librarian" feature, bibliographies, quotations and more. The Dallas TeleCollege Library may be accessed through the Dallas TeleCollege homepage at www.telecollege.dcccd.edu. Dallas TeleCollege also supports a variety of learning resources in the areas of study skills and writing skills. The Dallas TeleCollege Online Writing Lab allows you to submit short questions about grammar, punctuation, and spelling. The Online Writing Lab staff will read and comment on short essays sent via e-mail.

For more information about these and other learning resources available through Dallas TeleCollege, visit the homepage, at www.telecollege.dcccd.edu.

Course Formats

Distance learning courses are offered in a number of formats. Each format may utilize a variety of learning technologies, such as video and CD-ROM, which are designed to enhance the learning experience. Course formats are either offered completely at a distance or require on campus visits.

Completely at a Distance

- Online Course
  Online courses are delivered using only computers and computer peripherals. Students are required to have reliable Internet access and the latest version of Internet browser software. The online classroom is used to deliver instruction, facilitate interactions between faculty and students.
- Telecourse PLUS Course
  The Telecourse PLUS incorporates the use of video and the online classroom. The course includes a pre-produced video series with print materials. Students are required to have access to local cable for viewing or a VHS format videocassette player. Students are also required to have reliable Internet access and the latest version of Internet browser software. The online classroom is used to deliver instruction, facilitate interactions between faculty and students, and more.

On-Campus Requirements

- Telecourse
  The Telecourse allows the students to work and learn independently, with campus-based requirements including orientations, testing, and review sessions. The course includes a pre-produced video series with print materials. Class interaction is offered through telephone, fax and mail. Students are required to have access to local cable for viewing or a VHS format videocassette player.
- Campus-Based Distance Learning
  Campus-based distance learning courses may include any of the above formats along with on-campus requirements. This means that students must visit the campus for a portion of their class. Most student services are also delivered on campus and not at a distance.
- Individualized Distance Learning Courses (IDL)
  IDL courses are individual study courses that use print materials and required activities related to course topics. This self-paced course requires a faculty-to-student agreement for specific work assignments and/or projects. Additional requirements include a study-faculty orientation, written assignments, and tests. Contact your instructor for more information.

Learning Technologies

Course formats may include one or more of the following learning technologies:

- Internet

Courses utilizing the Internet require students have Internet access and the latest version of a browser (Netscape or Internet Explorer).

- Video Series
  Several course formats such as telecourses utilize pre-produced video series which can be viewed in the following ways:
- Local Cable TV – Videos can be viewed through many local cable channels at scheduled times.
- Videotapes – Videotapes may be leased from our online bookstore and viewed on a video cassette player or viewed on campus in the media center.
- Video Streaming – Video streaming allows you to view video lesson programs from your home or office computer. This service requires broadband connectivity such as DSL, cable modems, or wireless connections, and payment of a fee.
- CD–ROM/DVD – in some cases videos may be available on CD-ROM and/or DVD.
- CD-ROM
  The CD-ROM format is a student-centered instructional design using fully integrated multimedia course delivery along with supported print materials. This format brings video programs, interactive computer-based activities, and Internet resources to the student's desktop. Materials include a pre-produced video series along with print materials.

For more information about Dallas Telecollege Administration and Student Services visit our website at www.telecollege.dcccd.edu.

Degrees Offered

Associate in Arts Degree, Associate in Sciences Degree, Fields of Study, and Emphasis Degrees

In addition to the Associate in Arts and Associate in Sciences Degrees offered, a student may also complete an official Field of Study.

The Texas Higher Education Coordinating Board has created Fields of Study, which are designed to transfer as a block of credit to any Texas public college or university. Fields of Study are comprised of courses a student should complete at the freshman and sophomore level that will lead to a specific major in a degree. Students' transcripts will include a notation that states a specific Field of Study has been completed. In order for such a notation to appear, students must successfully complete specific courses comprising the Field of Study. No course substitutions, other than those shown within the plan, will be permitted.

In addition, students may wish to combine a completed Field of Study with the college core curriculum requirements to complete the appropriate Associates degree. In order to do so, students should complete the courses indicated in the degree plans located elsewhere in this catalog. However, students may have to make a choice between pursuing the degree or the official Field of Study because of the number of hours required. As additional Fields of Study are made available, information may be located on the college web page. The following Fields of Study are currently available:

- Associate in Sciences Degree with a Field of Study in Business
- Associate in Sciences Degree with a Field of Study in Computer Science
- Associate in Arts Degree with a Field of Study in Criminal Justice
- Associate in Sciences Degree with a Field of Study in Engineering Technology—Computer Engineering Technology
- Associate in Sciences Degree with a Field of Study in Engineering Technology—Electrical Engineering Technology
- Associate in Sciences Degree with a Field of Study in Engineering Technology—Electronics Engineering Technology
- Associate in Arts Degree with a Field of Study in Mass Communications--Advertising and Public Relations
- Associate in Arts Degree with a Field of Study in Mass Communications--Broadcast Journalism
- Associate in Arts Degree with a Field of Study in Mass Communications--Journalism
- Associate in Arts Degree with a Field of Study in Music
- Associate in Arts Degree with a Field of Study in Teacher Preparation for Pre-K - Grade 4
- Associate in Sciences Degree with a Field of Study in Teacher Preparation for Grades 4-8 Certification

The college also offers a number of "emphasis" degrees in specific majors. An "emphasis" degree is one designed by the college. It includes the college core curriculum required in all degrees plus courses within the student's desired major. Students pursuing an "emphasis" degree should work closely with an advisor to ensure all courses will transfer and count toward the major at the selected institution to which the student plans to transfer. An "Articulated Emphasis" degree is one that will transfer to specified universities. As additional Emphasis Degrees are made available, information may be located on the college web page. The following Emphasis Degrees are currently available:

- Associate in Arts Degree with an Emphasis in Art
- Associate in Arts Degree with an Emphasis in Bilingual Teacher Preparation for Early Childhood Pre-K - Grade 4
- Associate in Sciences Degree with an Emphasis in Bilingual Teacher Preparation for Early Childhood Pre-K - Grade 4
- Associate in Sciences Degree with an Emphasis in Bilingual Teacher Preparation for Early Childhood, Grade 4-8
- Associate in Arts Degree with an Emphasis in Early Childhood Education--Grade 4 Teacher Preparation
- Associate in Sciences Degree with an Emphasis in Electrical Engineering
- Associate in Arts Degree with an Emphasis in Humanities
- Associate in Sciences Degree with an Emphasis in Mathematics
- Associate in Arts Degree with an Emphasis in Peace Studies
- Associate in Arts Degree with an Emphasis in Photographic/Imaging
- Associate in Arts Degree with an Emphasis in Teacher Preparation—Teacher Preparation General Education
- Associate in Arts Degree with an Emphasis in Teacher Preparation—Urban Education

See specific degree plans and certificate plans under the Associate in Applied Sciences, Emphasis Degrees and Field of Study Degrees for degree offerings by DCCCD college locations.

ASSOCIATE IN ARTS DEGREE

Available at all DCCCD Colleges

Degree Code: AA.ARTS

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours including all the required courses listed.
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315 and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

This degree may be taken through a combination of on-campus and distance education offerings, or if planned correctly, the degree may be completed entirely through distance education. Receiving institutions are not required to accept a grade below "C" in transfer.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AA Degree	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 **or** Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, 2412, 2442 or higher level	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** from the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** from the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
ELECTIVE CREDITS Select any 13 hours of elective college credit courses **other than** those with the prefix of BCIS, BIOL, CHEM, COSC, ENGR, GEOL, MATH or PHYS.	**13**
Total Credit Hours	**61**

ASSOCIATE IN SCIENCES DEGREE

Available at all DCCCD Colleges

Degree Code: AS.SCIENCE

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours including all the required courses listed.
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

This degree may be taken through a combination of on-campus and distance education offerings, or if planned correctly, the degree may be completed entirely through distance education. Receiving institutions are not required to accept a grade below "C" in transfer.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AS Degree	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required.)**	9
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, or 2412, 2442 or higher level	3
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	8
SOCIAL/BEHAVIORAL SCIENCES *Select **each** from the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319.	15
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	9
INSTITUTIONAL OPTIONS *Select **each** from the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	4
ELECTIVE CREDITS Select at least 3-4 hours from the following prefixes: BCIS, BIOL, CHEM, COSC, ENGR, GEOL, MATH or PHYS. Select remaining 9-10 hours from any other college-level courses.	13
Total Credit Hours	61

Fields of Study Offerings

The Texas Higher Education Coordinating Board has created Fields of Study, which are designed to transfer as a block of credit to any Texas public college or university. Fields of Study are comprised of courses a student should complete at the freshman and sophomore level that will lead to a specific major in a degree. Students' transcripts will include a notation that states a specific Field of Study has been completed. In order for such a notation to appear, students must successfully complete specific courses comprising the Field of Study. No course substitutions, other than those shown within the plan, will be permitted.

Field of Study in Business—Available at all DCCCD Colleges

Speech 1315; Economics 2301 and 2302; BCIS 1405; Accounting 2301 or 2401 and 2302 or 2402; Math 1325 or 1425.

Field of Study in Computer Science—Available at Brookhaven, Cedar Valley, Eastfield, Mountain View, North Lake & Richland Colleges

Math 2414, 2513; Physics 2425 and 2426; Computer Science 1436, 1437, 2425 and 2436.

Field of Study in Criminal Justice—Available at Cedar Valley, Eastfield & Mountain View Colleges

Criminal Justice 1301, 1306, 1310, 2313 and 2328.

Field of Study in Engineering Technology—Computer Engineering Technology-Available at Mountain View & Richland Colleges

Math 2414, 2513; Physics 1401 and 1402; Chemistry 1411; English 2311; Engineering Technology 1401, 1402 and 1407.

Field of Study in Engineering Technology—Electrical Engineering Technology-Available at Richland College

Math 2414, 2513; Physics 1401 and 1402; Chemistry 1411; English 2311; Engineering Technology 1401, 1402 and 1407.

Field of Study in Engineering Technology-Electronics Engineering Technology-Available at Mountain View & Richland Colleges

For math, students may select option A or B (OPTION A: take Math 1314 or 1414 and 1316 or 2412; **OR** OPTION B: take Math 2414 and 2513). Physics 1401 and 1402 or 2425 and 2426; Chemistry 1411; English 2311; Engineering Technology 1401, 1402 and 1407.

Field of Study in Mass Communications-Advertising and Public Relations-Available at Brookhaven & Richland Colleges

*All students pursuing this degree **MUST** complete Option A or B:*

OPTION A

Select **each** of the following courses: Journalism 1307, 2327; Journalism 2330
Select **one** course from the following: Journalism 2305, 2311, 2315, 2332; Photography 2356; Communications 1336, 1337

OPTION B

Select **each** of the following courses: Journalism 1307 **and** Journalism 2327, or Journalism 2330
Select **two** courses from the following: Journalism 2305, 2311, 2315, 2332; Photography 2356; Communications 1336, 1337

Field of Study in Mass Communications-Broadcast Journalism-Available at Richland College

*All students pursuing this degree **MUST** complete Option A or B:*

OPTION A

Select **each** of the following courses: Journalism 1307, 1335; Drama 2366
Select **one** course from the following: Journalism 2311, 2315, 2332; Communications 1336, 1337

OPTION B

Select **each** of the following courses: Journalism 1307 **and** Journalism 1335 or Drama 2366
Select **two** courses from the following: Journalism 2311, 2315, 2332; Communications 1336, 1337

Field of Study in Mass Communications-Journalism-Available at Brookhaven, Eastfield & Richland Colleges

*All students pursuing this degree **MUST** complete Option A or B:*

OPTION A
Students must take: Journalism 1307
Select **one** course from the following courses: Journalism 1335, *2311, 2327, 2330
Select **two** courses from the following: Journalism 2305, *2311, 2315; Photography 1316

** Journalism 2311 is not repeatable for credit and will satisfy only one requirement.*

OPTION B
Students must take: Journalism 1307
Select **two** courses from the following: Journalism 1335, *2311, 2327, 2330
Select **one** course from the following: Journalism 2305, *2311, 2315; Photography 1316

** Journalism 2311 is not repeatable for credit and will satisfy only one requirement.*

Field of Study in Music—Available at all DCCCD Colleges
MUSI 1308; Four semester hours from MUEN 1121, 1122, 1123, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1151, 1152, 1153, 2123, 2141; Eight semester hours from MUAP 1101, 1105, 1109, 1113, 1115, 1117, 1121, 1125, 1129, 1133, 1137, 1141, 1145, 1149, 1153, 1157, 1158, 1161, 1165, 1169, 1177, 1181, 2201, 2205, 2209, 2213, 2215, 2217, 2221, 2225, 2229, 2233, 2237, 2241, 2245, 2249, 2253, 2257, 2258, 2261, 2265, 2269, 2277, 2281; Sixteen semester hours from MUSI 1116, 1117, 1311, 1312, 2311, 2312, 2116, 2117.

Field of Study in Teacher Preparation for Pre-K - Grade 4—Available at Brookhaven, Cedar Valley, Eastfield, Mountain View & Richland Colleges
TECA 1303, 1311, 1318 and 1354.

Field of Study in Teacher Preparation for Grades 4-8 Certification—Available at Brookhaven, Eastfield, Mountain View & Richland Colleges
EDUC 1301; TECA 1354; Math 1350 and 1351.

ASSOCIATE IN SCIENCES DEGREE WITH A FIELD OF STUDY IN BUSINESS

This plan is an official Field of Study Degree approved by the Texas Higher Education Coordinating Board

Available at all DCCCD Colleges

Degree Code: AS.FS.BUSINESS

This degree plan is designed to meet the needs of students who plan to major in Business and transfer to a four-year college/university. This curriculum applies to the Bachelor of Arts, Bachelor of Science, or Bachelor of Business Administration as deemed appropriate by the awarding institution. The field of study in business included in this degree is approved by the Texas Higher Education Coordinating Board. This degree plan will constitute a 61-64 semester credit hour transfer block to any public Texas four-year college or university. Transferring students shall not be required to repeat courses transferred as part of the field of study curriculum. Completion of the field of study curriculum shall not prevent a receiving institution from requiring additional lower-division courses that may be necessary for specific degree programs. Receiving institutions are not required to accept a grade below "C" in transfer.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, Speech 1315, and Math 1324;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AS Degree Business Field of Study	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS Math 1324 **(A grade of "C" or better required.)**	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408 and 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302; Economics 2301	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the following:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** BCIS 1405	**5**
REQUIRED BUSINESS FIELD OF STUDY COURSES *Select **each** of the following:* Accounting 2301 or 2401 **and** 2302 or 2402; Economics 2302; Math 1325 or 1425	**12-15**
Total Credit Hours	**61-64**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: Speech 1315; Economics 2301 and 2302; BCIS 1405; Accounting 2301 or 2401 and 2302 or 2402; Math 1325 or 1425.

ASSOCIATE IN SCIENCES DEGREE WITH A FIELD OF STUDY IN COMPUTER SCIENCE

This plan is an official Field of Study Degree approved by the Texas Higher Education Coordinating Board

Available at Brookhaven, Cedar Valley, Eastfield, Mountain View, North Lake and Richland Colleges

Degree Code: AS.FS.COMP.SCI

This degree plan is designed to meet the needs of students who plan to major in Computer Science and transfer to a four-year college or university. The Texas Higher Education Coordinating Board approves the field of study in Computer Science included in this degree. This degree plan will constitute a semester credit hour transfer block to any public Texas four-year college or university with a Computer Science Major. Transferring students shall not be required to repeat courses transferred as part of the field of study curriculum. Completion of the field of study curriculum shall not prevent a receiving institution from requiring additional lower-division courses that may be necessary for specific degree programs. Because of the complexity of requirements, student must plan very carefully and work with an advisor.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 67 credit hours including the courses listed below;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the first college-level math course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites: and
5. Complete 25% of the degree requirements at the college awarding the degree.

It is recommended that students complete the math sequence, physics sequence, and computer science sequence at the same institution to reduce the likelihood of potential gaps in the curriculum.

Course Requirements for the AS Degree Computer Science Field of Study	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS [1]Math 2513 **(A grade of "C" or better required in the first college-level math course.)**	**5**
LAB SCIENCES *Select **each** from the following:* [2]Physics 2425 [3]Physics 2426	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**

continued on next page

INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 [4]Computer Science 1436	**5**
REQUIRED COMPUTER SCIENCE FIELD OF STUDY COURSES *Select **each** of the following:* [5]Computer Science 1437 [6]Computer Science 2436 [7]Computer Science 2425 [8]Mathematics 2414	**16**
TOTAL CREDIT HOURS *Note: State universities are required to accept only 66 hours in transfer; therefore, it is strongly suggested that students check with their receiving university regarding the acceptance of any credit hours over the 66 credit hour maximum. Students may have to make a choice between completing the Field of Study or the degree.*	**67**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: Math 2513 and 2414; Physics 2425 and 2426; Computer Science 1436, 1437, 2425 and 2436.

[1] Mathematics 2513 has the prerequisite of Mathematics 2412, which has the prerequisite of Mathematics 1316, which has the prerequisite of Mathematics 1314 or 1414, which has the prerequisite of two years of high school algebra and an appropriate assessment score or Developmental Mathematics 0099 or 0093.

[2] Physics 2425 has the prerequisite of credit or concurrent enrollment in Mathematics 2513.

[3] Physics 2426 has the prerequisite of Physics 2425 and credit or concurrent enrollment in Mathematics 2414.

[4] Computer Science 1436 is not part of the Computer Science major requirements at The University of Texas at Austin, University of Texas at Arlington, University of Texas at Dallas, and Texas A & M University.

[5] Computer Science 1437 has the prerequisite of Computer Science 1436. Computer Science 1437 is not part of the Computer Science major requirements at The University of Texas at Austin. Preparatory courses such as Computer Science 1436 and Computer Science 1437 will assist students that need additional background but do not apply toward the computer science major requirements.

[6] Computer Science 2436 has the prerequisite of Computer Science 1437.

[7] Computer Science 2425 has the prerequisite of Computer Science 1436. Computer Science 2425 is not part of the Computer Science major requirements at The University of Texas at Austin or Texas A & M University, but may be applied to general degree requirements.

[8] Mathematics 2414 has the prerequisite of Mathematics 2513 or equivalent. Some universities require the completion of Mathematics 2315 as well; Mathematics 2315 has the prerequisite of Mathematics 2414.

ASSOCIATE IN ARTS DEGREE WITH A FIELD OF STUDY IN CRIMINAL JUSTICE

This plan is an official Field of Study Degree approved by the Texas Higher Education Coordinating Board

Available at Cedar Valley, Eastfield and Mountain View Colleges

Degree Code: AA.FS.CRIMINAL.JUST

This degree plan is designed to meet the needs of students who plan to major in Criminal Justice and transfer to a four-year college or university. The Texas Higher Education Coordinating Board approves the field of study in Criminal Justice included in this degree. This degree plan will constitute a semester credit hour transfer block to any public Texas four-year college or university with a Criminal Justice Major. Transferring students shall not be required to repeat courses transferred as part of the field of study curriculum. Completion of the field of study curriculum shall not prevent a receiving institution from requiring additional lower-division courses that may be necessary for specific degree programs. Students wishing to pursue a one-year or two-year program in this field and who do not wish to transfer may wish to consider the Associate of Applied Sciences Degree or a certificate rather than this plan. Students MUST verify the transferability of all DCCCD Criminal Justice courses prior to applying to a university.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 63 credit hours including the courses listed below;
2. Earn a grade of "C" or better in English 1301, Speech 1315, and Math 1324;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5 Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AA Degree Criminal Justice Field of Study	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and Speech 1315 **(a grade of "C" or better required)**	9
MATHEMATICS Math 1324 **(A grade of "C" or better required.)**	3
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 & 1408; CHEM 1405 & 1411; PHYS 1401 & 1405; PHYS 1401 & 2425; PHYS 1405 & 2425	8
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302; Economics 2301	15
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	9
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 Computer Science 1300 or higher level COSC course	4
REQUIRED CRIMINAL JUSTICE FIELD OF STUDY COURSES *Select **each** of the following:* Criminal Justice 1301 Criminal Justice 1306 Criminal Justice 1310 Criminal Justice 2313 Criminal Justice 2328	15
TOTAL CREDIT HOURS	63

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: Criminal Justice 1301, 1306, 1310, 2313 and 2328.

ASSOCIATE IN SCIENCES DEGREE WITH A FIELD OF STUDY IN ENGINEERING TECHNOLOGY - COMPUTER ENGINEERING TECHNOLOGY

This plan is an official Field of Study Degree approved by the Texas Higher Education Coordinating Board
Available at Mountain View and Richland Colleges

Degree Code: AS.FS.COMP.ENGR.TECH
In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 72 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Students who plan to transfer must work closely with an advisor. This plan allows transfer to all Texas public institutions offering a degree in this discipline including the University of Houston, University of Houston-Downtown and Prairie View A&M. Students should check with the transfer institution to determine the total number of transfer credits the institution will accept. Students who do not plan to transfer may wish to look at related Associate in Applied Sciences degrees and/or certificates.

Course Requirements for the AS Degree Computer Engineering Technology Field of Study	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS Math 2513 **(A grade of "C" or better required.)**	**5**
LAB SCIENCES *Select **each** of the following:* Physics 1401 *and* 1402	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS Computer Science 1300 or higher level COSC course	**3**
REQUIRED COMPUTER ENGINEERING TECHNOLOGY FIELD OF STUDY COURSES *Select **each** of the following:* Chemistry 1411 Math 2414 English 2311 Engineering Technology (ENGT) 1401, 1402 and 1407	**23**
Total Credit Hours *Note: State universities are required to accept only 66 hours in transfer; therefore, it is strongly suggested that students check with their receiving university regarding the acceptance of any credit hours over the 66 credit hour maximum. Students may have to make a choice between completing the Field of Study or the degree.*	**72**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: Math 2513, 2414; Physics 1401 and 1402; Chemistry 1411; English 2311; Engineering Technology (ENGT) 1401, 1402 and 1407.
This plan also includes transfer to the University of Houston, University of Houston-Downtown, and Prairie View A&M.

ASSOCIATE IN SCIENCES DEGREE WITH A FIELD OF STUDY IN ENGINEERING TECHNOLOGY - ELECTRICAL ENGINEERING TECHNOLOGY

This plan is an official Field of Study Degree approved by the Texas Higher Education Coordinating Board
Available at Richland College

Degree Code: AS.FS.ELECTRICAL
In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 72 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Students who plan to transfer must work closely with an advisor. Students should check with Prairie View A & M and the University of Houston to determine the total number of transfer credits these institutions will accept. Students who do not plan to transfer may wish to look at related Associate in Applied Sciences degrees and/or certificates.

Course Requirements for the AS Degree Electrical Engineering Technology Field of Study	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required)**	9
MATHEMATICS Math 2513 **(A grade of "C" or better required.)**	5
LAB SCIENCES *Select **each** of the following:* Physics 1401 and 1402	8
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	15
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	9
INSTITUTIONAL OPTIONS Computer Science 1300 or higher level COSC course	3
REQUIRED ELECTRICAL ENGINEERING TECHNOLOGY FIELD OF STUDY COURSES *Select **each** of the following:* Chemistry 1411 Math 2414 English 2311 Engineering Technology (ENGT) 1401, 1402 and 1407	23
Total Credit Hours *Note: State universities are required to accept only 66 hours in transfer; therefore, it is strongly suggested that students check with their receiving university regarding the acceptance of any credit hours over the 66 credit hour maximum. Students may have to make a choice between completing the Field of Study or the degree.*	72

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: Math 2414 and 2513; Physics 1401 and 1402; Chemistry 1411; English 2311; Engineering Technology (ENGT) 1401, 1402 and 1407.
*This plan is **only** for transfer to the University of Houston and Prairie View A&M University.*

ASSOCIATE IN SCIENCES DEGREE WITH A FIELD OF STUDY IN ENGINEERING TECHNOLOGY - ELECTRONICS ENGINEERING TECHNOLOGY

This plan is an official Field of Study Degree approved by the Texas Higher Education Coordinating Board

Available at Mountain View and Richland Colleges

Degree Code: AS.FS.ELECTRONIC

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 69 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Students who plan to transfer must work closely with an advisor. Students should check with the transfer institution to determine the total number of transfer credits that institutions will accept. Students who do not plan to transfer may wish to look at related Associate in Applied Sciences degrees and/or certificates.

Course Requirements for the AS Degree Electronics Engineering Technology Field of Study	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS Selected from the following according to where you wish to transfer: [1] Math 1314 or 1414 [2&3] Math 2513 **(A grade of "C" or better required.)**	**3-5**
LAB SCIENCES *Select from the following according to where you wish to transfer:* [1&2] Physics 1401 *and* 1402 **OR** [3] Physics 2425 and 2426	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS Computer Science 1300 or higher level COSC course	**3**

REQUIRED ELECTRONICS ENGINEERING TECHNOLOGY FIELD OF STUDY COURSES *Select **each** of the following:* Chemistry 1411 English 2311 Engineering Technology (ENGT) 1401, 1402 and 1407 *Select from the following according to where you wish to transfer:* [1] Math 1316 or 2412 [2&3] Math 2414	**22-23**
Total Credit Hours *Note: State universities are required to accept only 66 hours in transfer; therefore, it is strongly suggested that students check with their receiving university regarding the acceptance of any credit hours over the 66 credit hour maximum. Students may have to make a choice between completing the Field of Study or the degree.*	**69-72**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: Physics 1401 and 1402 or 2425 and 2426; Chemistry 1411; English 2311; Engineering Technology (ENGT) 1401, 1402 and 1407. The required math courses depend upon where students transfer. For math, students may select option A or B (OPTION A: take Math 1314 or 1414 and 1316 or 2412; **OR** OPTION B: take Math 2414 and 2513).

[1] Allows transfer to Sam Houston State Univ.

[2] Allows transfer to Sam Houston State Univ., Texas Tech Univ., Texas Southern Univ., and Univ. of Texas at Brownsville

[3] Allows transfer to Sam Houston State Univ., Texas Tech Univ., Texas Southern Univ., and Univ. of Texas at Brownsville, Texas A&M Univ., Univ. of North Texas, and Texas A&M Univ.-Corpus Christi

ASSOCIATE IN ARTS DEGREE WITH A FIELD OF STUDY IN MASS COMMUNICATIONS - ADVERTISING AND PUBLIC RELATIONS

Available at Brookhaven and Richland Colleges

Degree Code: AA.FS.ADV/PUB.REL

In order to be eligible to receive this AA degree, a student must:

1. Complete a minimum of 64 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

This degree may be taken through a combination of on-campus and distance education offerings; or if planned correctly, the degree may be completed entirely through distance education. Receiving institutions are not required to accept a grade below "C" in transfer.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AA Degree Mass Communications - Advertising and Public Relations Field of Study	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(A grade of "C" or better required)**, English 1302, and either Speech 1311 or 1315 **(A grade of "C" or better required.)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, 2412, 2442 or higher level	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426. NOTE: This requirement *cannot* be met by using the following combinations; BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 of higher level COSC course	**4**
REQUIRED DCCCD JOURNALISM COURSES *Select **each** of the following in subsequent semesters:* Journalism 1129, 1130, 2129, and 2130	**4**

REQUIRED MASS COMMUNICATIONS - ADVERTISING AND PUBLIC RELATIONS FIELD OF STUDY COURSES *All students pursuing this degree **MUST** complete Option A or B:* **OPTION A** *Select **each** of the following courses:* Journalism 1307, 2327 Journalism 2330 *Select **one** course from the following:* Journalism 2305, 2311, 2315, 2332 Photography 2356 Communications 1336, 1337 **OPTION B** *Select **each** of the following courses:* Journalism 1307 **and** Journalism 2327 or Drama 2330 *Select **two** courses from the following:* Journalism 2305, 2311, 2315, 2332 Photography 2356 Communications 1336, 1337	**12**
Total Credit Hours	**64**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: *Journalism 1307 and 9 credit hours from Option A* **OR** *Journalism 1307 and 9 credit hours from Option B.*

ASSOCIATE IN ARTS DEGREE WITH A FIELD OF STUDY IN MASS COMMUNICATIONS - BROADCAST JOURNALISM

Available at Richland College

Degree Code: AA.FS.BROADCAST

In order to be eligible to receive this AA degree, a student must:

1. Complete a minimum of 64 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

This degree may be taken through a combination of on-campus and distance education offerings; or if planned correctly, the degree may be completed entirely through distance education. Receiving institutions are not required to accept a grade below "C" in transfer.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AA Degree Mass Communications - Broadcast Journalism Field of Study	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(A grade of "C" or better required)**, English 1302, and either Speech 1311 or 1315 **(A grade of "C" or better required.)**	9
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, 2412, 2442 or higher level	3
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426. NOTE: This requirement *cannot* be met by using the following combinations; BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and PHYS 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	8
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	15
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	9
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 of higher level COSC course	4
REQUIRED DCCCD JOURNALISM COURSES *Select **each** of the following in subsequent semesters:* Journalism 1129, 1130, 2129, and 2130	4

REQUIRED MASS COMMUNICATIONS - BROADCAST JOURNALISM FIELD OF STUDY COURSES *All students pursuing this degree **MUST** complete Option A or B:* **OPTION A** *Select **each** of the following courses:* Journalism 1307, 1335 Drama 2366 *Select **one** course from the following:* Journalism 2311, 2315, 2332 Communications 1336, 1337 **OPTION B** *Select **each** of the following courses:* Journalism 1307 **and** Journalism 1335 or Drama 2366 *Select **two** courses from the following:* Journalism 2311, 2315, 2332 Communications 1336, 1337	**12**
Total Credit Hours	**64**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: *Journalism 1307 and 9 credit hours from Option A* **OR** *Journalism 1307 and 9 credit hours from Option B.*

ASSOCIATE IN ARTS DEGREE WITH A FIELD OF STUDY IN MASS COMMUNICATIONS - JOURNALISM

Available at Brookhaven, Eastfield and Richland Colleges

Degree Code: AA.FS.JOURN

In order to be eligible to receive this AA degree, a student must:

1. Complete a minimum of 64 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, Speech 1311 or 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

This degree may be taken through a combination of on-campus and distance education offerings; or if planned correctly, the degree may be completed entirely through distance education. Receiving institutions are not required to accept a grade below "C" in transfer.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AA Degree Mass Communications - Journalism Field of Study	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(A grade of "C" or better required)**, English 1302, and either Speech 1311 or 1315 **(A grade of "C" or better required.)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, 2412, 2442 or higher level	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426. NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and PHYS 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 of higher level COSC course	**4**
REQUIRED DCCCD JOURNALISM COURSES *Select **each** of the following in subsequent semesters:* Journalism 1129, 1130, 2129, and 2130	**4**

REQUIRED MASS COMMUNICATIONS - JOURNALISM FIELD OF STUDY COURSES *All students pursuing this degree **MUST** complete Option A or B:* **OPTION A** *Students **must** take:* Journalism 1307 *Select **one** course from the following:* Journalism 1335, *2311, 2327, 2330 *Select **two** courses from the following:* Journalism 2305, *2311, 2315 Photography 1316 **OPTION B** *Students **must** take:* Journalism 1307 *Select **two** courses from the following:* Journalism 1335, *2311, 2327, 2330 *Select **one** course from the following:* Journalism 2305, *2311, 2315 Photography 1316 * Journalism 2311 is not repeatable for credit and will satisfy only one requirement.	**12**
Total Credit Hours	**64**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: *Journalism 1307 and 9 credit hours from Option A* **OR** *Journalism 1307 and 9 credit hours from Option B.*

ASSOCIATE IN ARTS DEGREE WITH A FIELD OF STUDY IN MUSIC

This plan is an official Field of Study Degree approved by the Texas Higher Education Coordinating Board
Available at all DCCCD Colleges

Degree Code: AA.FS.MUSIC
This degree plan is designed to meet the needs of students who plan to major in Music and transfer to a four-year college/university. This curriculum applies to the Bachelor of Music degree, but also may be applied to the Bachelor of Arts or other baccalaureate-level music degree as deemed appropriate by the awarding institution. The field of study in music included in this degree is approved by the Texas Higher Education Coordinating Board. This degree plan will constitute a 66-semester credit hour transfer block to any public Texas four-year college or university.

Transferring students who have completed the field of study curriculum must satisfy the competency and proficiency requirements of the receiving institution. Transferring students shall not be required to repeat courses transferred as part of the field of study curriculum. However, diagnostic assessment of transfer students is permissible if the receiving institution routinely conducts diagnostic assessment of native students at the same point in the program of study.

Completion of the field of study curriculum shall not prevent a receiving institution from requiring additional lower-division courses that may be necessary for specific degree programs. Receiving institutions may require transfer students in specialized programs (e.g., jazz studies, performance, composition, music therapy, etc.) to take additional degree-specific lower-division courses that are not included in the field of study curriculum. Receiving institutions are not required to accept a grade below "C" in transfer.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 66 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AA Degree Music Field of Study	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** of the following:* Math 1314 or Math 1414 or higher level	**3-4**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408 and 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425. If a student is required to take 4 hours of Piano, this requirement is reduced to 4 hours.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302; *Psychology 2301 *If the university to which student wishes to transfer requires **both** Music 1308 **AND** 1309, or if student is undecided, the student does not have to take Psychology 2301.	**12-15**

continued on next page

HUMANITIES/VISUAL AND PERFORMING ARTS MUSI 1308 *MUSI 1309 *If the institution to which the student wishes to transfer requires only one music literature course, the student should take MUSI 1308. If it requires two music literature courses, the student should not take Psychology 2301, but should take MUSI 1308 and 1309.	**6**
REQUIRED MUSIC ENSEMBLE FIELD OF STUDY COURSES *Select **four semester hours** from the following:* MUEN 1121, 1122, 1123, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1151, 1152, 1153, 2123, 2141 (Courses may be repeated for credit.)	**4**
APPLIED STUDY I. *Select **eight semester hours** in the major applied area of study of the following:* MUAP 1101, 1105, 1109, 1113, 1115, 1117, 1121, 1125, 1129, 1133, 1137, 1141, 1145, 1149, 1153, 1157, 1158, 1161, 1165, 1169, 1177, 1181, 2201, 2205, 2209, 2213, 2215, 2217, 2221, 2225, 2229, 2233, 2237, 2241, 2245, 2249, 2253, 2257, 2258, 2261, 2265, 2269, 2277, 2281 (Courses may be repeated for credit) II. Applied/class piano MUSI 1181, 1182, 2181, 2182; MUAP 1169, 2269, 2369 The actual number of hours in piano is determined by the college based upon student's level and piano proficiency. If the institution determines the student needs 4 hours of piano, the science requirement is reduced to 4 hours.	**8**
THEORY/AURAL SKILLS *Select **16 hours** from the following:* MUSI 1116, 1117, 1311, 1312, 2311, 2312, 2116, 2117 (Courses may be repeated for credit.)	**16**
TOTAL CREDIT HOURS *Note: State universities are required to accept only 66 hours in transfer; therefore, it is strongly suggested that students check with their receiving university regarding the acceptance of any credit hours over the 66 credit hour maximum. Students may have to make a choice between completing the Field of Study or the degree.*	**66-67**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: MUSI 1308; Four semester hours from MUEN 1121, 1122, 1123, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1151, 1152, 1153, 2123, 2141; Eight semester hours from MUAP 1101, 1105, 1109, 1113, 1115, 1117, 1121, 1125, 1129, 1133, 1137, 1141, 1145, 1149, 1153, 1157, 1158, 1161, 1165, 1169, 1177, 1181, 2201, 2205, 2209, 2213, 2215, 2217, 2221, 2225, 2229, 2233, 2237, 2241, 2245, 2249, 2253, 2257, 2258, 2261, 2265, 2269, 2277, 2281; Sixteen semester hours from MUSI 1116, 1117, 1311, 1312, 2311, 2312, 2116, 2117.

ASSOCIATE IN ARTS DEGREE WITH A FIELD OF STUDY IN TEACHER PREPARATION FOR PRE-K - GRADE 4

This plan is an official Field of Study Degree approved by the Texas Higher Education Coordinating Board
Available at Brookhaven, Cedar Valley, Eastfield, Mountain View and Richland Colleges

Degree Code: AA.FS.TCH.PRP.PREK-4
This degree plan is an officially approved plan by the Texas Higher Education Coordinating Board for students who wish to pursue a Bachelor of Science in Human Sciences or Bachelor of Science in Interdisciplinary Studies with a concentration in Child and Family Studies/Child Development to become an Early Childhood teacher. Receiving institutions are not required to accept a grade below "C" in transfer.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours as shown below;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AA Degree in Child Development/Early Childhood Education	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required.)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** of the following:* Math 1314 or Math 1414 or higher level	**3-4**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302; Psychology 2301	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the following:* I. Arts 1301 or Music 1306 II. English 2326, 2327, 2328, 2331, 2332, or 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; or Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
REQUIRED TEACHER PREPARATION FOR PRE-K - GRADE 4 FIELD OF STUDY COURSES *Select **each** of the following:* TECA 1303, 1311, 1318, 1354	**12**
ELECTIVE CREDITS *One additional hour **or** one* of these:* CDEC 1321* or 1421* , 1319*, 1359*, 2341* or 2441* *Before taking one, student should ensure the course is the correct one as approved by the university to which the student will transfer.	**1-4**
Total Credit Hours	**61-65**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: TECA 1303, 1311, 1318 and 1354.

ASSOCIATE IN SCIENCES DEGREE WITH A FIELD OF STUDY IN TEACHER PREPARATION FOR GRADES 4-8 CERTIFICATION

This plan is an official Field of Study Degree approved by the Texas Higher Education Coordinating Board

Available at Brookhaven, Eastfield, Mountain View and Richland Colleges

Degree Code: AS.FS.TCH.PRP.4-8

This degree plan is an officially approved plan by the Texas Higher Education Coordinating Board for students who wish to pursue a Bachelor of Science in Human Sciences or Bachelor of Science in Interdisciplinary Studies with a concentration in Child and Family Studies/Child Development to become a teacher in Texas. Receiving institutions are not required to accept a grade below "C" in transfer.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours as shown below;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AS Degree in Teacher Preparation	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and Speech 1311 or Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** Math 1314 or Math 1414 or higher level	**3-4**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408 and 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302; Psychology 2301	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301 or Music 1306 II. English 2326, 2327, 2328, 2331, 2332, or 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; or Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
REQUIRED TEACHER PREPARATION FOR GRADE 4-8 CERTIFICATION FIELD OF STUDY COURSES *Select **each** of the following:* EDUC 1301; TECA 1354; Math 1350, 1351	**12**
ELECTIVE CREDITS *Select 1 additional hour **or** one* of the following:* CDEC 1359*; EDUC 1325*; GEOG 1301*; Any 3-4 hour Spanish course *Before taking one, student should ensure the course is the correct one as approved by the university where the student plans to transfer and count it in their Bachelor of Science with a major in one of the following disciplines: Mathematics, Science, Mathematics/Science Composite, Social Sciences/Language Arts Composite, or Interdisciplinary Studies (Generalist and Bilingual Generalists).	**1-4**
Total Credit Hours	**61-65**

Student's transcript will indicate the Field of Study has been completed upon successful completion of the following courses: EDUC 1301; TECA 1354; Math 1350 and 1351.

Emphasis Degrees

The college offers a number of "emphasis" degrees in specific majors. An "emphasis" degree is one designed by the college. It includes the college core curriculum required in all degrees plus courses within the student's desired major. Students pursuing an "emphasis" degree should work closely with an advisor to ensure all courses will transfer and count toward the major at the selected institution to which the student plans to transfer. An "Articulated Emphasis" degree is one that will transfer to specified universities. As additional Emphasis Degrees are made available, information may be located on the college web page. The following Emphasis Degrees are currently available:

Associate in Arts Degree with an Emphasis in Art—Available at all DCCCD colleges.

Associate in Arts Degree with an Emphasis in Bilingual Teacher Preparation for Early Childhood Pre-K - Grade 4—Available at Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View and Richland Colleges. This degree is transferable to the University of North Texas (Dallas or Denton Campus).

Associate in Sciences Degree with an Emphasis in Bilingual Teacher Preparation for Early Childhood Pre-K - Grade 4--Available at Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View and Richland Colleges. This degree is transferable to the University of Texas at Arlington.

Associate in Sciences Degree with an Emphasis in Bilingual Teacher Preparation, Grade 4- 8--Available at Brookhaven, Eastfield, El Centro, Mountain View and Richland Colleges. This degree is transferable to the University of North Texas (Dallas or Denton Campus).

Associate in Arts Degree with an Emphasis in Early Childhood Education - Grade 4 Teacher Preparation--Available at Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View and Richland Colleges. This degree is transferable to the University of Texas at Arlington.

Associate in Sciences Degree with an Emphasis in Electrical Engineering--Available at Richland College in conjunction with the University of Texas at Dallas.

Associate in Arts Degree with an Emphasis in Humanities--Available at Brookhaven, Cedar Valley, Eastfield, Mountain View, North Lake and Richland Colleges.

Associate in Sciences Degree with an Emphasis in Mathematics—Available at all DCCCD colleges.

Associate in Arts Degree with an Emphasis in Peace Studies--Available at Richland College. This degree is transferable to the University of North Texas Political Science Department.

Associate in Arts Degree with an Emphasis in Photographic/Imaging—Available at North Lake and Richland Colleges.

Associate in Arts Degree with an Emphasis in Teacher Preparation—Teacher Preparation General Education—Available at Brookhaven, Eastfield and Richland Colleges

Associate in Arts Degree with an Emphasis in Teacher Preparation—Urban Education
Available at El Centro and Richland Colleges. This degree is transferable to the University of Texas at Arlington and Texas Woman's University.

ASSOCIATE IN ARTS DEGREE WITH AN EMPHASIS IN ART

Available at all DCCCD Colleges

This is an "Emphasis" degree. Students should read and understand the paragraphs below.

Degree Code: AA.ARTS.ARTS

This degree plan is designed to meet the needs of students who plan to transfer to a four-year college/university with a major in Art. Students planning to continue their Art studies as a transfer student should check specific requirements at the transfer institution. This is a general plan and it may not satisfy all the requirements of a specific transfer four-year college/university. Students should work closely with an academic advisor/counselor.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 63 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AA Degree Emphasis in Art	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, 2412, 2442 or higher level	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** from the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1303, 1304 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** from the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
ART EMPHASIS *Select **three** from the following:* ARTS 1311, 1312, 1316, 1317 *Select **two** from the following:* ARTS 1303, 1304, 1311, 1312, 1316, 1317, 2313, 2316, 2323, 2324, 2326, 2333, 2341, 2346, 2356 or 2366	**15**
Total Credit Hours	**63**

ASSOCIATE IN ARTS DEGREE IN BILINGUAL TEACHER PREPARATION FOR EARLY CHILDHOOD PRE-K - GRADE 4

Available at Brookhaven, Eastfield, Mountain View, and Richland Colleges and Transferable to the University of North Texas *(Dallas or Denton Campus)*

Degree Code: AA.UNT.BIL.PREK-4

This is an "Articulated Emphasis" degree. Students should read and understand the paragraphs below.

This degree plan is designed to meet the needs of **students who plan to major in Teacher Preparation, Bilingual, Pre-K - Grade 4 and who plan to transfer to UNT (*Dallas or Denton Campus).* Students who complete this plan, including all degree requirements and the additional hours as shown in the plan, and meet the admissions requirements of UNT *(Dallas or Denton Campus)* will be granted full junior status at UNT *(Dallas or Denton Campus)* to pursue a bachelor's degree in this discipline.** Students **MUST** take the THEA (Texas Higher Education Assessment) test and score at least 240 on Reading, 220 on Writing, and 230 on Math in order to be accepted into this program at UNT.

This plan incorporates the DCCCD 48-hour core that will be accepted in full by UNT *(Dallas or Denton Campus)* for its own core and an additional 15-16 hours in order to receive the AA degree. Students completing this plan will also receive a notification on their transcript that they have completed the Texas Higher Coordinating Board's approved Field of Study in Teacher Preparation for Pre-K - Grade 4. This plan also includes an additional 18 hours beyond the AA degree and are approved by UNT to count toward the major.

In order to be eligible to receive this AA degree, a student must:

1. Complete a minimum of 63 credit hours indicated in this plan *(students are strongly encouraged to complete the additional 18 hours shown in this plan);*
2. Earn a grade of "C" or better in English 1301, Speech 1315, and Math 1314 or 1414;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements through the college awarding the degree.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AA Degree in Bilingual Teacher Preparation for Early Childhood Pre-K - Grade 4	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(A grade of "C" or better required)**, English 1302, Speech 1315 **(A grade of "C" or better required.)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314 or Math 1414	**3-4**
LAB SCIENCES *Select **each** of the following:* Biology 1406 and 1407 ***or*** Biology 1408 and 1409	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302 Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351 Economics 1303, 2301, 2302, 2311 Psychology 2301, 2314, 2316 Sociology 1301, 1306, 2319	**15**

HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301; Drama 1310; Music 1306 II. English 2332 or 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
REQUIRED BILINGUAL TEACHER PREPARATION FOR EARLY CHILDHOOD PRE-K - GRADE 4 COURSES *Select **each** of the following:* TECA 1303 TECA 1311 or CDEC 1411 TECA 1318 TECA 1354 CDEC 1319	**15-16**
Total Credit Hours for this AA Degree	**63-65**

OTHER COURSES Following the completion of the degree, students are encouraged to complete all the following courses that are guaranteed to transfer into the University of North Texas' Teacher Preparation, Bilingual, Pre-K - Grade 4 program. *Select **each** of the following:* Math 1350 and 1351 (both must be taken in DCCCD) Geology 1401 Physics 1415 Biology 2406	**18**
Total Credit Hours Transferable to UNT for this Program	**81-83**

ASSOCIATE IN SCIENCES DEGREE WITH AN EMPHASIS IN BILINGUAL TEACHER PREPARATION FOR EARLY CHILDHOOD PRE-K - GRADE 4

Available at Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, and Richland Colleges and Transferable to the University of Texas at Arlington

Degree Code: AS.UTA.BIL.PREK-4

This is an "Articulated Emphasis" degree. Students should read and understand the paragraphs below.

Students completing all courses in this plan will receive an AS degree and will be assured all courses with a grade of "C" or better will transfer into UTA's College of Education for a Bachelor of Arts Degree in Child Studies with teacher certification in Early Chuildhood - Grade 4/Bilingual. Students will be admitted into the program with a DCCCD GPA (2) **of at least 2.75.** Students **MUST** take the THEA (Texas Higher Education Assessment) test and score at least 270 on Reading, 220 on Writing, and 230 on Math in order to be accepted into this program at UTA.

This AS plan incorporates the core curriculum plus 18 hours toward the degree. The AS degree will be awarded when students complete all requirements at a minimum of 66 credit hours. Students are also permitted to acquire an additional 12-14 hours beyond the AS degree before transferring to UTA.

In order to be eligible to receive this AS degree, a student must:

1. Complete a minimum of 66 credit hours indicated in this plan *(students are strongly encouraged to complete the additional 12-14 hours shown in this plan);*
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AS Degree in Bilingual Teacher Preparation for Early Childhood Pre-K - Grade 4	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(A grade of "C" or better required)**, English 1302, and either Speech 1311 or 1315 **(A grade of "C" or better required.)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** of the following:* Math 1314 or Math 1414	**3-4**
LAB SCIENCES *Select **both** of the following:* Biology 1408, 1409	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302; Psychology 2301	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the following:* I. Arts 1301 or Music 1306 II. English 2326, 2327, 2328, 2331, 2332, or 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; or Religion 1304	**9**

INSTITUTIONAL OPTIONS *Select **each** of the following:*: Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
REQUIRED BILINGUAL TEACHER PREPARATION FOR EARLY CHILDHOOD EDUCATION PRE-K - GRADE 4 COURSES *Select **each** of the following:* EDUC 1301, 1325; CDEC 1359; EDTC 1321; MATH 1350, MATH 1351	**18**
Total Credit Hours for this AS Degree	**66-67**

OTHER COURSES Following the completion of the degree, students are encouraged to complete all the following courses which are guaranteed to transfer into the University of Texas at Arlington's BA Degree in Child Studies with teacher certification in Early Childhood - Grade 4/Bilingual program. *Select **each** of the following:* SPAN 2313, SPAN 2314; and any additional 6-8 hours in a course with the prefix of BIOL, CHEM, GEOL, or PHYS	**12-14**
Total Credit Hours Transferable to UTA for this Program	**78-81**

ASSOCIATE IN SCIENCES DEGREE IN BILINGUAL TEACHER PREPARATION, GRADES 4-8

Available at Brookhaven, Eastfield, Mountain View, and Richland Colleges and Transferable to the University of North Texas *(Dallas or Denton Campus)*

Degree Code: AS.UNT.TCH.PRP.4-8

This is an "Articulated Emphasis" degree. Students should read and understand the paragraphs below.

This degree plan is designed to meet the needs of **students who plan to major in Teacher Preparation, Bilingual, Grades 4-8 and who plan to transfer to UNT (*Dallas or Denton Campus*). Students who complete this plan, including all degree requirements and the additional hours as shown in the plan, and meet the admissions requirements of UNT *(Dallas or Denton Campus)* will be granted full junior status at UNT *(Dallas or Denton Campus)* to pursue a bachelor's degree in this discipline.** Students **MUST** take the THEA (Texas Higher Education Assessment) test and score at least 240 on Reading, 220 on Writing, and 230 on Math in order to be accepted into this program at UNT.

This plan incorporates the DCCCD 48-hour core that will be accepted in full by UNT *(Dallas or Denton Campus)* for its own core and an additional 15 hours of degree requirements. The AS degree will be awarded when students complete all requirements at a minimum of 63 credit hours. This plan also includes an additional 18 hours beyond the AS degree and are approved by UNT to count toward the major. Students with Spanish-speaking abilities are encouraged to receive credit for the Spanish language courses through the appropriate CLEP examination.

In order to be eligible to receive this AS degree, a student must:

1. Complete a minimum of 63 credit hours indicated in this plan *(students are strongly encouraged to complete the additional 18 hours shown in this plan);*
2. Earn a grade of "C" or better in English 1301, Speech 1315, and Math 1314 or 1414;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements through the college awarding the degree.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AS Degree in Bilingual Teacher Preparation, Grades 4-8	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(A grade of "C" or better required)**, English 1302, Speech 1315 **(A grade of "C" or better required.)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314 or Math 1414	**3-4**
LAB SCIENCES *Select **each** of the following:* Geology 1405 Physicis 1415	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302 Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351 Economics 2301	**15**

HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301; Drama 1310; Music 1306 II. English 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
REQUIRED BILINGUAL TEACHER PREPARATION, GRADE 4-8 COURSES *Select **each** of the following:* MATH 1350 and 1351 (both must be taken at DCCCD) CDEC 1330 and 1359 EDUC 1325	**15**
Total Credit Hours for this AS Degree	**63-64**

OTHER COURSES Following the completion of the AS degree, students are encouraged to complete all the following courses which are guaranteed to transfer into the University of North Texas' Teacher Preparation, Bilingual, Grades 4-8 program. *Select **each** of the following:* SPAN 1411 and 1412 SPAN 2311 and 2312 BIOL 2406	**18**
Total Credit Hours Transferable to UNT for this Program	**81-82**

ASSOCIATE IN ARTS DEGREE
EARLY CHILDHOOD EDUCATION - GRADE 4 TEACHER PREPARATION

Available at Brookhaven, Eastfield, Mountain View, and Richland Colleges
and Transferable to the University of Texas at Arlington

Degree Code: AA.UTA.TCH.PREP.GRD4

This is an "Articulated Emphasis" degree. Students should read and understand the paragraphs below.

Students completing all courses in this plan will receive an AA degree and will be assured all courses with a grade of "C" or better will transfer into UTA's College of Education for a Bachelor of Arts Degree in Child Studies with teacher certification in Early Chuildhood - Grade 4. Students will be admitted into the program with a DCCCD GPA (2) of at least 2.75. Students **MUST** take the THEA (Texas Higher Education Assessment) test and score at least 270 on Reading, 220 on Writing, and 230 on Math in order to be accepted into this program at UTA.

Students who do not wish to seek the aforementioned degree at UTA should not complete this AA degree. This AA plan incorporates the core curriculum plus 14 hours toward the degree. The AA degree will be awarded when students complete all requirements at a minimum of 63 credit hours. Students are also permitted to acquire an additional 14 hours beyond the AA degree before transferring to UTA.

In order to be eligible to receive this AA degree, a student must:

1. Complete a minimum of 63 credit hours indicated in this plan *(students are strongly encouraged to complete the additional 14 hours shown in this plan);*
2. Earn a grade of "C" or better in English 1301, Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AA Degree in Early Childhood - Grade 4 Teacher Preparation	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(A grade of "C" or better required)**, English 1302, and either Speech 1311 or 1315 **(A grade of "C" or better required.)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** of the following:* Math 1314 or Math 1414	**3-4**
LAB SCIENCES *Select **both** of the following:* Biology 1408, 1409	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302; Psychology 2301	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the following:* I. Arts 1301 or Music 1306 II. English 2326, 2327, 2328, 2331, 2332, or 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; or Religion 1304	**9**

INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
REQUIRED EARLY CHILDHOOD EDUCATION - GRADE 4 TEACHER PREPARATION COURSES *Select **each** of the following:* TECA 1303, 1311, 1318; EDUC 2301 AND 1325	**15**
Total Credit Hours for this AA Degree	**63-64**

OTHER COURSES Following the completion of the degree, students are encouraged to complete all the following courses which are guaranteed to transfer into the University of University of Texas at Arlington's BA Degree in Child Studies with teacher certification in Early Childhood - Grade 4 program. *Select **each** of the following:* Spanish 1411, 1412, 2313 and 2314	**14**
Total Credit Hours Transferable to UTA for this Program	**77-78**

ASSOCIATE IN SCIENCES DEGREE WITH AN EMPHASIS IN ELECTRICAL ENGINEERING

Available at Richland College in conjunction with The University of Texas at Dallas

Degree Code: to be assigned

This is an "Articulated Emphasis" degree with the University of Texas at Dallas.

Students who complete this degree with a GPA of 2.50 with no grade below that of "C" and who meet all admissions requirements at UTD will be accepted into UTD's Bachelor of Science in Electrical Engineering program. Students should follow this plan only if they wish to transfer to UTD in Electrical Engineering. Students wishing to transfer to another university should not assume this entire plan will transfer.

In order to be eligible to receive this AS degree, a student must:

1. Complete a minimum of 66 credit hours indicated in this plan *(students also should complete the additional eight hours as shown in order to be accepted into the UTD program);*
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or 1315, and Math 2513;
3. Receive a GPA (2) of at least 2.00 ("C");
   (NOTE: UTD guarantees admission with a 2.50 GPA with no grade below a "C")
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AS Degree Emphasis in Electrical Engineering	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(A grade of "C" or better required)**, English 1302, and either Speech 1311 or 1315 **(A grade of "C" or better required.)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** Math 2513	**5**
LAB SCIENCES *Select **each** of the following:* Physics 2425 and 2426	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** from the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** from the following:* Physical Education 1164 **and** Computer Science 1415	**5**

ELECTRICAL ENGINEERING EMPHASIS *Select all of the following:* Math 2414, 2315 Engineering 1172, 2300, 2310, and 2110	**15**
Total Credit Hours for this AS Degree	**66**

OTHER COURSES In order to fulfill the requirements to be accepted into the UTD Electrical Engineering program, students **must** complete the following courses: Chemistry 1411 Math 2420	**8**
Total Credit Hours Required for this Program	**74**

Students completing this degree must submit to UTD a completed Texas Common Application within 12 months of their anticipated enrollment at UTD.

ASSOCIATE IN ARTS DEGREE WITH AN EMPHASIS IN HUMANITIES

Available at Brookhaven, Cedar Valley, Eastfield, Mountain View, North Lake and Richland Colleges

This is an "Emphasis" degree. Students should read and understand the paragraphs below.

Degree Code: AA.Humanities
This plan is designed to meet the needs of students who plan to transfer to a four-year college/university with a major in Humanities. Students planning to continue their Humanities studies as transfer students should check specific requirements at the transfer institution. This is a general plan and it may not satisfy all the requirements of a specific transfer institution. Students should work closely with an academic advisor/counselor.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 63 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.
   This degree may be taken through a combination of on-campus and distance education offerings, or if planned correctly, the degree may be completed entirely through distance education. Receiving institutions are not required to accept a grade below "C" in transfer. *Students who plan to transfer must work closely with an advisor.*

Course Requirements for the AA Degree Emphasis in Humanities	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, 2412, 2442 or higher level	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** from the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Psychology 2301, 2314, 2316	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **each** of the following:* Humanities 1301 Cultural Studies 2370 *Select **one** of the following:* English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333	**9**
INSTITUTIONAL OPTIONS *Select **each** from the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
HUMANITIES EMPHASIS *Select **each** of the following:* Humanities 1302 Religion 1304 *Select **one** course from **each** of the three groupings:* I. Philosophy 1301 or 2303 II. Anthropology 2346 or 2351 III. Sociology 1301, 1306, or 2319	**15**
Total Credit Hours	**63**

ASSOCIATE IN SCIENCES DEGREE WITH AN EMPHASIS IN MATHEMATICS

Available at all DCCCD Colleges

This is an "Emphasis" degree. Students should read and understand the paragraphs below.

Degree Code: AS.MATH

This degree plan is designed to meet the needs of students who plan to transfer to a four-year college/university with a major in mathematics. Students planning to continue their mathematics studies as a transfer student should check specific requirements at the transfer institution. This is a general plan and may not satisfy all the requirements of a specific transfer four-year college/university. Students should work closely with an academic advisor/counselor.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AS Degree Emphasis in Mathematics	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and Speech 1311 **(a grade of "C" or better required)**	**9**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
MATHEMATICS EMPHASIS Students should select no less than 16 hours from the following courses. The lowest level course in the math sequence will be used to meet the core curriculum mathematics requirement; **a grade of "C" or better required** in the lowest level math course. Math 1314 or 1414; Math 1316; Math 1348 or Math 2412; Math 2513, Math 2414, Math 2315; Math 2318 or Math 2418; Math 2320 or Math 2420; Math 2305	**16-20**
Total Credit Hours	**61-65**

ASSOCIATE IN ARTS DEGREE WITH AN EMPHASIS IN PEACE STUDIES

Available at Richland College and Transferable to University of North Texas Political Science Department

Degree Code: to be assigned

This is an "Articulated Emphasis" degree. Students should read and understand the paragraphs below.

The plan is designed to meet the needs of students who plan to transfer to the University of North Texas and pursue a minor in Peace Studies. Students who wish to transfer to another university must confirm this plan with that institution.

In order to be eligible to receive this AA degree, a student must:

1. Complete a minimum of 61 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards; and
5. Complete 25% of the degree requirements at Richland College

This degree may be taken through a combination of on-campus and distance education offerings; or if planned correctly, the degree may be completed entirely through distance education. UNT is not required to accept a grade below "C" in transfer.

Students who plan to transfer must work closely with an advisor.

Course Requirements for the AA Degree	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(A grade of "C" or better required)**, English 1302, and Speech 1311 or Speech 1315 **(A grade of "C" or better required.)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, or 2412 or higher level	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the three groupings:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the following:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**

INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
PEACE STUDIES EMPHASIS *Select **each** of the following:* Cultural Studies 2370* Philosophy 2306* Sociology 2372*, and 2373* **These courses must be selected from specific sections especially marked for this program* *Select any additional **one** credit hour* **Note:** It is strongly recommended that students take a variety of additional peace studies courses. Please refer to the current schedule of classes for listings.	**13**
Total Credit Hours	**61**

ASSOCIATE IN ARTS DEGREE WITH AN EMPHASIS IN PHOTOGRAPHIC/IMAGING

Available at North Lake and Richland Colleges

This is an "Emphasis" degree. Students should read and understand the paragraphs below.

Degree Code: AA.PHOTO.IMAGING.04

This degree plan is designed to meet the needs of students who plan to transfer to a four-year college/university with a major in Photographic/Imaging. Students planning to continue their Photographic/Imaging studies as a transfer student should check specific requirements at the transfer institution. This is a general plan and it may not satisfy all the requirements of a specific transfer four-year college/university. Students should work closely with an academic advisor/counselor.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 63 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AA Degree Emphasis in Photographic/Imaging	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and Speech 1311 **(a grade of "C" or better required)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314, 1324, 1332, 1333, 1348, 1414, 2342, 2412, 2442 or higher level	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** from the following:* Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the three groupings:* I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
PHOTOGRAPHIC/IMAGING EMPHASIS *Select **15 credit hours** from the following:* Photography 1316 or Arts 2356; Photography 1317 or Arts 2357; Photography 2325, 2326, 2356; Arts 2389	**15**
Total Credit Hours	**63**

ASSOCIATE IN ARTS DEGREE WITH AN EMPHASIS IN TEACHER PREPARATION - TEACHER PREPARATION GENERAL EDUCATION

Available at Brookhaven, Eastfield and Richland Colleges

This is an "Emphasis" degree. Students should read and understand the paragraphs below.

Degree Code: AA.TEACHER.PREP.GEN

This degree plan is designed to meet the needs of students who plan to transfer to a four-year college/university with a major in an academic subject. Students planning to continue their teacher preparation studies as a transfer student should check on specific requirements at the transfer institution. This is a general plan and it may not satisfy all the requirements of a specific transfer four-year college/university. Students should work closely with an academic advisor/counselor.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites; and
5. Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AA Degree Emphasis In Teacher Preparation	Credit Hours
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS **(A grade of "C" or better required.)** *Select **one** from the following:* Math 1314 or 1414	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 and 1408; CHEM 1405 and 1411; PHYS 1401 and 1405; PHYS 1401 and 2425; PHYS 1405 and 2425.	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302; Psychology 2301	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the following:* I. Arts 1301, or Music 1306 II. English 2326, 2327, 2328, 2331, 2332, 2333 III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
TEACHER PREPARATION GENERAL EDUCATION EMPHASIS *Select **each** of the following:* EDUC 1301, 1325, 2301; EDTC 1321 ***One** remaining credit hour from any college level course is required to meet the degree requirement of 61 hours.* *NOTE: It is recommended that students take a foreign language. Check with your receiving universities for specific requirements.*	**13**
Total Credit Hours	**61**

ASSOCIATE IN ARTS DEGREE WITH AN EMPHASIS IN TEACHER PREPARATION - URBAN EDUCATION

Available at El Centro and Richland Colleges and Transferable to UT Arlington and Texas Woman's University

This is an "Articulated Emphasis" degree. Students should read and understand the paragraphs below.

Degree Code: AA.URBAN.ED.03

This degree plan is designed to meet the needs of **students who plan to major in Urban Education and pursue a teaching career. This plan will transfer directly into the Bachelor of Arts degree in Child Studies (with EC4 and EC4 Bilingual teacher certification) at UT Arlington. It will also transfer directly into the Bachelor of Science degree in Interdisciplinary Studies (with EC4 and EC4 Bilingual teacher certification) at Texas Woman's University.** Students should work closely with an advisor if they plan to transfer into teacher certification programs at other universities.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours including all the required courses listed;
2. Earn a grade of "C" or better in English 1301, either Speech 1311 or Speech 1315, and the selected college-level mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C");
4. Meet all Texas Success Initiative (TSI) standards and course prerequisites: and
5. Complete 25% of the degree requirements at the college awarding the degree.

Course Requirements for the AA Degree Emphasis in Urban Education	**Credit Hours**
COMMUNICATIONS *Select **each** of the following:* English 1301 **(a grade of "C" or better required)**, English 1302, and either Speech 1311 or Speech 1315 **(a grade of "C" or better required)**	**9**
MATHEMATICS *Select **one** from the following:* **(A grade of "C" or better required.)** Math 1314 or Math 1414	**3**
LAB SCIENCES *Select **two** from the following:* Biology 1406, 1407, 1408, 1409; Chemistry 1405, 1407, 1411, 1412; Geology 1401, 1403, 1404, 1445; Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 NOTE: This requirement *cannot* be met by using the following combinations: BIOL 1406 & 1408; CHEM 1405 & 1411; PHYS 1401 & 1405; PHYS 1401 & 2425	**8**
SOCIAL/BEHAVIORAL SCIENCES *Select **each** of the following:* History 1301, 1302; Government 2301, 2302 *Select **one** of the following:* Psychology 2301 or 2314	**15**
HUMANITIES/VISUAL AND PERFORMING ARTS *Select **one** from **each** of the following:* I. Arts 1301 or Music 1306 II. English 2326, 2327, 2328, 2331, 2332, 2333 III. EDTC 1325 (which will be substituted for CUST 2370)	**9**
INSTITUTIONAL OPTIONS *Select **each** of the following:* Physical Education 1164 **and** Computer Science 1300 or higher level COSC course	**4**
URBAN EDUCATION EMPHASIS *Select **each** of the following:* EDTC 1301, EDTC 1321; CDEC 1359; SPAN 1411 While the degree is awarded upon the completion of 61 hours, students are strongly encouraged to complete SPAN 1412 also.	**13**
Total Credit Hours	**61**

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

2004-2005/2005-2006 Technical/Occupational Programs Offered On Our Campuses

BH - Brookhaven College CV - Cedar Valley College EF - Eastfield College EC - El Centro College
MV - Mountain View College NL - North Lake College RL - Richland College

Career Educational Programs	BH	CV	EF	EC	MV	NL	RL
Accounting AAS	●	●	●	●	●	●	●
Accounting Technician Enhanced Skills Certificate	●	●	●	●	●	●	●
Accounting Assistant Certificate	●	●	●	●	●	●	●
Accounting Clerk Certificate	●	●	●	●	●	●	●
Air Conditioning & Refrigeration – Residential AAS		●	●			●	
Profit Center Manager Enhanced Skills Certificate			●				
Residential Technician I Certificate		●	●			●	
Technician III Certificate (Level I)		●	●			●	
Technician III Certificate (Level II)		●	●				
Air Conditioning and Refrigeration Technology AAS			●				
Associate Degree Nursing AAS				●			
Perioperative Nursing Enhanced Skills Cert.				●			
Auto Body Technology AAS			●				
Auto Body Metal Technician Certificate			●				
Auto Body Painter Certificate			●				
Auto Body Shop Management Certificate			●				
Auto Body Technology Certificate			●				
Automotive Technology	●	●	●				
Dealership-Sponsored Technician AAS	●						
Service Technician AAS	●	●	●				
Chassis Service Technician Certificate	●	●	●				
Electronics and Climate Controls Technician Cert.	●	●	●				
Engine Repair and Performance Technician Cert.	●	●	●				
Transmission Service Technician Certificate	●	●	●				
Automotive Technology/Diesel & Heavy Equipment			●				
Construction Equipment AAS			●				
Heavy Truck AAS			●				
Construction Equipment Technician Certificate			●				
Diesel Engine Fuel Systems Technician Certificate			●				
Heavy Truck Technician Certificate			●				
Preventive Maintenance Technician Certificate		●	●				
Aviation Technology					●		
Aircraft Dispatcher AAS					●		
Aircraft Dispatcher Certificate					●		
Airport Management AAS					●		
Professional Pilot Option AAS					●		
Biotechnology AAS				●	●		
Biotechnology Certificate				●	●		
Business Administration AAS	●	●	●	●	●	●	●
Human Resources Assistant Certificate		●	●		●	●	●
Business Trainee I Skills Achievement Award	●						
Business Trainee II Skills Achievement Award	●						
Business Trainee III Skills Achievement Award	●						

Career Educational Programs	BH	CV	EF	EC	MV	NL	RL
Child Development AAS	●		●				
Administrator Enhanced Skills Certificate	●		●				
Administrative Certificate	●		●				
Child Development Assoc. Skills Ach. Award	●		●				
Intervention Specialist Certificate	●		●				
Early Childhood Training Certificate	●		●				
Infant-Toddler Certificate	●		●				
Pre-K - Grade 4 Skills Achievement Award	●		●				
School-Age Caregiver Certificate	●		●				
Special Child Skills Achievement Award	●		●				
Commercial Music		●					
Arranger/Composer/Copyist AAS		●					
Music Retailing AAS		●					
Music Retailing Certificate		●					
Performing Musician AAS		●					
Performing Musician Certificate		●					
Recording Technology AAS		●					
Recording Technology One-Year Certificate		●					
Recording Technology Two-Year Certificate		●					
Computer-Aided Design and Drafting AAS			●		●		
Architectural Drafting Certificate			●		●		
Computer-Aided Design & Drafting Enh. Sk. Cert.			●		●		
Computer-Aided Design Operator Certificate			●		●		
Computer-Aided Design Advanced Operator Cert.			●		●		
Integrated Circuit Design AAS			●				
Integrated Circuit Design Certificate			●				
Computer Graphics AAS		●				●	
Computer Graphics Certificate		●				●	
Computer Graphics Specialist Certificate		●				●	
Computer Information Technology	●	●	●	●	●	●	●
Cisco Networking Asst. Skills Achievement Award				●		●	
Cisco Networking Intern Skills Achievement Awd.				●		●	●
Client Server Programming & Administration Cert.			●				
C Programming Skills Achievement Award	●						
DBA Certificate				●		●	●
Help Desk/User Support Technician Certificate	●	●	●	●	●	●	●
Information Security Certificate		●	●	●	●	●	●
Information Security Skills Achievement Award	●						
Info. Tech. Sup. Spec. I Market. Skills Ach. Award				●			
Info. Tech. Sup. Spec. II Market. Skills Ach. Award				●			

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DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

2004-2005/2005-2006 Technical/Occupational Programs Offered On Our Campuses

BH - Brookhaven College CV - Cedar Valley College EF - Eastfield College EC - El Centro College
MV - Mountain View College NL - North Lake College RL - Richland College

Career Educational Programs	BH	CV	EF	EC	MV	NL	RL
Midrange Specialist AAS				o			
Midrange Assistant Certificate				o			
Midrange Tech Support Certificate				o			
Netplus Preparation Certificate			o				
Network Administration AAS			o				
Network Administrator and Support AAS	o	o		o	o	o	o
Network Operation Center Technician Certificate			o				
Networking Associate Certificate				o	o	o	o
Networking Professional Certificate				o	o	o	o
Networking Support Certificate	o	o		o	o	o	o
Oracle Associate Skills Achievement Award				o		o	o
Oracle Professional Skills Achievement Award				o		o	o
Personal Computer Support AAS	o	o	o	o	o	o	o
Personal Computer Specialist Certificate	o	o	o	o	o	o	o
Personal Computer Technician Certificate	o	o	o	o	o	o	o
Personal Computer User Certificate	o	o	o	o	o	o	o
Personal Computer Technology Skills Ach. Award	o						
Software Programmer/Developer AAS	o	o	o	o	o	o	o
Software Programmer/Developer Assistant Cert.	o	o	o	o	o	o	o
Software Programmer/Developer Associate Cert.							o
SQL Server Certificate		o		o	o	o	o
UNIX AAS	o					o	o
UNIX System Administrator AAS							o
UNIX Administrator Certificate	o					o	o
UNIX System Administrator Certificate							o
UNIX Skills Achievement Award	o						
Visual Basic Programming Skills Ach. Award	o						
Visual Studio Developer Certificate		o	o	o	o	o	o
Web Developer Specialist Certificate	o	o	o	o	o	o	o
Web Production and Design AAS			o			o	
Basic Web Production Certificate			o			o	
Web Production and Design Certificate			o			o	
Construction Management and Technology AAS						o	
Construction Technology AAS						o	
Construction Technology Certificate						o	
Criminal Justice AAS		o	o		o		
Human Services Enhanced Skills Certificate			o		o		
Law Enforcement Enhanced Skills Certificate		o	o		o		
Basic Criminal Justice Certificate		o	o		o		
Criminal Justice Certificate (46 hours)		o	o		o		
Criminal Justice Certificate (30 hours)		o	o		o		
Diagnostic Medical Sonography AAS				o			
Diagnostic Medical Sonography Adv. Tech. Cert.				o			

Career Educational Programs	BH	CV	EF	EC	MV	NL	RL
Diesel Truck and Heavy Equipment AAS			o				
Diesel Truck & Heavy Equipment Technician Cert.			o				
Preventive Maintenance Technician Certificate			o				
Digital Imaging Technology AAS			o				
Digital Photography Certificate			o				
Electronic Pre-Press Certificate			o				
Echocardiology Technology AAS				o			
Echocardiology Technology Advanced Tech. Cert.				o			
Educational Personnel AAS				o			o
Bilingual/ESL AAS				o			o
Educational Assistant Certificate				o			o
Electrical Technology AAS						o	
Electrical Construction AAS						o	
Electrical Construction Certificate						o	
Electrical Technology Certificate						o	
Electronic Commerce AAS	o		o		o	o	o
Business Specialist Certificate	o		o		o	o	o
Technology Specialist Certificate	o		o		o	o	
Electronic Telecommunications AAS			o				
Audio Visual Certificate						o	
Telephony Supervisor Enhanced Skills Certificate			o				
Convergence Technology AAS						o	
Convergence Technology Certificate						o	
Technical Platform Certificate (16 hours)						o	
Electronic Telecommunications Certificate			o				
Technical Platform Certificate (16 hours)			o				
Wireless Communications Technology Certificate			o				
Electronics/Computer Technology AAS			o				
Computer Technology Enhanced Skills Certificate			o				
Telecommunications Enhanced Skills Certificate			o				
Basic Electronics Technology Certificate			o				
Semiconductor Manufacturing Technology AAS			o				
Electronics Technology AAS					o	o	
Automated Manufacturing Enhanced Skills Cert.					o	o	
Computer Maintenance Enhanced Skills Cert.					o	o	
Networking Specialist Certificate					o		
Semiconductor Manufacturing Technology AAS					o	o	
Technical Platform Certificate					o		
Emergency Medical Services	o						
Paramedicine AAS	o						
Paramedicine Certificate	o						
Emergency Medical Technician Basic Certificate	o						

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DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

2004-2005/2005-2006 Technical/Occupational Programs Offered On Our Campuses

BH - Brookhaven College CV - Cedar Valley College EF - Eastfield College EC - El Centro College
MV - Mountain View College NL - North Lake College RL - Richland College

Career Educational Programs	BH	CV	EF	EC	MV	NL	RL
Engine Technology		•					
Motorcycle Mechanics Certificate		•					
Outboard Mechanics Certificate		•					
Small Engine Mechanics Certificate		•					
Engineering Technology			•				•
CAD/CAM Certificate							•
Computer-Aided Design AAS							•
Electronics Technology AAS							•
Electronics Technology Certificate							•
Integrated Circuit Layout AAS			•				•
Integrated Circuit Layout Certificate			•				•
Computer-Aided Design Skills Ach. Award							•
Parametric Automated Design Skills Ach. Award							•
Fashion Design				•			
Apparel Design AAS				•			
Pattern Design AAS				•			
Theatrical Costume Design Certificate				•			
Food and Hospitality Institute				•			
Bakery/Pastry AAS				•			
Bakery/Pastry Certificate				•			
Culinary Arts AAS				•			
Basic Culinary Skills Certificate				•			
Food and Hospitality Service AAS				•			
Food and Hospitality Service Certificate				•			
Certified Food and Hospitality Manager Certificate				•			
Geographic Information Systems Technology Cert.			•		•		
Health Information Management AAS					•		
Medical Records Coder Certificate					•		
Hospitality Management AAS						•	
Hospitality Management Certificate						•	
Interior Design AAS				•			
Interior Design Advanced Technical Certificate				•			
International Business and Trade AAS							•
Import/Export Certificate							•
International Business and Trade Certificate							•
International Business and Trade Skills Ach. Award							•
Internet Development Technologies AAS				•			
Advanced Web Application Development Certif.				•			
E-Commerce Strategic Planning Certificate				•			
Interactive Media Development Certificate				•			
UNIX OS Administration Certificate				•			
Web Application Development Certificate				•			
Web Application Development Specialization Cert.				•			
Web Site System Administration Certificate				•			

Career Educational Programs	BH	CV	EF	EC	MV	NL	RL
Interpreter Training Program AAS			•				
Deaf Studies Certificate			•				
Invasive Cardiovascular Technology AAS				•			
Invasive Cardiovascular Tech. Adv. Tech. Cert.				•			
Logistics Technology AAS	•					•	
Logistics Technnology Certificate						•	
Management AAS	•	•	•	•	•	•	•
Management Certificate	•	•	•	•	•	•	•
Supervisor Certificate		•	•		•	•	•
Leadership Marketable Skills Achievement Award		•					
Marketing Careers	•	•					
Business Marketing AAS	•	•					
Department Manager Enhanced Skills Certificate	•	•					
Call Center Specialist Skills Achievement Award	•						
Customer Service Representative Certificate	•	•					
Retail/Wholesale Business Specialist Certificate	•	•					
Sales Marketing Associate Certificate	•	•					
Fashion Marketing AAS	•						
Department Manager Enhanced Skills Certificate	•						
Visual Merchandising Assistant Certificate	•						
Medical Assisting Certificate				•	•		
Medical Laboratory Technology AAS				•			
Medical Staff Services AAS				•			
Medical Transcription Certificate				•			
Mortgage Banking AAS						•	
Designate Certificate						•	
Intern Skills Achievement Award						•	
Multimedia Technology							•
Multimedia Web Design AAS							•
Internet Communications Level I Certificate							•
Internet Communications Level II Certificate							•
Multimedia Developer Level I Certificate							•
Multimedia Developer Level II Certificate							•
Visual Design Level I Certificate							•
Visual Design Level II Certificate							•
Office Technology	•	•	•	•	•	•	•
Administrative Support Certificate	•	•	•	•	•	•	•
Executive Assistant AAS	•	•	•	•	•	•	•
Executive Assist.-Tech Prep Navy Yeoman AAS	•		•	•	•	•	•
Office Assistant Certificate	•	•	•	•	•	•	•
Software Application Specialist Certificate	•	•	•	•	•	•	•

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DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

2004-2005/2005-2006 Technical/Occupational Programs Offered On Our Campuses

BH - Brookhaven College CV - Cedar Valley College EF - Eastfield College EC - El Centro College
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Career Educational Programs	BH	CV	EF	EC	MV	NL	RL
Ornamental Horticulture Technology AAS							•
Greenhouse Florist AAS							•
Interiorscape Design AAS							•
Interiorscape Certificate							•
Landscape Management AAS							•
Landscape Nursery AAS							•
Floral/Interiorscape Specialist Certificate							•
Florist Certificate							•
Landscape Gardener Certificate							•
Landscape Design Specialist Certificate							•
Landscape/Turf Management Specialist Certificate							•
Nursery/Greenhouse Management Specialist Cert.							•
Ornamental Horticulture Technician Certificate							•
Paralegal AAS				•			
Paramedic Certificate				•			
Patient Care Technician Certificate		•					
Certified Nursing Asst. Skills Achievement Award		•					
Plumbing/Pipefitting and HVAC Construction AAS						•	
Heating, Ventilation, and Air Conditioning Certificate						•	
Pipefitting Certificate						•	
Plumbing Certificate						•	
Radiologic Sciences AAS	•			•			
Real Estate AAS		•				•	•
Building Property Management AAS						•	
Facilities Management Administrator Certificate						•	
Real Estate Certificate		•				•	•
Systems Maintenance Tech. & Admin. Certificate						•	

Career Educational Programs	BH	CV	EF	EC	MV	NL	RL
Respiratory Care AAS				•			
Semiconductor Manufacturing							•
Equipment Technician AAS							•
Operator Certificate							•
Small Business Academy Certificate				•			
Social Work Associate-Generalist AAS			•				
Human Services Certificate			•				
Substance Abuse Counseling AAS			•				
Substance Abuse Counseling Certificate			•				
Surgical Technologist Certificate				•			
Travel, Exposition and Meeting Management AAS							•
Exposition/Trade Show Management							•
Enhanced Skills Certificate							•
Meeting and Convention Management							•
Enhanced Skills Certificate							•
Travel Management							•
Enhanced Skills Certificate							•
Certificate in Meetings							•
Certificate in Travel							•
Veterinary Technology AAS		•					
Large Animal Veterinary Assisting		•					
Small Animal Veterinary Assisting		•					
Video Technology AAS						•	
Video Technology Enhanced Skills Certificate						•	
Animation and Special Effects Certificate						•	
Multimedia Specialist Certificate						•	
Visual Communications AAS	•						
Visual Communications Enhanced Skills Cert.	•						
Visual Communications Certificate	•						
Vocational Nursing Certificate				•			
Welding Technology AAS					•		
Welding Technology Certificate					•		

ACCOUNTING

Effective September 1, 2003, this award has been deactivated for Eastfield College. For current students, the award will be closed on or before September 1, 2006. New students should not attempt to pursue this award.

Offered at Brookhaven, Cedar Valley, Eastfield (see above), El Centro, Mountain View, North Lake and Richland

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ACCT.03

This degree is designed to prepare students for various career opportunities in accounting. Students may specialize in the areas of financial, managerial, cost, tax, and/or small business accounting. Emphasis is placed on internal accounting procedures and generally accepted accounting principles. This program is intended to provide a foundation on which the graduate can build an accounting career through expanded experience and/or further education.

		CREDIT HOURS
SEMESTER I		
+ACCT 2301	Principles of Accounting I **OR**	3
+ACCT 2401	Principles of Accounting I	(4)
ACNT 1311	Introduction to Computerized Accounting	3
++POFT 1325	Business Math and Machine Applications	3
++POFI 2301	Word Processing	3
Elective[1]	Business/Technical	3-4
		15-17
SEMESTER II		
ACCT 2302	Principles of Accounting II **OR**	3
ACCT 2402	Principles of Accounting II	(4)
ACNT 1313	Computerized Accounting Applications	3
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
Elective[1]	Business/Technical	3-4
		15-17
SEMESTER III		
ECON 2301	Principles of Economics I	3
+++MATH 1324	Mathematics for Business and Economics I	3
Elective[1]	Business/Technical	3-4
Elective[2]	Accounting Specialty	3
Elective[3]	Social/Behavioral Science	3
		15-16
SEMESTER IV		
ECON 2302	Principles of Economics II	3
ENGL 1302	Composition II	3
Elective[1]	Business/Technical	3-4
Elective[2]	Accounting Specialty	3
Elective[4]	Humanities/Fine Arts	3
		15-16
Minimum Hours Required		60-66

Upon completion of Semester I courses, the Accounting Clerk Certificate will be conferred.

Upon completion of Semester I and Semester II courses, the Accounting Assistant Certificate will be conferred.

Upon completion of Semester I through Semester IV courses, the Associate in Applied Sciences Degree in Accounting will be conferred.

+ACNT 1303 is recommended prior to ACCT 2301 or ACCT 2401 for a student with no accounting background. ACNT 1303 and ACNT 1304 are included in the Elective[1] (Business/Technical) list in this program.

++Any student demonstrating proficiency by previous training, experience, or placement tests may substitute a course from the Elective[1] (Business/Technical) list.

+++Any three-credit mathematics courses assigned the MATH rubric may be substituted except students cannot take MATH 1371, MATH 1372, MATH 1373, MATH 1374, or MATH 1375.

Elective[1]--The Business/Technical elective may be selected from the following fields/courses:

Accounting (ACNT, ACCT), Business (BUSG, BUSI), any computer course (ITCC, ITMC, ITSC, ITSE, ITNW, ITSW, INEW, COSC), ECON 1303, ENGL 2311, Management (HRPO, BMGT), Marketing (MRKG), Mathematics (MATH), Office Technology (POFI, POFT). The practicum courses (ACNT 1366 and ACNT 2366) are recommended for students employed in a general business area. The cooperative education courses (ACNT 1380 and ACNT 2380) are recommended for students employed in the accounting area.

Elective[2]-- The Accounting Specialty elective must be selected from the following accounting courses:

ACNT	1329	Payroll and Business Tax Accounting 3
ACNT	1331	Federal Income Tax: Individual 3
ACNT	1380	Cooperative Education-Accounting 3
ACNT	1391	Special Topics in Accounting 3
ACNT	2303	Intermediate Accounting I 3
ACNT	2304	Intermediate Accounting II 3
ACNT	2309	Cost Accounting 3
ACNT	2311	Managerial Accounting 3
ACNT	2380	Cooperative Education-Accounting 3

Elective[3]--The Social/Behavioral Science elective must be selected from the DCCCD Core Curriculum for Social/Behavioral Sciences.

Elective[4]--The Humanities/Fine Arts elective must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Accounting and provides the student advanced skills required by the industry to specialize in Accounting Technician.

ACCOUNTING TECHNICIAN

Effective September 1, 2003, this award has been deactivated for Eastfield College. For current students, the award will be closed on or before September 1, 2006. Effective January 1, 2004, this award has been deactivated for North Lake College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Offered at Brookhaven, Cedar Valley, Eastfield (see above), El Centro, Mountain View, North Lake (see above) and Richland

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.ACCT.TECH.04

	CREDIT HOURS
SEMESTER I	
ACNT XXXX	3
ACNT XXXX	3
	6

Minimum Hours Required 6

Select two courses not previously taken in the Associate in Applied Sciences Degree in Accounting from the following Accounting Specialty Courses:

ACNT	1329	Payroll and Business Tax Accounting	3
ACNT	1331	Federal Income Tax: Individual	3
ACNT	1380	Cooperative Education-Accounting	3
ACNT	1391	Special Topics in Accounting	3
ACNT	2303	Intermediate Accounting I	3
ACNT	2304	Intermediate Accounting II	3
ACNT	2309	Cost Accounting	3
ACNT	2311	Managerial Accounting	3
ACNT	2380	Cooperative Education-Accounting	3

This is a Tech Prep Program. Students interested in pursuing this Tech Prep Enhanced Skills Certificate should consult their advisor.

ACCOUNTING ASSISTANT

Effective September 1, 2003, this award has been deactivated for Eastfield College. For current students, the award will be closed on or before September 1, 2006. New students should not attempt to pursue this award.

Offered at Brookhaven, Cedar Valley, Eastfield (see above), El Centro, Mountain View, North Lake and Richland

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ACCT.ASSIST.03

The program is designed to provide the student with an expanded knowledge of basic accounting and business principles while emphasizing the development of communication and human relations skills necessary for advancement in accounting or other business-related careers. The courses required for this certificate are applicable to the Associate in Applied Sciences Degree in Accounting.

		CREDIT HOURS
SEMESTER I		
+ACCT 2301	Principles of Accounting I **OR**	3
+ACCT 2401	Principles of Accounting I	(4)
ACNT 1311	Introduction to Computerized Accounting	3
++POFT 1325	Business Math and Machine Applications	3
++POFI 2301	Word Processing	3
Elective[1]	Business/Technical	3-4
		15-17
SEMESTER II		
ACCT 2302	Principles of Accounting II **OR**	3
ACCT 2402	Principles of Accounting II	(4)
ACNT 1313	Computerized Accounting Applications	3
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
Elective[1]	Business/Technical	3-4
		15-17
Minimum Hours Required		30-34

+ACNT 1303 is recommended prior to ACCT 2301 or ACCT 2401 for a student with no accounting background. ACNT 1303 and ACNT 1304 are included in the Elective[1] (Business/Technical) list in this program.

++Any student demonstrating proficiency by previous training, experience, or placement tests may substitute a course from the Elective[1] (Business/Technical) list.

Elective[1]--The Business/Technical elective may be selected from the following fields/courses:

Accounting (ACNT, ACCT), Business (BUSG, BUSI), any computer course (ITCC, ITMC, ITSC, ITSE, ITNW, ITSW, INEW, COSC), ECON 1303, ENGL 2311, Management (HRPO, BMGT), Marketing (MRKG), Mathematics (MATH), Office Technology (POFI, POFT). The practicum courses (ACNT 1366 and ACNT 2366) are recommended for students employed in a general business area. The cooperative education courses (ACNT 1380 and ACNT 2380) are recommended for students employed in the accounting area.

ACCOUNTING CLERK

Effective September 1, 2003, this award has been deactivated for Eastfield College. For current students, the award will be closed on or before September 1, 2006. New students should not attempt to pursue this award.

Offered at Brookhaven, Cedar Valley, Eastfield (see above), El Centro, Mountain View, North Lake and Richland

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ACCT.CLERK.03

This program is designed to provide the student with the skills necessary to obtain entry-level employment in accounting. Emphasis is on the development of basic accounting, spreadsheet, word processing, and ten-key skills. The courses required for the certificate are applicable to the Accounting Assistant Certificate and the Associate in Applied Sciences Degree in Accounting.

		CREDIT HOURS
SEMESTER I		
+ACCT 2301	Principles of Accounting I **OR**	3
+ACCT 2401	Principles of Accounting I	(4)
ACNT 1311	Introduction to Computerized Accounting	3
++POFT 1325	Business Math and Machine Applications	3
++POFI 2301	Word Processing	3
Elective[1]	Business/Technical	3-4
		15-17

Minimum Hours Required.....15-17

+ACNT 1303 is recommended prior to ACCT 2301 or ACCT 2401 for a student with no accounting background. ACNT 1303 and ACNT 1304 are included in the Elective[1] (Business/Technical) list in this program.

++Any student demonstrating proficiency by previous training, experience, or placement tests may substitute a course from the Elective[1] (Business/ Technical) list.

Elective[1]--The Business/Technical elective must be selected from the following fields/courses:

Accounting (ACNT, ACCT), Business (BUSG, BUSI); any computer course (ITCC, ITMC, ITSC, ITSE, ITNW, ITSW, INEW, COSC), ECON 1303, ENGL 2311, Management (HRPO, BMGT), Marketing (MRKG), Mathematics (MATH), Office Technology (POFI, POFT). The practicum courses (ACNT 1366 and ACNT 2366) are recommended for students employed in a general business area. The cooperative education courses (ACNT 1380 and ACNT 2380) are recommended for students employed in the accounting area.

AIR CONDITIONING AND REFRIGERATION -- RESIDENTIAL

Effective September 1, 2003, this award has been deactivated for North Lake College. For current students, the award will be closed on or before September 1, 2006. New students should not attempt to pursue this award.

Cedar Valley, Eastfield and North Lake only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.HVAC.RESID

This program is designed to train students to meet employment requirements in the field of residential air conditioning. This will include the installation, repair and maintenance of residential air conditioning equipment. Included in this program is the study of residential air conditioners, heat pumps, gas and electric furnaces, humidifiers, and the design of residential air conditioning systems. Throughout the entire program an emphasis is placed on current techniques used by service technicians.

		CREDIT HOURS
SEMESTER I		
HART 1401	Basic Electricity for HVAC	4
HART 1403	Air Conditioning Control Principles	4
HART 1407	Refrigeration Principles	4
ENGL 1301	Composition I	3
		15
SEMESTER II		
HART 1441	Residential Air Conditioning	4
HART 1445	Gas and Electric Heating	4
HART 2449	Heat Pumps	4
+Elective	Math	3-5
		15-17
SEMESTER III		
HART 2438	Air Conditioning Installation and Startup	4
HART 2445	Residential Air Conditioning Systems Design	4
SPCH 1311	Introduction to Speech Communication	3
++Elective	Natural Science	4
		15
SEMESTER IV		
HART 2436	Air Conditioning Troubleshooting	4
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
+++Elective	Humanities/Fine Arts	3
++++Elective		3-5
++++Elective		3-5
		16-20
Minimum Hours Required		61-67

+MATH elective – Student must take MATH 1314 or any higher level MATH course.

++ Elective – Must be selected from the DCCCD Core Curriculum for Natural Sciences.

+++ Elective – Must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

++++Elective – Must be selected from the following courses:

Any 3-5 credit hour HART course not previously identified as part of the award pattern. 3-5

OR

ACNT	1303	Introduction to Accounting I	3
BUSI	1301	Introduction to Business	3
CNBT	1411	Construction Methods and Materials	4
ITSE	1401	Introduction to Computers	4
SPAN	XXXX	Any 3-4 credit hour Spanish course for which the Student meets the prerequisites.	3-4
WLDG	1307	Introduction t Welding Using Multiple Processes	3

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Air Conditioning Refrigeration-Residential and provides the student advanced skills required by the industry to specialize in Profit Center Management.

PROFIT CENTER MANAGER

Eastfield and North Lake only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.HVAC.PROFIT.03

		CREDIT HOURS
SEMESTER I		
ACNT 1303	Introduction to Accounting I	3
BUSI 1301	Introduction to Business	3
ITSC 1401	Introduction to Computers	4
HART 2436	Air Conditioning Troubleshooting	4
HART 1380	Cooperative Education – Heating, Air Conditioning and Refrigeration Technology/Technician **OR**	3
HART 2380	Cooperative Education – Heating, Air Conditioning and Refrigeration Technology/Technician **OR**	(3)
HART 1368	Practicum (or field experience)-Heating, Air Conditioning and Refrigeration Technology/Technician **OR**	(3)
HART 2368	Practicum (or field experience)-Heating, Air Conditioning and Refrigeration Technology/ Technician	(3)
		17

Minimum Required Hours 17

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills Certificate need to consult with their advisor.

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AIR CONDITIONING AND REFRIGERATION -- RESIDENTIAL TECHNICIAN I

Effective September 1, 2003, this award has been deactivated for North Lake College. For current students, the award will be closed on or before September 1, 2006. New students should not attempt to pursue this award.

Cedar Valley, Eastfield and North Lake (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.HVAC.RESID.I

		CREDIT HOURS
SEMESTER I		
HART 1401	Basic Electricity for HVAC	4
HART 1403	Air Conditioning Control Principles	4
HART 1407	Refrigeration Principles	4
		12
SEMESTER II		
HART 1441	Residential Air Conditioning	4
HART 1445	Gas and Electric Heating	4
HART 2449	Heat Pumps **OR**	4
		12

Minimum Hours Required 24

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AIR CONDITIONING AND REFRIGERATION -- RESIDENTIAL TECHNICIAN III

Effective September 1, 2003, this award has been deactivated for Cedar Valley, Eastfield, and North Lake Colleges. For current students, the award will be closed on or before September 1, 2006. New students should not attempt to pursue this award.

Cedar Valley (see above), Eastfield (see above), and North Lake (see above) only

(Level I - Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.HVAC.RES.TECH.III

		CREDIT HOURS
SEMESTER I		
CETT 1402	Electricity Principles	4
HART 1403	A/C Control Principles	4
HART 1407	Refrigeration Principles	4
Select two from the following:		6
ENGL 1301	Composition I	(3)
SPCH 1311	Introduction to Speech Communication	(3)
+Elective	Math Elective	(3)
		18
SEMESTER II		
HART 1441	Residential Air Conditioning	4
HART 1445	Gas and Electric Heating	4
HART 1449	Heat Pumps **OR**	4
HART 1380	Cooperative Education – Heating, Air Conditioning and Refrigeration Technologies/Technicians **OR**	(3)
HART 1368	Practicum (or field experience)-Heating, Air Conditioning and Refrigeration Technologies/Technicians	(3)
		11-12
SEMESTER III		
HART 2436	Troubleshooting **OR**	4
HART 1380	Cooperative Education – Heating, Air Conditioning and Refrigeration Technologies/Technician **OR**	(3)
HART 2380	Cooperative Education – Heating, Air Conditioning and Refrigeration Technologies/Technician **OR**	(3)
HART 1368	Practicum (or field experience)-Heating, Air Conditioning and Refrigeration Technologies/Technician **OR**	(3)
HART 2368	Practicum (or field experience)-Heating, Air Conditioning and Refrigeration Technologies/Technician	(3)
HART 2438	Air Conditioning Installation and Startup	4
HART 2445	Air Conditioning Systems Design	4
		11-12
Minimum Hours Required		40-42

+Elective 3 credit hours chosen from Math (1300 level or above courses).

AIR CONDITIONING AND REFRIGERATION -- RESIDENTIAL TECHNICIAN III

Cedar Valley and Eastfield only

(Level II Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.HVAC.RES.TECH.III

		CREDIT HOURS
SEMESTER I		
HART 1401	Basic Electricity for HVAC	4
HART 1403	Air Conditioning Control Principles	4
HART 1407	Refrigeration Principles	4
Students must select from TWO of the following three categories:		6-10
CATEGORY I		
ENGL 1301	Composition I	3
CATEGORY II		
SPCH 1311	Introduction to Speech Communication	3
CATEGORY III		
+Elective	Math **OR**	3-5
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(4)
		18-22
SEMESTER II		
HART 1441	Residential Air Conditioning	4
HART 1445	Gas and Electric Heating	4
HART 2449	Heat Pumps	4
HART 2438	Air Conditioning Installation and Startup	4
		16
SEMESTER III		
HART 2436	Air Conditioning Troubleshooting	4
HART 2445	Residential Air Conditioning Systems Design	4
+++ Elective		3-5
+++ Elective		3-5
		14-18
Minimum Hours Required		48-56

+MATH elective – Student must take MATH 1314 or any higher level MATH course.

++Elective – Must be selected from the DCCCD Core Curriculum for Natural Sciences.

+++Elective – Must be selected from the following courses:

Any HART course not previously identified as part of the award pattern. 3-5

OR

ACNT	1303	Introduction to Accounting I	3
BUSI	1301	Introduction to Business	3
CNBT	1411	Construction Methods and Materials	4
ITSC	1401	Introduction to Computers	4
SPAN	XXXX	Any 3-4 credit hour Spanish course for which the student meets the prerequisites.	3-4
WLDG	1307	Introduction to Welding Using Multiple Processes	3

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.HVAC.AIR.COND

This program furnishes both the theory and practice required to qualify a person for employment in the various areas of the air conditioning and refrigeration industry. Special emphasis is placed on commercial and industrial air conditioning and refrigeration during the second year. Hands-on experience stresses operation and trouble-shooting of medium and low temperature refrigeration and chilled water air conditioning systems.

		CREDIT HOURS
SEMESTER I		
HART 1401	Basic Electricity for HVAC	4
HART 1403	Air Conditioning Control Principles	4
HART 1407	Refrigeration Principles	4
ENGL 1301	Composition I	3
		15
SEMESTER II		
HART 1441	Residential Air Conditioning	4
HART 1445	Gas and Electric Equipment	4
HART 2449	Heat Pumps	4
+Elective	MATH **OR**	3-5
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(4)
		15-19
SEMESTER III		
HART 2442	Commercial Refrigeration	4
HART 2436	Air Conditioning Troubleshooting	4
HART 2434	Advanced A/C Controls	4
+++Elective	Humanities/Fine Arts	3
		15
SEMESTER IV		
HART 2368	Practicum (or field experience) - Heating, Air Conditioning and Refrigeration Technology/Technician **OR**	3
HART 2380	Cooperative Education – Heating, Air Conditioning and Refrigeration Technology/Technician	(3)
HART 1451	Energy Management	4
HART 2441	Commercial Air Conditioning	4
SPCH 1311	Introduction to Speech Communication	3
PSYC 2302	Applied Psychology **OR**	3
PSYC 2301	Introduction to Psychology	(3)
		17
Minimum Hours Required		62-66

+MATH elective – Students must take MATH 1314 or any higher level MATH course.

++Elective – Must be selected from the DCCCD Core Curriculum for Natural Sciences.

+++Elective – Must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

ASSOCIATE DEGREE NURSING

El Centro only (North Lake is an authorized site)

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.NURSING

The Associate Degree Nursing Program is a two-year, 72 credit hour program, leading to the Associate in Applied Sciences Degree. The program prepares graduates to be eligible to write the NCLEX-RN Examination to become licensed as a Registered Nurse (R.N.) in Texas. The program is accredited by the Board of Nurse Examiners for the State of Texas, (333 Guadalupe, Suite 3-460, Austin, Texas 78701: Telephone number 512-305-7400) and the National League for Nursing Accrediting Commission (61 Broadway, 33rd Floor, New York, New York 10006: Telephone number 212-363-5555).

The program combines classroom and skills laboratory experience with hospital clinical experience.

The program offered at North Lake is under the administration and accreditation of the El Centro College Associate Degree Nursing program. Students will attend classes at North Lake, but receive their degrees from El Centro.

Contact the Assessment Center at El Centro College for the pre-entrance assessment and, Health Occupations Admissions to receive an information packet.

ADMISSION TO THE PROGRAM

Applicants are rank ordered for admission based on the G.P.A. earned on four prerequisite courses.

Applicants must:

1. Fulfill all requirements for admission to both the college and the Associate Degree Nursing Program.
2. Complete the designated assessment testing process and any required remediation.
3. Complete the four prerequisite courses in English, Biology, Psychology and Mathematics with a cumulative grade point average of 2.5 or better.
4. Submit a completed admission application packet to the nursing admission office at El Centro on or before the enrollment period deadline. Information sessions are available to further discuss the application process to the program.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding the transferability of DCCCD courses.

		CREDIT HOURS
PREREQUISITES TO PROGRAM ADMISSION		
SCIT 1407	Human Anatomy and Physiology I **OR**	4
#BIOL 2401	Anatomy and Physiology I	(4)
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
PSYC 2301	Introduction to Psychology	3
		13
SEMESTER I - First Year		
RNSG 1423	Introduction to Professional Nursing for Integrated Programs	4
RNSG 1119	Integrated Nursing Skills I	1
RNSG 1460	Clinical - Nursing – Registered Nurse Training (RN, ASN, BSN, MSN)	4
SCIT 1408	Human Anatomy and Physiology II **OR**	4
BIOL 2402	Anatomy and Physiology II	(4)
PSYC 2314	Developmental Psychology	3
		16
SEMESTER II		
RNSG 2504	Integrated Care of the Client with Common Health Care Needs	5
RNSG 1129	Integrated Nursing Skills II	1
RNSG 1461	Clinical - Nursing – Registered Nurse Training (RN, ASN, BSN, MSN)	4
BIOL 2420	Microbiology for Non-Science Majors	4
SPCH 1311	Introduction to Speech Communication	3
		17
SEMESTER III - Second Year		
RNSG 2514	Integrated Care of the Client with Complex Health Care Needs	5
RNSG 2460	Clinical - Nursing – Registered Nurse Training (RN, ASN, BSN, MSN)	4
+Elective	Humanities/Fine Arts	3
		12
SEMESTER IV		
RNSG 2535	Integrated Client Care Management	5
RNSG 2562	Clinical - Nursing – Registered Nurse Training (RN, ASN, BSN, MSN)	5
RNSG 2221	Management of Client Care	2
		12
Minimum Hours Required		70

+Humanities/Fine Arts - must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

BIOL 1406 Biology for Science Majors I or SCIT 1407 Human Anatomy and Physiology I are prerequisites to BIOL 2401 Anatomy and Physiology I.

A grade of a C or better is required for all courses. Support courses must be completed before or during the semester indicated.

TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Nursing and provides the student advanced skills required by the industry to specialize in Perioperative Nursing.

PERIOPERATIVE NURSING

El Centro only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.NURS.PERIOP.INTERN

This two-semester program offers registered and graduate nurses the opportunity to acquire additional theory and skills required for patient care in the surgical setting. The perioperative approach to patient care is employed. Principles of surgical asepsis, patient care, use of surgical supplies and equipment, and ethical/legal aspects are presented. The emphasis of the program is on the scrub and circulating roles in perioperative nursing. Nurses enrolled in this program must hold a current license from the Board of Nurse Examiners for the State of Texas, or be a graduate of a nursing program eligible for the next NCLEX-RN examination.

Visit the web site
http://www.elcentrocollege.edu/healthcareers/.

		CREDIT HOURS
PREREQUISITES		
Nurses enrolled in this program must hold a current license from the Board of Nurse Examiners for the State of Texas, or be a graduate of a nursing program eligible for the next NCLEX-RN examination. Current CPR certification.		
SEMESTER I		
SRGT 1340	Perioperative Nursing I	3
SRGT 1167	Practicum (or Field Experience) - Surgical Technology/Technologist	1
		4
SEMESTER II		
SRGT 1343	Perioperative Nursing II	3
SRGT 2366	Practicum (or Field Experience) - Surgical Technology/Technologist	3
		6
Minimum Hours Required		10

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills Certificate need to consult with their advisor.

AUTO BODY TECHNOLOGY

Eastfield only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.AUTO.BODY

This program introduces the student to all facets of auto body repair and painting. Emphasis is placed upon the development of the necessary skills and knowledge required to function successfully in this industry. The program of study includes technical aspects of metal behavior combined with correct repair and refinishing procedures.

		CREDIT HOURS
SEMESTER I		
ABDR 1519	Basic Metal Repair	5
ABDR 1431	Basic Refinishing	4
ABDR 1307	Auto Body Welding	3
+Elective	MATH Elective **OR**	3-5
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(4)
		15-19
SEMESTER II		
ABDR 1555	Minor Metal Repair	5
ABDR 1558	Intermediate Refinishing	5
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
		16
SEMESTER III		
ABDR 2537	Structural Analysis and Damage Repair V	5
ABDR 2541	Major Collision Repair and Panel Replacement	5
+++Elective	Social/Behavioral Science	3
		13
SEMESTER IV		
ABDR 2353	Color Analysis and Paint Matching	3
ABDR 2357	Collision Repair Shop Management	3
ABDR 2355	Collision Repair Estimating	3
ABDR 2380	Cooperative Education- Autobody/ Collision and Repair Technology/ Technician **OR**	3
ABDR 2388	Internship – Autobody/Collision and Repair Technology/Technician	(3)
ABDR 2402	Auto Body Mechanical and Electrical Service	4
++++Elective	Humanities/Fine Arts	3
		19
Minimum Hours Required		63-67

+MATH elective – Student must take MATH 1314 or any higher level MATH course.

++ Elective – Must be selected from the DCCCD Natural Sciences Core list.

+++ Elective – Must be selected from the DCCCD Social/Behavioral Science Core list.

++++Elective – Must be selected from the DCCCD Humanities/Fine Arts Core list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

AUTO BODY TECHNOLOGY

Eastfield only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.AUTO.BODY

This program is designed to train a student in all facets of auto body repair and painting. Emphasis is placed upon those skills needed by the student to become a successful auto body repair person. This program offers the student a certificate in auto body technology upon successful completion of the program.

		CREDIT HOURS
SEMESTER I		
ABDR 1519	Basic Metal Repair	5
ABDR 1431	Basic Refinishing	4
ABDR 1307	Auto Body Welding	3
		12
SEMESTER II		
ABDR 1555	Minor Metal Repair	5
ABDR 1558	Intermediate Refinishing	5
SPCH 1311	Introduction to Speech Communication **OR**	3
ABDR 1391	Special Topics in Auto/Automotive Body Repairer	(3)
		13
SEMESTER III		
ABDR 2537	Structural Analysis and Damage Repair V	5
ABDR 2541	Major Collision Repair and Panel Replacement	5
+Elective	MATH **OR**	3-5
TECM 1341	Technical Math **AND**	(3)
++Elective	Natural Science	(4)
		13-17
SEMESTER IV		
ABDR 2353	Color Analysis and Paint Matching	3
ABDR 2357	Collision Repair Shop Management	3
ABDR 2355	Collision Repair Estimating	3
ABDR 2380	Cooperative Education- Autobody/ Collision and Repair Technology/ Technician **OR**	3
ABDR 2388	Internship – Autobody/Collision and Repair Technology/Technician	(3)
		12
Minimum Hours Required		50-54

+MATH elective – Student must take MATH 1314 or any higher level MATH course.

++Elective – Must be selected from the DCCCD Natural Sciences Core list.

Note: Some students enrolling in this program may plan to transfer to a four-year institution. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTO BODY TECHNOLOGY -- AUTO BODY METAL TECHNICIAN

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.AUTO.BODY.METAL

Preparation for positions in the auto collision industry in the area of metal and structural repair. Courses include metal repair, frame repair, and major panel replacement. Students receive training using lab modules, live projects, and cooperative work experience.

		CREDIT HOURS
SEMESTER I		
ABDR 1519	Basic Metal Repair	5
ABDR 1555	Minor Metal Repair	5
ABDR 1307	Auto Body Welding	3
SPCH 1311	Introduction to Speech Communication **OR**	3
ABDR 1391	Special Topics in Auto/Automotive Body Repairer	(3)
		16
SEMESTER II		
ABDR 2537	Structural Analysis and Damage Repair V	5
ABDR 2541	Major Collision Repair and Panel Replacement	5
ABDR 2380	Cooperative Education- Autobody/ Collision and Repair Technology/ Technician **OR**	3
ABDR 2388	Internship – Autobody/Collision and Repair Technology/Technician	(3)
		13
Minimum Hours Required		29

AUTO BODY TECHNOLOGY -- AUTO BODY PAINTER

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.AUTO.BODY.PAINT

Instruction leading to positions in the auto collision industry in the area of paint refinishing. Courses include surface preparation, overall refinishing, and paint mixing and tinting. Students receive training using lab modules, live projects, and cooperative work experience.

		CREDIT HOURS
SEMESTER I		
ABDR 1519	Basic Metal Repair	5
ABDR 1431	Basic Refinishing	4
ABDR 1307	Auto Body Welding	3
SPCH 1311	Introduction to Speech Communication **OR**	3
ABDR 1391	Special Topics in Auto/Automotive Body Repairer	(3)
		15
SEMESTER II		
ABDR 1558	Intermediate Refinishing	5
ABDR 2353	Color Analysis and Paint Matching	3
ABDR 2380	Cooperative Education- Autobody/ Collision and Repair Technology/ Technician **OR**	3
ABDR 2388	Internship – Autobody/Collision and Repair Technology/Technician	(3)
		11
Minimum Hours Required		26

AUTO BODY TECHNOLOGY -- AUTO BODY SHOP MANAGEMENT

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.AUTO.BODY.SHOP

Instruction leading to positions in management of auto collision facilities. Management positions include shop supervisors and managers, insurance estimators, supply sales, and factory product representatives. Classes are designed to provide a broad exposure to industry procedures and practices.

		CREDIT HOURS
SEMESTER I		
ABDR 1519	Basic Metal Repair	5
ABDR 2541	Major Collision Repair and Panel Replacement	5
ABDR 2537	Structural Analysis and Damage Repair V	5
		15
SEMESTER II		
ABDR 1431	Basic Refinishing	4
ABDR 2357	Collision Repair Shop Management	3
ABDR 2355	Collision Repair Estimating	3
+Elective	MATH **OR**	3-5
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(4)
		13-17
Minimum Hours Required		28-32

+MATH elective – Student must take MATH 1314 or any higher level MATH course.

++Elective – Must be selected from the DCCCD Natural Science Core list.

Note: Some students enrolling in this program may plan to transfer to a four-year institution. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY -- DEALERSHIP-SPONSORED TECHNICIAN

Brookhaven only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.AT.DEALERSHIP

This specialized program is designed to prepare students for entry-level employment as automotive technicians in specific manufacturer's dealership service organizations. Students entering this program must be sponsored by participating dealerships approved by the College. Emphasis is placed upon the development of the necessary skills and knowledge required to function in automotive dealerships repairing and maintaining late-model automobiles with electronic systems. This program includes operational theory, practical skills, and accepted shop procedures reinforced by intensive practice during cooperative work experience periods in the sponsoring dealership.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1306	Automotive Engine Removal and Installation	3
AUMT 1319	Automotive Engine Repair	3
AUMT 2380	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
TECM 1341	Technical Algebra	3
		15
SEMESTER II		
AUMT 1307	Automotive Electrical Systems	3
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Automotive Suspension and Steering Systems	3
AUMT 1381	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
PHYS 1405	Concepts in Physics	4
		16
SEMESTER III		
AUMT 1345	Automotive Heating and Air Conditioning	3
AUMT 2311	Automotive Electronics Controls	3
SPCH 1311	Introduction to Speech Communication	3
		9
SEMESTER IV		
AUMT 2317	Automotive Engine Performance Analysis I	3
AUMT 2334	Automotive Engine Performance Analysis II	3
AUMT 2375	Powertrain Diagnostics	3
AUMT 2280	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	2
PSYC 2302	Applied Psychology	3
ENGL 1301	Composition I	3
		17
SEMESTER V		
AUMT 2313	Manual Drive Train and Axles	3
AUMT 2325	Automotive Automatic Transmission and Transaxle	3
AUMT 2332	Automotive Automatic Transmission and Transaxle II	3
AUMT 2381	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
HUMA 1301	Introduction to the Humanities	3
		15
Minimum Hours Required		72

NOTE: Any student enrolling in TECM 1341 Technical Algebra must take PHYS 1405 Concepts I Physics. Other college level Math meets the requirement for Math and Natural Science.

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institutions of their choice.

AUTOMOTIVE TECHNOLOGY -- SERVICE TECHNICIAN

Brookhaven only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.AT.SERVICE.TECH

The purpose of this program is to prepare students for entry level employment as an automotive technician. This program reflects a building-block approach from simple to complex and includes theory, diagnosis, repair and maintenance of automobiles, including late model vehicles with electronic systems. Emphasis is placed on operational theory, practical skills and accepted shop procedures.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1306	Automotive Engine Removal and Installation	3
AUMT 1319	Automotive Engine Repair	3
SPCH 1311	Introduction to Speech Communication	3
		12
SEMESTER II		
AUMT 1307	Automotive Electrical Systems	3
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Automotive Suspension and Steering Systems	3
+Elective	Any 3 or 4 credit Math course **OR**	3-4
TECM 1341	Technical Algebra **AND**	(3)
+Elective	Natural Science	(4)
		12-16
SEMESTER III		
+++Elective	Humanities/Fine Arts	3
		3
SEMESTER IV		
AUMT 2313	Manual Drive Train and Axles	3
AUMT 2311	Automotive Electronics Controls	3
AUMT 1345	Automotive Heating and Air Conditioning	3
ENGL 1301	Composition I	3
		12
SEMESTER V		
AUMT 2317	Automotive Engine Performance Analysis I	3
AUMT 2334	Automotive Engine Performance Analysis II	3
AUMT 2375	Powertrain Diagnostics	3
AUMT 2380	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
PSYC 2302	Applied Psychology	3
		15
SEMESTER VI		
AUMT 2325	Automotive Automatic Transmission and Transaxle	3
AUMT 2332	Automotive Automatic Transmission and Transaxle II	3
AUMT 2381	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
		9
Minimum Hours Required		63-67

+Elective – any student enrolling in TECM 1341 must take one Natural Science course from the DCCCD Natural Science Core list. Other college level MATH meets the requirement for MATH and Natural Sciences.

++Natural Science Elective – any student enrolling in TECM 1341 must take one Natural Science course selected from the DCCCD Natural Science Core list.

+++Elective - Must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY -- SERVICE TECHNICIAN

Cedar Valley and Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.AT.SERV.TECH

The purpose of this program is to prepare students for entry level employment as an automotive technician. This program reflects a building-block approach from simple to complex and includes theory, diagnosis, repair and maintenance of automobiles, including late model vehicles with electronic systems. Emphasis is placed on operational theory, practical skills and accepted shop procedures.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1306	Automotive Engine Removal and Installation	3
AUMT 1319	Automotive Engine Repair	3
AUMT 1307	Automotive Electrical Systems	3
+Elective	Any 3 or 4 credit Math course **OR**	3-4
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(4)
		15-19
SEMESTER II		
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Automotive Suspension and Steering Systems	3
AUMT 2311	Automotive Electronics Controls	3
ENGL 1301	Composition I	3
		12
SEMESTER III		
AUMT 1345	Automotive Heating and Air Conditioning	3
SPCH 1311	Introduction to Speech Communication	3
		6
SEMESTER IV		
AUMT 2317	Automotive Engine Performance Analysis I	3
AUMT 2334	Automotive Engine Performance Analysis II	3
AUMT 2375	Powertrain Diagnostics	3
AUMT 2380	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
++++Elective	Humanities/Fine Arts	3
		15
SEMESTER V		
AUMT 2313	Manual Drive Train and Axles	3
AUMT 2325	Automotive Automatic Transmission and Transaxle	3
AUMT 2332	Automotive Automatic Transmission and Transaxle II	3
AUMT 2381	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
++++Elective	Social/Behavioral Sciences	3
		15

Minimum Hours Required 63-67

+Elective – any student enrolling in TECM 1341 must take one Natural Science course from the DCCCD Natural Science Core list. Other college level MATH meets the requirement for MATH and Natural Sciences.

++Natural Science Elective – any student enrolling in TECM 1341 must take one Natural Science course selected from the DCCCD Natural Science Core list.

+++Elective - Must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

++++Elective - Must be selected from the DCCCD Core Curriculum for Social/Behavioral Sciences.

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY -- CHASSIS SERVICE TECHNICIAN

Brookhaven, Cedar Valley and Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.AUMT.CHASSIS

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Automotive Suspension and Steering Systems	3
AUMT 1380	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
		15

Minimum Hours Required 15

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY -- ELECTRONICS AND CLIMATE CONTROLS TECHNICIAN

Brookhaven, Cedar Valley and Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.AUMT.ELEC.CLIM

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
+Elective		3-4
		9-10
SEMESTER II		
AUMT 1345	Automotive Heating and Air Conditioning	3
AUMT 2311	Automotive Electronics Controls	3
AUMT 1381	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
		9

Minimum Hours Required 18-19

+Elective - must be selected from the following:

ENGL	1301	Composition I	3
SPCH	1311	Introduction to Speech Communication	3
TECM	1341	Technical Algebra	3
MATH	XXXX	Any 3 credit or 4-credit MATH course	3-4
ITSC	1401	Introduction to Computers	3

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY -- ENGINE REPAIR AND PERFORMANCE TECHNICIAN

Brookhaven, Cedar Valley and Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.AUMT.ENGINE.PERF

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1306	Automotive Engine Removal and Installation	3
AUMT 1319	Automotive Engine Repair	3
AUMT 1307	Automotive Electrical Systems	3
		12
SEMESTER II		
AUMT 2317	Automotive Engine Performance Analysis I	3
AUMT 2334	Automotive Engine Performance Analysis II	3
AUMT 2375	Powertrain Diagnostics	3
AUMT 2381	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
+Elective		3-4
		15-16
Minimum Hours Required		27-28

+Elective - must be selected from the following:

ENGL	1301	Composition I	3
SPCH	1311	Introduction to Speech Communication	3
TECM	1341	Technical Algebra	3
MATH	XXXX	Any 3 credit or 4-credit MATH course	3-4
ITSC	1401	Introduction to Computers	4

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY -- TRANSMISSION SERVICE TECHNICIAN

Brookhaven, Cedar Valley and Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.AUMT.TRANSMISSION

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
AUMT 2313	Manual Drive Train and Axles	3
		9
SEMESTER II		
AUMT 2325	Automotive Automatic Transmission and Transaxle	3
AUMT 2332	Automotive Automatic Transmission and Transaxle II	3
AUMT 2380	Cooperative Education – Automobile/ Automotive Mechanics Technology/ Technician	3
		9
Minimum Hours Required		18

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY/DIESEL AND HEAVY EQUIPMENT -- CONSTRUCTION EQUIPMENT

Effective January 1, 2004, this award has been deactivated for Eastfield. For current students, the award will be closed on or before January 1, 2007. New students should not attempt to pursue this award.

Eastfield (see above) only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.AT.DHE.CNT.EQ.01

Excavators, cranes, bulldozers, bob-cats, tractors, the monstrous yellow machines that busily construct our highways, shopping centers and homes are advanced instruments that require well-trained, highly skilled technicians to repair and maintain them. At Eastfield College, the Diesel and Heavy Equipment program provides an opportunity to train on the latest industry-standard equipment in the Heavy Equipment option.

After successful completion of Heavy Equipment course work, you may enter the field as an entry-level technician in the repair and maintenance of heavy construction equipment. Positions may be found in the following areas: equipment dealerships, construction contractors, mining, oil industries and other construction related industries.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
DEMR 1229	Preventative Maintenance	2
DEMR 1410	Diesel Engine Testing and Repair I	4
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER II		
AUMT 1310	Automotive Brake Systems	3
AUMT 2313	Manual Drive Train and Axles	3
DEMR 1411	Diesel Engine Testing and Repair II	4
ENGL 1301	Composition I	3
		13
SEMESTER III		
AUMT 1345	Automotive Heating and Air Conditioning	3
DEMR 1416	Basic Hydraulics	4
+MATH	Any 1000 Level MATH **OR**	3-4
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(4)
		10-14
SEMESTER IV		
DEMR 2334	Advanced Diesel Tune-up and Troubleshooting	3
DEMR 2335	Advanced Hydraulics	3
DEMR 2432	Electronic Controls	4
+++Elective	Humanities/Fine Arts	3
		13
SEMESTER V		
DEMR 2348	Failure Analysis	3
HEMR 1501	Tracks and Undercarriages	5
DEMR 2542	Automatic Power Shift and Hydrostatic Transmissions I	5
++++Elective	Social/Behavioral Science	3
		16
Minimum Hours Required		67-71

+MATH Option - Any college level (1000 level or above) Math meets the requirement for Math and Natural Science. Any student enrolling in TECM 1341, Technical Algebra must take one Natural Science course selected from the DCCCD approved course list.

++Elective - Any student enrolling in TECM 1341, Technical Algebra must take one Natural Science course selected from the DCCCD approved course list.

+++Elective - Must be selected from the DCCCD Humanities/Fine Arts approved course list.

++++Elective - Must be selected from the DCCCD Social/Behavioral Sciences approved course list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY/DIESEL AND HEAVY EQUIPMENT -- HEAVY TRUCK

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Effective September 1, 2004, this award has been deactivated for Eastfield College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Eastfield (see above) only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.AT.DHE.HVY.TR.01

The Heavy Truck Specialization curriculum is designed to train future technicians in maintaining and repairing heavy trucks. Upon completion of the course work, you may enter the field as an entry-level diesel heavy truck technician, or as a technician's helper.

The Heavy Truck specialization offers the training you will need, and helps develop your potential to reach a supervisory position with truck dealerships, freight companies, contractors, oil and mining industries, and other related fields.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
DEMR 1229	Preventative Maintenance	2
DEMR 1410	Diesel Engine Testing and Repair I	4
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER II		
AUMT 1310	Automotive Brake Systems	3
AUMT 2313	Manual Drive Train and Axles	3
DEMR 1411	Diesel Engine Testing and Repair II	4
ENGL 1301	Composition I	3
		13
SEMESTER III		
AUMT 1345	Automotive Heating and Air Conditioning	3
DEMR 1416	Basic Hydraulics	4
+MATH	Any 1000 Level MATH **OR**	3-4
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(4)
		10-14
SEMESTER IV		
DEMR 2334	Advanced Diesel Tune-up and Troubleshooting	3
DEMR 2331	Advanced Brake Systems	3
DEMR 2432	Electronic Controls	4
+++Elective	Humanities/Fine Arts	3
		13
SEMESTER V		
DEMR 2348	Failure Analysis	3
DEMR 1327	Tractor Trailer Service and Repair	3
DEMR 1447	Power Train II	4
++++Elective	Social/Behavioral Science	3
		13
Minimum Hours Required		64-68

+MATH Option - Any college level (1000 level or above) Math meets the requirement for Math and Natural Science. Any student enrolling in TECM 1341, Technical Algebra must take one Natural Science course selected from the DCCCD approved course list.

++Elective - Any student enrolling in TECM 1341, Technical Algebra must take one Natural Science course selected from the DCCCD approved course list.

+++Elective - Must be selected from the DCCCD Humanities/Fine Arts approved course list.

++++Elective - Must be selected from the DCCCD Social/Behavioral Sciences approved course list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY/DIESEL AND HEAVY EQUIPMENT -- CONSTRUCTION EQUIPMENT TECHNICIAN

Effective January 1, 2004, this award has been deactivated for Eastfield College. For current students, the award will be closed on or before January 1, 2007. New students should not attempt to pursue this award.

Eastfield (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.AT.DHE.CONST.EQU

This certificate prepares the student as an entry-level maintenance technician. Maintenance procedures and basic systems operations are studied.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
DEMR 1229	Preventive Maintenance	2
DEMR 1410	Diesel Engine Testing and Repair I	4
		12
SEMESTER II		
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Suspension and Steering	3
AUMT 1345	Automotive Heating and Air Conditioning	3
DEMR 1411	Diesel Engine Testing and Repair II	4
DEMR 1416	Basic Hydraulics	4
		17
SEMESTER III		
DEMR 2335	Advanced Hydraulics	3
DEMR 2542	Automatic Power Shift and Hydrostatic Transmissions I	5
HEMR 1501	Tracks and Undercarriages	5
		13

Minimum Hours Required 42

AUTOMOTIVE TECHNOLOGY/DIESEL AND HEAVY EQUIPMENT -- DIESEL ENGINE FUEL SYSTEMS TECHNICIAN

Effective January 1, 2004, this award has been deactivated for for Eastfield College. For current students, the award will be closed on or before January 1, 2007. New students should not attempt to pursue this award.

Eastfield (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.AT.DHE.FUEL.SYST

This certificate prepares the student as an entry-level maintenance technician. Maintenance procedures and basic systems operations are studied.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
DEMR 1229	Preventive Maintenance	2
DEMR 1410	Diesel Engine Testing and Repair I	4
		12
SEMESTER II		
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Suspension and Steering	3
AUMT 1345	Automotive Heating and Air Conditioning	3
AUMT 2317	Engine Performance Analysis I	3
DEMR 1411	Diesel Engine Testing and Repair II	4
		16
SEMESTER III		
AUMT 2334	Engine Performance Analysis II	3
DEMR 2348	Failure Analysis	3
DEMR 2334	Advanced Diesel Tune-Up and Troubleshooting	3
DEMR 2432	Electronic Controls	4
		13

Minimum Hours Required 41

AUTOMOTIVE TECHNOLOGY/DIESEL AND HEAVY EQUIPMENT -- HEAVY TRUCK TECHNICIAN

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Effective September 1, 2004, this award has been deactivated for Eastfield College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Eastfield (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.AT.DHE.HEAVY.TRU

This certificate prepares the student as an entry-level maintenance technician. Maintenance procedures and basic systems operations are studied.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
DEMR 1229	Preventive Maintenance	2
DEMR 1410	Diesel Engine Testing and Repair I	4
		12
SEMESTER II		
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Suspension and Steering	3
AUMT 1345	Automotive Heating and Air Conditioning	3
DEMR 1411	Diesel Engine Testing and Repair II	4
DEMR 1317	Basic Brake Systems	3
		16
SEMESTER III		
DEMR 1421	Power Train I	4
DEMR 2331	Advanced Brake Systems	3
DEMR 1327	Tractor Trailer Service and Repair	3
		10
Minimum Hours Required		38

AUTOMOTIVE TECHNOLOGY/DIESEL AND HEAVY EQUIPMENT-- PREVENTIVE MAINTENANCE TECHNICIAN

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Effective September 1, 2004, this award has been deactivated for Eastfield College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Cedar Valley and Eastfield (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.AT.DHE.PREV.MN.04

This certificate prepares the student as an entry-level maintenance technician. Maintenance procedures and basic systems operations are studied.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
DEMR 1229	Preventive Maintenance	2
DEMR 1410	Diesel Engine Testing and Repair I	4
		12
SEMESTER II		
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Automotive Suspension and Steering Systems	3
AUMT 1345	Automotive Heating and Air Conditioning	3
DEMR 1411	Diesel Engine Testing and Repair II	4
DEMR 1317	Basic Brake Systems	3
		16
SEMESTER III		
DEMR 1421	Power Train I	4
DEMR 1327	Tractor Trailer Service and Repair	3
DEMR 2331	Advanced Brake Systems	3
		10
Minimum Hours Required		38

AVIATION TECHNOLOGY -- PROFESSIONAL PILOT

Mountain View only

Because of the varied and interrelated aviation career options available, Mountain View's Aviation Technology Program is designed to allow students to take a group of core courses which includes selected aviation, business, English, mathematics and human relations courses and then proceed with specialized courses in the specific career option they wish to enter.

The Associate in Applied Sciences Degree options are (1) Professional Pilot; (2) Aircraft Dispatcher; and (3) Airport Management. A one-year certificate program is available in Aircraft Dispatcher.

AVIATION TECHNOLOGY -- PROFESSIONAL PILOT OPTION

Mountain View only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.AVIA.PILOT.04

The Professional Pilot Option provides students with flight training and ground school through the flight instructor certificate. All ground school instruction and flight training conform to Part 61 and 141 of the Federal Aviation Administration Regulations. Prior to admission to the program, registration and payment of fees, consultation with and approval by an Aviation Technology instructor is necessary. Simulator fees, flight fees and fees for pre- and post-flight briefings are in addition to the regular tuition charge.

Students completing this option may find employment opportunities as an airline pilot, corporate pilot, flight engineer, flight instructor and other general aviation positions. It is recommended that students in the Professional Pilot Option schedule flight training during the summer months in addition to the Spring and Fall semesters to aid in completing the program within a two year period.

Graduation requirements--Students in the Professional Pilot Option must successfully complete all required courses in the Professional Pilot curriculum. They must also complete all educational requirements imposed by the State of Texas. In addition, they must obtain the Private, Commercial (with the Instrument Rating), and Flight Instructor Certificates from the FAA.

		CREDIT HOURS
SEMESTER I		
AIRP 1313	Introduction to Aviation	3
AIRP 1317	Private Pilot Ground School	3
AIRP 1301	Air Navigation	3
AIRP 1215	Private Flight	2
AIRP 1311	Flight Theory	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
		17-18
SEMESTER II		
AIRP 1347	Human Factors in Aviation	3
AIRP 1343	Aerodynamics	3
AIRP 1351	Instrument Ground School	3
AIRP 1307	Aviation Meteorology	3
AIRP 1255	Intermediate Flight	2
ENGL 1301	Composition I	3
		17
SEMESTER III		
AIRP 2337	Commercial Ground School	3
AIRP 2250	Instrument Flight	2
AIRP 2355	Propulsion Systems	3
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications **OR**	(4)
BCIS 1405	Business Computer Applications	(4)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
PSYC 2301	Introduction to Psychology	3
		18
SEMESTER IV		
AIRP 2239	Commercial Flight	2
AIRP 2333	Aircraft Systems	3
AVIM 2335	Airport Management	3
AIRP 2349	Instructor Ground School	3
AIRP 2236	Certified Flight Instructor-Airplane	2
AVIM 2337	Aviation Law	3
+Elective	Humanities/Fine Arts	3
		19
Minimum Hours Required		71-72

+Humanities/Fine Arts course: Any three-credit course from the Humanities/Fine Arts DCCCD CORE.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

AVIATION TECHNOLOGY -- AIRCRAFT DISPATCHER

Mountain View only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.AVIA.DSPATCH.04

The job performed by an aircraft dispatcher is an integral part of the overall flight operations for airlines. An individual in this position works in conjunction with an airline pilot and is responsible for regulation compliance, weather and loading procedures prior to take-off. In the Aircraft Dispatcher Program students may earn a certificate after approximately one year or choose to complete the Associate in Applied Sciences Degree.

Entry into either program will be in accordance with Federal Aviation Administration regulations and with instructor approval. Upon completion of the courses in the desired program, students may be recommended to apply to take the FAA knowledge examination for Aircraft Dispatcher and the practical examination for Aircraft Dispatcher.

Graduation requirements--Students in the Aircraft Dispatcher Option must successfully complete all required courses in the Aircraft Dispatcher curriculum. They must also complete all educational requirements imposed by the State of Texas. In addition, they must obtain the Aircraft Dispatcher Certificate from the FAA.

		CREDIT HOURS
SEMESTER I		
AIRP 1313	Introduction to Aviation	3
AIRP 1317	Private Pilot Ground School	3
AIRP 1311	Flight Theory	3
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications **OR**	(4)
BCIS 1405	Business Computer Applications	(4)
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
		16-17
SEMESTER II		
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
AIRP 1351	Instrument Ground School	3
AIRP 1307	Aviation Meteorology	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
		15
SEMESTER III		
AIRP 2337	Commercial Ground School	3
AIRP 2355	Propulsion Systems	3
AIRP 2352	Practical Dispatching I	3
AIRP 2333	Aircraft Systems	3
PSYC 2301	Introduction to Psychology	3
		15
SEMESTER IV		
AIRP 1347	Human Factors in Aviation	3
AIRP 2353	Practical Dispatching II	3
BMGT 1303	Principles of Management	3
AVIM 2337	Aviation Law	3
+Elective	Humanities/Fine Arts	3
		15
Minimum Hours Required		61-62

+Humanities/Fine Arts course: Any three-credit course from the Humanities/Fine Arts DCCCD CORE.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

AVIATION TECHNOLOGY -- AIRCRAFT DISPATCHER

Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.AVIA.DISPATCHER

The job performed by an aircraft dispatcher is an integral part of the overall flight operations for airlines. An individual in this position works in conjunction with an airline pilot and is responsible for regulation compliance, weather and loading procedures prior to take-off. In the Aircraft Dispatcher Program students may earn a certificate after approximately one year or choose to complete the Associate in Applied Sciences Degree.

Entry into either program will be in accordance with Federal Aviation Administration regulations and with instructor approval. Upon completion of the courses in the desired program, students may be recommended to apply to take the FAA knowledge examination for aircraft dispatcher and the FAA Practical Examination.

		CREDIT HOURS
SEMESTER I		
AIRP 1313	Introduction to Aviation	3
AIRP 1317	Private Pilot Ground School	3
AIRP 1311	Flight Theory	3
AIRP 1351	Instrument Ground School	3
AIRP 1307	Aviation Meteorology	3
AIRP 2352	Practical Dispatching I	3
		18
SEMESTER II		
AVIM 2337	Aviation Law	3
AIRP 2355	Propulsion Systems	3
AIRP 2333	Aircraft Systems	3
AIRP 2337	Commercial Ground School	3
AIRP 2353	Practical Dispatching II	3
		15

Minimum Hours Required 33

Completion Requirements--Students in the Aircraft Dispatcher Option must successfully complete all required courses in the Aircraft Dispatcher curriculum. They must also complete all educational requirements imposed by the State of Texas. In addition, they must obtain the Aircraft Dispatcher Certificate from the FAA.

AVIATION TECHNOLOGY -- AIRPORT MANAGEMENT

Mountain View only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.AIRP.MGMT.04

This option provides students with a general administrative overview combining aviation and business courses stressing terminology, management techniques and functions as they apply to the aviation industry. Students completing this program may qualify for support or training positions in airport management, as staff members to operations superintendents or aviation authority boards. Positions with fixed base operators such as aircraft dealers may include equipment and aircraft sales and service.

		CREDIT HOURS
SEMESTER I		
AIRP 1313	Introduction to Aviation	3
AIRP 1317	Private Pilot Ground School	3
AIRP 1311	Flight Theory	3
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications **OR**	(4)
BCIS 1405	Business Computer Applications	(4)
BUSI 1301	Introduction to Business	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
		19-20
SEMESTER II		
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
BMGT 1303	Principles of Management	3
ENGL 1301	Composition I	3
AIRP 1307	Aviation Meteorology	3
ACCT 2301	Principles of Accounting I **OR**	3
ACCT 2401	Principles of Accounting I	(4)
		15-16
SEMESTER III		
AVIM 2331	Airline Management	3
AVIM 2339	Aviation Marketing	3
ACCT 2302	Principles of Accounting II **OR**	3
ACCT 2402	Principles of Accounting II	(4)
ECON 2301	Principles of Economics I	3
AVIM 2337	Aviation Law	3
		15-16

(continued on next page)

SEMESTER IV

AVIM 2335	Airport Management	3
ECON 2302	Principles of Economics II	3
BUSI 2301	Business Law	3
PSYC 2301	Introduction to Psychology	3
+Elective	Humanities/Fine Arts	3
		15

Minimum Hours Required 64-67

+Humanities/Fine Arts course: Any three-credit course from the Humanities/Fine Arts DCCCD CORE.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

BIOTECHNOLOGY

El Centro and Mountain View only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.BIOTECH.03

The El Centro and Mountain View College Biotechnology program offers individuals the choice of a Level I Certificate or a two-year Associate Degree program. The program is designed to prepare the graduate for entry-level positions in biotechnology, biological research and industrial laboratories.

Biotechnology students will study the theories of modern advances in biotechnology, molecular biology, DNA and RNA technology, and bioethics. Skills will include laboratory management and safety, laboratory operations, planning, recording, and reporting experiments, caring for equipment and living cells, cell and tissue culture, genetics, pipetting, technical writing, and statistical analysis. The final semester will include a capstone internship which will provide a transitional experience from course work to workplace. The biotechnology program will also provide a foundation for students who would like to continue a bachelor's and/or graduate degrees.

Job opportunities include: medical schools, pharmaceutical and industrial companies, colleges, universities and rapidly new emerging occupations.

		CREDIT HOURS
PREREQUISITE:		
ENGL 1301	Composition I	3
PSYC 2301	Introduction to Psychology	3
		6
SEMESTER I		
BIOL 1406	Biology for Science Majors I	4
CHEM 1411	General Chemistry I	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamental of Public Speaking	(3)
COSC 1300	Computer Literacy	3
BITC 1311	Introduction to Biotechnology	3
		17
SEMESTER II		
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
BIOL 2416	Genetics	4
CHEM 1412	General Chemistry II	4
BITC 1302	Biotechnology Laboratory Methods and Techniques	3
		14-15
SEMESTER III		
BIOL 2420	Microbiology for Non-Science Majors	4
BITC 2286	Internship-Biology Technician/ Biotechnology Laboratory Technician	2
		6
SEMESTER IV		
BITC 1301	Biotechnology Laboratory Instrumentation	3
BITC 1391	Special Topics in Biological Technology/Technician	3
MLAB 1335	Immunology/Serology	3
+Elective	Humanities/Fine Arts	3
		12
SEMESTER V		
BITC 2431	Cell Culture Techniques	4
BITC 2401	Molecular Biology Techniques	4
BITC 2486	Internship-Biology Technician/ Biotechnology Laboratory Technician	4
		12
Minimum Hours Required		67-68

+Humanities/Fine Arts Elective must be selected from the DCCCD Humanities/Fine Arts CORE list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

BIOTECHNOLOGY

El Centro and Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.BIOTECHNOLOGY

The El Centro and Mountain View College Biotechnology program offers individuals the choice of a Level I Certificate or a two-year Associate Degree program. The program is designed to prepare the graduate for entry-level positions in biotechnology, biological research and industrial laboratories.

Biotechnology students will study the theories of modern advances in biotechnology, molecular biology, DNA and RNA technology, and bioethics. Skills will include laboratory management and safety, laboratory operations, planning, recording, and reporting experiments, caring for equipment and living cells, cell and tissue culture, genetics, pipetting, technical writing, and statistical analysis. The final semester will include a capstone internship which will provide a transitional experience from course work to workplace. The biotechnology program will also provide a foundation for students who would like to continue a bachelor's and/or graduate degrees.

Job opportunities include: medical schools, pharmaceutical and industrial companies, colleges, universities and rapidly new emerging occupations.

		CREDIT HOURS
SEMESTER I		
CHEM 1411	General Chemistry I	4
BITC 1311	Introduction to Biotechnology	3
BIOL 1406	Biology for Science Majors I	4
+Elective		3-4
		14-15
SEMESTER II		
BIOL 2420	Microbiology for Non-Science Majors	4
CHEM 1412	General Chemistry II	4
BITC 1302	Biotechnology Laboratory Methods and Techniques	3
BITC 2286	Internship-Biology Technician/ Biotechnology Laboratory Technician	2
		13
Minimum Hours Required		27-28

+Electives - may be selected from the following:

ENGL	1301	Composition I	3
PSYC	2301	Introduction to Psychology	3
COSC	1300	Computer Literacy	3
MATH	1414	College Algebra **OR**	4
MATH	1314	College Algebra	(3)

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

BUSINESS ADMINISTRATION

Offered at all seven campuses

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.BUSI.ADMIN

The Associate in Applied Sciences Degree in Business Administration is designed for students seeking a broad program of study in all phases of business practices. This degree focuses not only at the core of management (principles of management, organizational behavior, and personnel administration) but also encompasses the critical areas of business operations (principles of marketing, accounting, and business law).

		CREDIT HOURS
SEMESTER I		
BMGT 1303	Principles of Management	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
+Math	**OR**	3-5
POFT 1321	Business Math **AND**	(3)
++Elective	Natural Science	(4)
+++Elective		3
		15-19
SEMESTER II		
MRKG 1311	Principles of Marketing	3
ACCT 2301	Principles of Accounting I** **OR**	3
ACCT 2401	Principles of Accounting I**	(4)
ENGL 1302	Composition II	3
ITSC 1401	Introduction to Computers	4
+++Elective		3
		16-17
SEMESTER III		
ACCT 2302	Principles of Accounting II **OR**	3
ACCT 2402	Principles of Accounting II	(4)
BUSI 2301	Business Law	3
ECON 2301	Principles of Economics I	3
PSYC 2302	Applied Psychology **OR**	3
PSYC 2301	Introduction to Psychology	(3)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		15-16
SEMESTER IV		
HRPO 2301	Human Resources Management	3
HRPO 2307	Organizational Behavior	3
ECON 2302	Principles of Economics II	3
POFT 2312	Business Communications II	3
BMGT 2382	Cooperative Education-Business Administration and Management, General	3
++++Elective	Humanities/Fine Arts	3
		18
Minimum Hours Required		64-70

+MATH – Students must select a Mathematics course from the DCCCD Mathematics CORE list.

++Elective – Students must select a course in Biology (BIOL), Chemistry (CHEM), Geology (GEOL) or Physics (PHYS) from the DCCCD Lab Science CORE list.

+++Elective - Students must take 3 hours of any college level courses to satisfy these electives.

++++ Elective – Students must select from the DCCCD Humanities/Fine Arts CORE list.

**Students may substitute ACNT 1303 and ACNT 1304. Only three hours may be applied to the required number of hours for granting the degree.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

BUSINESS ADMINISTRATION—HUMAN RESOURCES ASSISTANT

Cedar Valley, Eastfield, Mountain View, North Lake and Richland only

(Certificate)

This certificate program prepares students for entry-level clerical positions in human resources.

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.BUSADM.HR.ASST.04

		CREDIT HOURS
SEMESTER I		
BMGT 1303	Principles of Management	3
ACNT 1303	Introduction to Accounting I	3
HRPO 2307	Organizational Behavior	3
		9
SEMESTER II		
POFT 2312	Business Correspondence and Communication	3
HRPO 2301	Human Resources Management	3
		6
Minimum Hours Required		15

BUSINESS ADMINISTRATION -- BUSINESS TRAINEE

Brookhaven only

The three levels of Business Trainee are designed to work with the student's career plans and to match the wide range of skill combinations needed at various entry level positions. Courses available for the various skill levels may be selected from but are not limited the attached list of courses.

BUSINESS TRAINEE I

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.BUSI.TRAIN.I.01

	CREDIT HOURS
SEMESTER I	
Any BMGT 1300 or above, or any BUSG 1300 or above, or any BUSI 1300 or above, HPRO 1300 or above, or any IBUS 1300 or above	3
Any 2, 3, or 4-credit ITSC, ITSW, POFI, POFT; or any MRKG 1200 or above	2-4
	5-7
Minimum Hours Required	5-7

BUSINESS TRAINEE II

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.BUSI.TRAIN.II.01

	CREDIT HOURS
SEMESTER I	
Any ACCT, any ACNT or any ECON 1300 or Above	3-4
any 2-, 3-, or 4-credit hour ITSC, ITSW, POFI, POFT; or any MRKG 1200 or above	2-4
	5-8
Minimum Hours Required	5-8

BUSINESS TRAINEE III

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.BUSI.TRAIN.III.01

	CREDIT HOURS
SEMESTER I	
Any BMGT 1300 or above, or any BUSG 1300 or above, or any BUSI 1300 or above, or any HPRO 1300 or above, or any IBUS 1300 or above	3
Any 2, 3, or 4-credit ITSC, ITSW, POFI, POFT or any MRKG 1200 or above	2-4
Any ACCT or ACNT	3-4
Any ECON 1300 or above	3
	11-14
Minimum Hours Required	11-14

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

CHILD DEVELOPMENT

Brookhaven and Eastfield only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CHILD.DEVE

The Child Development Program offers students an in-depth study of young children from birth to twelve years of age in conjunction with the Parent/Child Study Center that provides students day-to-day involvement with young children. The program is designed to enable students to provide an optimal learning and caring environment for children.

		CREDIT HOURS
SEMESTER I		
TECA 1311	Introduction to Early Childhood Education	3
TECA 1354	Child Growth and Development	3
TECA 1303	Family and the Community	3
TECA 1318	Nutrition, Health and Safety	3
ENGL 1301	Composition I	3
+Elective	Child Development	1-3
		16-18
SEMESTER II		
CDEC 1313	Curriculum Resources for Early Childhood Programs **AND**	3
CDEC 2187	Internship – Child Care Provider/ Assistant	1
CDEC 1319	Child Guidance	3
CDEC 1359	Children with Special Needs	3
MATH 1314	College Algebra **OR**	3
	Higher Level MATH course	(3-5)
++Elective	Child Development	3-4
		16-19
SEMESTER III		
CDEC 2286	Internship – Child Care Provider/ Assistant	2
CDEC 1356	Emergent Literacy for Early Childhood	3
GOVT 2301	American Government	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
ITSC 1401	Introduction to Computers	4
++Elective	Child Development	3-4
		18-19
SEMESTER IV		
CDEC 2287	Internship – Child Care Provider/ Assistant	2
CDEC 2304	Child Abuse and Neglect	3
CDEC 2280	Cooperative Education – Child Care Provider/Assistant **OR**	2
CDEC 2380	Cooperative Education – Child Care Provider/Assistant **OR**	(3)
CDEC 2480	Cooperative Education – Child Care Provider/Assistant	(4)
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
+++Elective	Humanities/Fine Arts	3-4
		13-16

Minimum Hours Required 63-72

+Electives - must be selected from the following:

CDEC	1141	CDA Preparation for Assessment	1
CDEC	1317	Child Development Associate Training I	3
CDEC	1318	Nutrition Health and Safety	3
CDEC	1321	The Infant and Toddler	3
CDEC	1323	Observation and Assessment	3
CDEC	1330	Growth and Development: 6-14 Years	3
CDEC	1334	School-Age Activities and Group Dynamics	3
CDEC	1335	Early Childhood Development: 3-5 Years	3
CDEC	1339	Early Childhood Development: 0-3 Years	3
CDEC	1343	Independent Study in Child Development	3
CDEC	2326	Administration of Programs for Children I	3

++Electives - must be selected from the following:

CDEC	1340	Instructional Techniques for Children with Special Needs	3
CDEC	1357	Math and Science for Early Childhood	3
CDEC	1395	Special Topics in Early Childhood Provider/ Assistant	3
CDEC	1396	Special Topics in Administration of Programs for Children	3
CDEC	1413	Curriculum Resources for Early Childhood Programs	4
CDEC	1454	Child Growth and Development	4
CDEC	2315	Diverse Cultural/Multilingual Education	3
CDEC	2322	Child Development Associate Training II	3
CDEC	2324	Child Development Associate Training III	3
CDEC	2328	Administration of Programs for Children II	3
CDEC	2336	Administration of Programs for Children III	3
CDEC	2341	The School Age Child	3
CDEC	2380	Cooperative Education – Child Care Provider/Assistant	3
CDEC	2480	Cooperative Education – Child Care Provider/Assistant	4

(continued on next page)

+++Electives - must be selected from the following:

ARTS	1301	Art Appreciation	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
SPAN	1411	Beginning Spanish**	4

**American Sign Language may not be substituted for this course.

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Sills Certificate (ESC) need to consult their advisor.

NOTE: Students planning on transferring to a four-year institution to complete a Bachelor's degree need to consult the Child Development Program Chair before taking any Child Development classes.

TECH PREP ENHANCED SKILLS CERTIFICATES

This Enhanced Skills Certificates is attached to the Associate in Applied Sciences Degree in Child Development and provides the student advanced skills required by the industry.

ADMINISTRATOR

Brookhaven and Eastfield only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.CHILD.ADMINISTRATOR

		CREDIT HOURS
SEMESTER I		
CDEC 2326	Administration of Programs for Children I	3
CDEC 2328	Administration of Programs for Children II	3
		6

Minimum Hours Required 6

CHILD DEVELOPMENT -- ADMINISTRATIVE

Brookhaven and Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.CHILD.ADMINIST

This certificate program will provide an opportunity for the student to study administrative procedures for child care facilities.

		CREDIT HOURS
SEMESTER I		
TECA 1311	Introduction to Early Childhood Education	3
TECA 1354	Child Growth and Development	3
CDEC 2326	Administration of Programs for Children I	3
ENGL 1301	Composition I	3
+Elective	Child Development	1-4
		13-16
SEMESTER II		
CDEC 1319	Child Guidance	3
CDEC 2328	Administration of Programs for Children II	3
TECA 1318	Nutrition, Health and Safety	3
SPCH 1311	Introduction to Speech Communication	3
ITSC 1401	Introduction to Computers **OR**	4
MATH 1332	College Mathematics I **OR**	(3)
MATH 1324	Mathematics for Business and Economics	(3)
		15-16
SEMESTER III		
CDEC 2336	Administration of Programs for Children III	3
CDEC 2289	Internship – Child Care Provider/ Assistant	2
		5
Minimum Hours Required		33-37

+Elective - may be selected from the following:

CDEC	1141	CDA Preparation for Assessment	1
CDEC	1166	Practicum or (Field Experience) Child Care Provider/Assistant	1
CDEC	1167	Practicum or (Field Experience) Child Care Provider/Assistant	1
CDEC	1317	Child Development Associate Training I	3
CDEC	1318	Nutrition, Health and Safety	3
CDEC	1343	Independent Study in Child Development	3
CDEC	1396	Special Topics in Administration of Programs for Children	3
CDEC	1413	Curriculum Resources for Early Childhood Programs	4
CDEC	1454	Child Growth and Development	4
CDEC	2304	Child Abuse and Neglect	3
CDEC	2315	Diverse Cultural/Multilingual Education	3
CDEC	2322	Child Development Associate Training II	3
CDEC	2324	Child Development Associate Training III	3
CDEC	2380	Cooperative Education - Child Care Provider/Assistant	3
CDEC	2480	Cooperative Education - Child Care Provider/Assistant	4
TECA	1303	Family and the Community	3

CHILD DEVELOPMENT -- INTERVENTION SPECIALIST

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Brookhaven and Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CHILD.INTERVENT

This certificate program is designed for students seeking a career working with children and families from a diverse population. The certificate will enable the student to identify and address the needs of children and families at risk of success.

		CREDIT HOURS
SEMESTER I		
TECA 1311	Introduction to Early Childhood Education	3
TECA 1354	Child Growth and Development	3
TECA 1318	Nutrition, Health and Safety	3
TECA 1303	Family and the Community	3
ENGL 1301	Composition I	3
		15
SEMESTER II		
CDEC 1319	Child Guidance	3
CDEC 2304	Child Abuse and Neglect	3
CDEC 2315	Diverse Cultural/Multilingual Education	3
CDEC 1356	Emergent Literacy for Early Childhood	3
CDEC 1359	Children with Special Needs	3
		15
SEMESTER III		
CDEC 2284	Cooperative Education-Child Development	2
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
+Elective	Foreign Language	3-4
		8-9
Minimum Hours Required		38-39

+Elective – may choose from the following:

Any beginning level Foreign Language

CHILD DEVELOPMENT -- INFANT-TODDLER

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Brookhaven and Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.CHILD.INFANT

This certificate program provides for an in-depth study of infant-toddler growth and development, programs, and services.

		CREDIT HOURS
SEMESTER I		
TECA 1311	Introduction to Early Childhood Education	3
TECA 1318	Nutrition, Health and Safety	3
CEDC 1319	Child Guidance	3
CDEC 1339	Early Childhood Development: 0-3 Years	3
+Elective	Child Development	1-3
		13-15
SEMESTER II		
CDEC 1321	The Infant and Toddler	3
CDEC 2304	Child Abuse and Neglect	3
TECA 1303	Family and the Community	3
+Elective	Child Development	1-3
		10-12
SEMESTER III		
CDEC 2188	Internship – Child Care Provider Assistant	1
		1
Minimum Hours Required		24-28

+Elective – must be selected from the following:

CDEC	1141	CDA Preparation for Assessment 1
CDEC	1166	Practicum or (Field Experience) - Child Care Provider/Assistant 1
CDEC	1167	Practicum or (Field Experience) - Child Care Provider/Assistant 1
CDEC	1317	Child Development Associate Training I 3
CDEC	1323	Observation and Assessment 3
CDEC	1343	Independent Study in Child Development 3
CDEC	1359	Children with Special Needs 3
CDEC	1395	Special Topics in Early Childhood Provider/Assistant 3
CDEC	2315	Diverse Cultural/Multilingual Education 3
CDEC	2322	Child Development Associate Training II 3
CDEC	2324	Child Development Associate Training III 3
CDEC	2380	Cooperative Education- Child Care Provider/Assistant 3
SOCI	2301	Marriage and the Family 3

CHILD DEVELOPMENT -- EARLY CHILDHOOD TRAINING

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Brookhaven and Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.CHILD.EARLY

This certificate program provides general courses in early childhood for those wanting to increase their skills and knowledge for working with children.

		CREDIT HOURS
SEMESTER I		
TECA 1311	Introduction to Early Childhood Education	3
TECA 1354	Child Growth and Development **OR**	3
CDEC 1339	Early Childhood Development: 0-3 years **AND**	(3)
CDEC 1335	Early Childhood Development: 3-5 years	(3)
TECA 1318	Nutrition, Health, and Safety	3
+Elective	Child Development	1-4
		10-16
SEMESTER II		
CDEC 1313	Curriculum Resources for Early Childhood Programs **AND**	3
CDEC 2187	Internship – Child Care Provider/ Assistant	1
CDEC 1319	Child Guidance	3
+Elective	Child Development	1-4
+Elective	Child Development	1-4
		9-15
SEMESTER II		
CDEC 2281	Cooperative Education – Child Care Provider/Assistant	2
		2
Minimum Hours Required		21-33

+Elective - must be selected from the following:

CDEC	1141	CDA Preparation for Assessment 1
CDEC	1166	Practicum or (Field Experience) –Child Care Provider/Assistant 1
CDEC	1167	Practicum or (Field Experience) –Child Care Provider/Assistant 1
CDEC	1317	Child Development Associate Training I 3
CDEC	1318	Nutrition, Health and Safety 3
CDEC	1321	The Infant and Toddler 3
CDEC	1323	Observation and Assessment 3
CDEC	1334	School Age Activities and Group Dynamics 3
CDEC	1340	Instructional Techniques for Children with Special Needs 3
CDEC	1343	Independent Study in Child Development 3
CDEC	1356	Emergency Literacy for Early Childhood 3
CDEC	1359	Children with Special Needs 3
CDEC	1395	Special Topics in Early Childhood Provider/ Assistant 3
CDEC	1413	Curriculum Resources for Early Childhood Programs 4
CDEC	1454	Child Growth and Development 4
CDEC	2188	Internship – Child Care Provider/Assistant 1
CDEC	2189	Internship – Child Care Provider/Assistant 1
CDEC	2288	Internship – Child Care Provider/Assistant 2
CDEC	2304	Child Abuse and Neglect 3
CDEC	2315	Diverse Cultural/Multilingual Education 3
CDEC	2322	Child Development Associate Training II 3
CDEC	2324	Child Development Associate Training III 3
CDEC	2326	Administration of Programs for Children I 3
CDEC	2328	Administration of Programs for Children II 3
CDEC	2336	Administration of Programs for Children III 3
CDEC	2341	The School Age Child 3
TECA	1303	Family and the Community 3

CHILD DEVELOPMENT -- SCHOOL-AGE CAREGIVER

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Brookhaven and Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.CHILD.SCHOOL

This certificate program provides for an in-depth study of school-age growth and development, programs, and services. It is designed to enable students to provide an optimal learning environment for children in before- and after-school, recreational and summer programs.

		CREDIT HOURS
SEMESTER I		
CDEC 1330	Growth and Development: 6-14 Years	3
CDEC 1319	Child Guidance	3
TECA 1303	Family and the Community	3
CDEC 2304	Child Abuse and Neglect	3
+Elective	Child Development	1-4
		13-16
SEMESTER II		
TECA 1318	Nutrition, Health and Safety	3
CDEC 2341	The School Age Child	3
CDEC 1334	School Age Activities and Group Dynamics	3
+Elective	Child Development	1-4
		10-13
SEMESTER II		
CDEC 2189	Internship – Child Care Provider Assistant	1
		1
Minimum Hours Required		24-30

+Elective-may be selected from the following:

CDEC	1141	CDA Preparation for Assessment	1
CDEC	1318	Nutrition, Health and Safety	3
CDEC	1323	Observation and Assessment	3
CDEC	1340	Instructional Techniques for Children with Special Needs	3
CDEC	1343	Independent Study in Child Development	3
CDEC	1413	Curriculum Resources for Early Childhood Programs	4
CDEC	1454	Child Growth and Development	4
CDEC	2286	Internship – Child Care Provider/Assistant	2
CDEC	2288	Internship – Child Care Provider/Assistant	2
CDEC	2315	Diverse Cultural/Multilingual Education	3
CDEC	2326	Administration of Programs for Children I	3
CDEC	2328	Administration of Programs for Children II	3
CDEC	2336	Administration of Programs for Children III	3
TECA	1303	Family and the Community	3

CHILD DEVELOPMENT -- CHILD DEVELOPMENT ASSOCIATE

Brookhaven and Eastfield only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CHILD.ASSOCIATE

This award program provides 120 hours of training required by the National Council of Early Childhood Professional Recognition. After completion of this award students may pursue the Child Development Associate (CDA) Credential.

		CREDIT HOURS
SEMESTER I		
CDEC 1317	Child Development Associate Training I	3
		3
SEMESTER II		
CDEC 2322	Child Development Associate Training II	3
CDEC 1166	Practicum or (Field Experience) – Child Development and Early Childhood	1
		4
SEMESTER III		
CDEC 2324	Child Development Associate Training III	3
CDEC 1167	Practicum or (Field Experience) – Child Development and Early Childhood	1
		4
Minimum Hours Required		11

CHILD DEVELOPMENT -- SPECIAL CHILD

Brookhaven and Eastfield only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CHILD:SPECIAL

This award program is planned to emphasize the needs and skills for working with special children and their families.

		CREDIT HOURS
SEMESTER I		
CDEC 1359	Children with Special Needs	3
CDEC 1323	Observation and Assessment	3
		6
SEMESTER II		
CDEC 1340	Instructional Techniques for Children with Special Needs	3
CDEC 2288	Internship – Child Development and Early Childhood or Provider Assistant	2
TECA 1303	Family and the Community	3
		8
Minimum Hours Required		14

CHILD DEVELOPMENT – PRE K-GRADE 4

Brookhaven and Eastfield only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CHILD.PREK-GR4

This award consists of the 4 field of study courses officially approved for students who wish to pursue a Bachelor of Science degree in Human Sciences or a Bachelor of Science degree in Interdisciplinary Studies with a concentration in Child and Family Studies/Child Development to become an Early Childhood teacher (Grades PreK-4). Receiving institutions are not required to accept a grade below "C" in transfer.

		CREDIT HOURS
SEMESTER I		
TECA 1311	Introduction to Early Childhood Education	3
TECA 1354	Child Growth and Development	3
		6
SEMESTER II		
TECA 1301	Family and the Community	3
TECA 1318	Nutrition, Health and Safety	3
		6
Minimum Hours Required		12

COMMERCIAL MUSIC -- ARRANGER/COMPOSER/COPYIST

Cedar Valley only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MUS.ARRANG.6/04

This program is designed to prepare the student with the writing skills required for arranging and composing for small and large instrumental and vocal groups in all areas of commercial music, i.e., jazz, rock, pop, country/western. Standard manuscript techniques will be emphasized in actual writing assignments.

		CREDIT HOURS
SEMESTER I		
MUSI 1311	Music Theory I	3
MUSI 1116	Musicianship I	1
MUSI 1181	Piano Class I	1
MUSC 1327	Audio Engineering I	3
MUSC 1303	History of Popular Music	3
MUSC 2141	Forum/Recital	1
SPCH 1311	Introduction to Speech Communication	3
+Ensemble		1
++Applied Music		1
		17
SEMESTER II		
MUSI 1312	Music Theory II	3
MUSI 1117	Musicianship II	1
MUSI 1182	Piano Class II	1
MUSC 2141	Forum/Recital	1
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
	Natural Science +++ **AND**	(4)
TECM 1303	Technical Mathematics	(3)
+Ensemble		1
++Applied Music		1
		14-18
SEMESTER III		
MUSC 1331	Musical Instrument Digital Interface (MIDI) I	3
MUSC 2314	Improvisation Theory I	3
MUSC 2141	Forum/Recital	1
MUSI 1386	Composition	3
MUSI 2311	Music Theory III	3
+Ensemble		1
++Applied Music		1
		15
SEMESTER IV		
MUSB 1305	Survey of the Music Business	3
MUSC 2141	Forum/Recital	1
MUSC 2319	Orchestration	3
MUSI 2312	Music Theory IV	3
PSYC 2302	Applied Psychology	3
+Ensemble		1
++Applied Music		1
		15

Minimum Hours Required 61-65

+Ensembles must be selected from the following:

MUEN	1122	Jazz Ensemble	1
MUEN	1123	Band	1
MUEN	1131	Keyboard Ensemble	1
MUEN	1132	Woodwind Ensemble	1
MUEN	1133	Brass Ensemble	1
MUEN	1134	Guitar Ensemble	1
MUEN	1135	Percussion Ensemble	1
MUEN	1137	Symphonic Wind Ensemble	1
MUEN	1151	Vocal Ensemble	1
MUEN	2123	Lab Band	1
MUEN	2141	Chorus	1

++Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181.

+++Natural Science course must be selected from the following list:

BIOL	1406	Biology for Science Majors I	4
BIOL	1407	Biology for Science Majors II	4
BIOL	1408	Biology for Non-Science Majors I	4
BIOL	1409	Biology for Non-Science Majors II	4
CHEM	1405	Introductory Chemistry I	4
CHEM	1407	Introductory Chemistry II	4
CHEM	1411	General Chemistry I	4
CHEM	1412	General Chemistry II	4
GEOL	1401	Earth Science	4
GEOL	1403	Physical Geology	4
GEOL	1404	Historical Geology	4
GEOL	1445	Oceanography	4
PHYS	1401	Introductory General Physics	4
PHYS	1402	Introductory General Physics	4
PHYS	1405	Concepts in Physics	4
PHYS	1407	Concepts in Physics	4
PHYS	1411	Fundamentals of Astronomy	4
PHYS	1412	General Introductory Astronomy	4
PHYS	1415	Physical Science	4
PHYS	1417	Physical Science	4
PHYS	2425	General Physics	4
PHYS	2426	General Physics	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMMERCIAL MUSIC -- PERFORMING MUSICIAN

Cedar Valley only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MUS.PERFORM.6/04

This program is designed to prepare the instrumental and vocal student for performances in commercial music, i.e., jazz, rock, pop, country/western. This training will include work in performance techniques, styles, solo and ensemble work, repertoire for small and large groups, and actual performances.

		CREDIT HOURS
SEMESTER I		
MUSI 1311	Music Theory I	3
MUSI 1116	Musicianship I	1
MUSI 1181	Piano Class I	1
MUSC 1327	Audio Engineering I	3
MUSC 2141	Forum/Recital	1
MUSC 1303	History of Popular Music	3
SPCH 1311	Introduction to Speech Communication	3
+Ensemble		1
++Applied Music		1
		17
SEMESTER II		
MUSI 1312	Music Theory II	3
MUSI 1117	Musicianship II	1
MUSI 1182	Piano Class II	1
MUSC 2141	Forum/Recital	1
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
	Natural Science +++ **AND**	(4)
TECM 1303	Technical Mathematics	(3)
+Ensemble		1
++Applied Music		1
		14-18
SEMESTER III		
MUSC 1331	Musical Instrument Digital Interface (MIDI) I	3
MUSC 2314	Improvisation Theory I	3
MUSC 2141	Forum/Recital	1
PSYC 2302	Applied Psychology	3
MUSP 1391	Special Topics in Music – General Performance	3
+Ensemble		1
+++Applied Music		2
		16
SEMESTER IV		
MUSB 1305	Survey of the Music Business	3
MUSC 2141	Forum/Recital	1
MUSP 1242	Small Commercial Music Ensemble	2
MUSC 2319	Orchestration	3
MUSP 1391	Special Topics in Music – General Performance	3
+Ensemble		1
+++Applied Music		2
		15

Minimum Hours Required 62-66

+Ensembles must be selected from the following:

MUEN	1122	Jazz Ensemble	1
MUEN	1123	Band	1
MUEN	1131	Keyboard Ensemble	1
MUEN	1132	Woodwind Ensemble	1
MUEN	1133	Brass Ensemble	1
MUEN	1134	Guitar Ensemble	1
MUEN	1135	Percussion Ensemble	1
MUEN	1137	Symphonic Wind Ensemble	1
MUEN	1151	Vocal Ensemble	1
MUEN	2123	Lab Band	1
MUEN	2141	Chorus	1

++Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181.

+++Applied music courses to be selected from any music course numbered from MUAP 2201 through MUAP 2281.

++++Natural Science course must be selected from the following list:

BIOL	1406	Biology for Science Majors I	4
BIOL	1407	Biology for Science Majors II	4
BIOL	1408	Biology for Non-Science Majors I	4
BIOL	1409	Biology for Non-Science Majors II	4
CHEM	1405	Introductory Chemistry I	4
CHEM	1407	Introductory Chemistry II	4
CHEM	1411	General Chemistry I	4
CHEM	1412	General Chemistry II	4
GEOL	1401	Earth Science	4
GEOL	1403	Physical Geology	4
GEOL	1404	Historical Geology	4
GEOL	1445	Oceanography	4
PHYS	1401	Introductory General Physics	4
PHYS	1402	Introductory General Physics	4
PHYS	1405	Concepts in Physics	4
PHYS	1407	Concepts in Physics	4
PHYS	1411	Fundamentals of Astronomy	4
PHYS	1412	General Introductory Astronomy	4
PHYS	1415	Physical Science	4
PHYS	1417	Physical Science	4
PHYS	2425	General Physics	4
PHYS	2426	General Physics	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMMERCIAL MUSIC -- RECORDING TECHNOLOGY

Cedar Valley only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MUS.RECORD.6/04

This program is designed to prepare commercial musicians with additional skills in the field of recording technology. In addition to preparing the student in vocal or instrumental commercial music techniques, training is provided in the basic console recording skills such as microphone selection and placement, mix down techniques, master tape production, studio techniques, trouble-shooting, and session procedures. Emphasis is placed on the specific needs of the commercial musician in the field of recording.

		CREDIT HOURS
SEMESTER I		
MUSI 1311	Music Theory I	3
MUSI 1116	Musicianship I	1
MUSI 1181	Piano Class I	1
MUSC 1327	Audio Engineering I	3
MUSC 2141	Forum/Recital	1
SPCH 1311	Introduction to Speech Communication	3
MUSC 1303	History of Popular Music	3
+Ensemble		1
++Applied Music		1
		17
SEMESTER II		
MUSI 1312	Music Theory II	3
MUSI 1117	Musicianship II	1
MUSI 1182	Piano Class II	1
RTVB 2343	Commercial Recording Techniques	3
MUSC 2427	Audio Engineering II	4
MUSC 2141	Forum/Recital	1
ENGL 1301	Composition I	3
+Ensemble		1
++Applied Music		1
		18
SEMESTER III		
MUSC 1331	Musical Instrument Digital Interface (MIDI) I	3
MUSC 2141	Forum/Recital	1
RTVB 1392	Special Topics in Radio and Television Broadcasting Technology/Technician **OR**	3
RTVB 1380	Cooperative Education - Radio and Television	(3)
MUSC 2447	Audio Engineering III	4
MATH 1314	College Algebra **OR**	3
	Natural Science +++ **AND**	(4)
TECM 1303	Technical Mathematics	(3)
		14-18
SEMESTER IV		
MUSC 2141	Forum/Recital	1
MUSB 1305	Survey of the Music Business	3
RTVB 1392	Special Topics in Radio and Television Broadcasting Technology/Technician **OR**	3
RTVB 1381	Cooperative Education - Radio and Television	(3)
MUSC 2448	Audio Engineering IV	4
PSYC 2302	Applied Psychology	3
		14

Minimum Hours Required 63-67

+Ensembles must be selected from the following:

MUEN	1122	Jazz Ensemble	1
MUEN	1123	Band	1
MUEN	1131	Keyboard Ensemble	1
MUEN	1132	Woodwind Ensemble	1
MUEN	1133	Brass Ensemble	1
MUEN	1134	Guitar Ensemble	1
MUEN	1135	Percussion Ensemble	1
MUEN	1137	Symphonic Wind Ensemble	1
MUEN	1151	Vocal Ensemble	1
MUEN	2123	Lab Band	1
MUEN	2141	Chorus	1

++ Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181.

+++Natural Science course must be selected from the following list:

BIOL	1406	Biology for Science Majors I	4
BIOL	1407	Biology for Science Majors II	4
BIOL	1408	Biology for Non-Science Majors I	4
BIOL	1409	Biology for Non-Science Majors II	4
CHEM	1405	Introductory Chemistry I	4
CHEM	1407	Introductory Chemistry II	4
CHEM	1411	General Chemistry I	4
CHEM	1412	General Chemistry II	4
GEOL	1401	Earth Science	4
GEOL	1403	Physical Geology	4
GEOL	1404	Historical Geology	4
GEOL	1445	Oceanography	4
PHYS	1401	Introductory General Physics	4
PHYS	1402	Introductory General Physics	4
PHYS	1405	Concepts in Physics	4
PHYS	1407	Concepts in Physics	4
PHYS	1411	Fundamentals of Astronomy	4
PHYS	1412	General Introductory Astronomy	4
PHYS	1415	Physical Science	4
PHYS	1417	Physical Science	4
PHYS	2425	General Physics	4
PHYS	2426	General Physics	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMMERCIAL MUSIC -- MUSIC RETAILING

Cedar Valley only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MUS.RETAIL.6/04

This program is designed to prepare the music major in retaining for the music industry job market. Training is provided in music skills as well as in business, i.e., business of music, salesmanship, small business management. The training is culminated with work experience coordinated through local merchants.

		CREDIT HOURS
SEMESTER I		
MUSI 1311	Music Theory I	3
MUSI 1116	Musicianship I	1
MUSI 1181	Piano Class I	1
MUSB 1305	Survey of the Music Business	3
MUSC 2141	Forum/Recital	1
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
+Ensemble		1
++Applied Music		1
		17
SEMESTER II		
MUSI 1312	Music Theory II	3
MUSI 1117	Musicianship II	1
MUSI 1182	Piano Class II	1
MUSC 2141	Forum/Recital	1
MRKG 1302	Principles of Retailing	3
SPCH 1311	Introduction to Speech Communication	3
+Ensemble		1
++Applied Music		1
		14
SEMESTER III		
MUSC 1327	Audio Engineering I	3
MUSC 2141	Forum/Recital	1
MUSB 1380	Cooperative Education - Music Management and Merchandising	3
PSYC 2302	Applied Psychology	3
MATH 1314	College Algebra **OR**	3
	Natural Science +++ **AND**	(4)
TECM 1303	Technical Mathematics	(3)
		13-17
SEMESTER IV		
MUSC 1331	Musical Instrument Digital Interface (MIDI) I	3
MUSC 2141	Forum/Recital	1
MUSB 1381	Cooperative Education-Music Management and Merchandising	3
ACCT 2301	Principles of Accounting I	3
BMGT 1303	Principles of Management	3
POFI 1301	Computer Applications I	3
		16

Minimum Hours Required 60-64

+Ensembles must be selected from the following:

MUEN	1122	Jazz Ensemble	1
MUEN	1123	Band	1
MUEN	1131	Keyboard Ensemble	1
MUEN	1132	Woodwind Ensemble	1
MUEN	1133	Brass Ensemble	1
MUEN	1134	Guitar Ensemble	1
MUEN	1135	Percussion Ensemble	1
MUEN	1137	Symphonic Wind Ensemble	1
MUEN	1151	Vocal Ensemble	1
MUEN	2123	Lab Band	1
MUEN	2141	Chorus	1

++Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181.

+++Natural Science course must be selected from the following list:

BIOL	1406	Biology for Science Majors I	4
BIOL	1407	Biology for Science Majors II	4
BIOL	1408	Biology for Non-Science Majors I	4
BIOL	1409	Biology for Non-Science Majors II	4
CHEM	1405	Introductory Chemistry I	4
CHEM	1407	Introductory Chemistry II	4
CHEM	1411	General Chemistry I	4
CHEM	1412	General Chemistry II	4
GEOL	1401	Earth Science	4
GEOL	1403	Physical Geology	4
GEOL	1404	Historical Geology	4
GEOL	1445	Oceanography	4
PHYS	1401	Introductory General Physics	4
PHYS	1402	Introductory General Physics	4
PHYS	1405	Concepts in Physics	4
PHYS	1407	Concepts in Physics	4
PHYS	1411	Fundamentals of Astronomy	4
PHYS	1412	General Introductory Astronomy	4
PHYS	1415	Physical Science	4
PHYS	1417	Physical Science	4
PHYS	2425	General Physics	4
PHYS	2426	General Physics	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMMERCIAL MUSIC -- MUSIC RETAILING

Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.MUSI.RETAILING

This program is designed to prepare the music major in retailing for the music industry job market. Training is provided in music skills as well as in business, i.e., business of music, salesmanship, retailing techniques.

		CREDIT HOURS
SEMESTER I		
MUSI 1300	Foundations of Music I	3
MUSI 1181	Piano Class I	1
MUSB 1305	Survey of the Music Business	3
BUSI 1301	Introduction to Business	3
		10
SEMESTER II		
MUSC 1331	Musical Instrument Digital Interface (MIDI) I **OR**	3
MUSC 1327	Audio Engineering I	(3)
MUSB 1380	Cooperative Education – Music Business Management and Merchandising	3
BMGT 1302	Principles of Retailing	3
BMGT 1333	Principles of Selling	3
		12
Minimum Hours Required		22

COMMERCIAL MUSIC -- PERFORMING MUSICIAN

Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MUSI.PERFORMING

This program is designed to prepare the instrumental or vocal student for entry-level positions in the live performing market of commercial music (jazz, rock, pop, country, etc.) with enough training provided for a strong foundation to build upon. Coursework includes development of music theory written and aural skills, keyboard introduction, audio engineering and MIDI skills, and development of improvisation skills and repertoire applicable to the individual student.

		CREDIT HOURS
SEMESTER I		
MUSI 1311	Music Theory I	3
MUSI 1116	Musicianship I	1
MUSB 1305	Survey of the Music Business	3
MUSI 1181	Piano Class I	1
MUSC 1303	History of Popular Music	3
+Ensemble		1
++Applied Music		1
		13
SEMESTER II		
MUSC 2141	Forum/Recital	1
MUSC 1327	Audio Engineering I **OR**	3
MUSC 1331	Musical Instrument Digital Interface (MIDI) I	(3)
MUSP 1391	Special Topics in Music-General Performance	3
MUSC 2314	Improvisation Theory I **OR**	3
MUSP 1242	Small Commercial Music Ensemble	(2)
+Ensemble		1
++Applied Music		2
		12-13
Minimum Hours Required		25-26

+Ensembles must be selected from the following:

MUEN	1134	Guitar Ensemble	1
MUEN	1135	Percussion Ensemble	1
MUEN	1151	Vocal Ensemble	1
MUEN	2123	Lab Band	1

++Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

COMMERCIAL MUSIC -- RECORDING TECHNOLOGY

Cedar Valley only

(One-year Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MUS.1Y.RECORD.04

This program is designed to prepare commercial musicians with additional skills in the field of recording technology. In addition to preparing the student in vocal or instrumental commercial music techniques, training is provided in the basic console recording skills such as microphone selection and placement, mix down techniques, master tape production, studio techniques, trouble-shooting, and session procedures. Emphasis is placed on the specific needs of the commercial musician in the field of recording.

		CREDIT HOURS
SEMESTER I		
MUSI 1300	Foundations of Music I	3
MUSI 1181	Piano Class I	1
MUSC 1327	Audio Engineering I	3
MUSC 1331	Musical Instrument Digital Interface (MIDI) I	3
		10
SEMESTER II		
MUSC 2427	Audio Engineering II	4
MUSC 2141	Forum/Recital	1
MUSB 1305	Survey of the Music Business	3
RTVB 2343	Commercial Recording Techniques	3
		11
Minimum Hours Required		21

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMMERCIAL MUSIC -- RECORDING TECHNOLOGY

Cedar Valley only

(Two-year Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MUS.2Y.RECORD.04

This program is designed to prepare commercial musicians with additional skills in the field of recording technology. In addition to preparing the student in vocal or instrumental commercial music techniques, training is provided in the basic console recording skills such as microphone selection and placement, mix down techniques, master tape production, studio techniques, trouble-shooting, and session procedures. Emphasis is placed on the specific needs of the commercial musician in the field of recording.

		CREDIT HOURS
SEMESTER I		
MUSC 1327	Audio Engineering I	3
MUSC 2141	Forum/Recital	1
ENGL 1301	Composition I	3
MUSC 1331	Musical Instrument Digital Interface (MIDI) I	3
		10
SEMESTER II		
MUSI 1300	Foundations of Music I	3
MUSC 2427	Audio Engineering II	4
MUSC 2141	Forum/Recital	1
RTVB 2343	Commercial Recording Techniques	3
		11
SEMESTER III		
MUSC 2447	Audio Engineering III	4
MUSC 1303	History of Popular Music	3
+Elective		1
		8
SEMESTER IV		
MUSC 2448	Audio Engineering IV	4
MUSB 1305	Survey of the Music Business	3
SPCH 1311	Introduction to Speech Communication	3
		10
Minimum Hours Required		39

+Elective must be selected from any MUEN, MUSB, MUSC, MUAP, MUSI or RTVB course.

COMPUTER-AIDED DESIGN AND DRAFTING

Eastfield and Mountain View only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CADD

This program prepares the student for employment in a wide range of industries as a CAD operator, printed circuit board designer or technician. Information in related fields is provided to enable the student to work effectively with engineers, technologists, architects and professional staff. Enrollment in CADD cooperative work experience courses (co-op) provides students with on-the-job experience while in the program.

		CREDIT HOURS
SEMESTER I		
DFTG 1373	CAD/Graphic Processes **OR**	3
ARTC 1313	Digital Publishing I	(3)
DFTG 1409	Basic Computer-Aided Drafting	4
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
++++Elective	Technical Elective	3-4
		16-18
SEMESTER II		
DFTG 1271	CADD Operations	2
DFTG 1372	Manufacturing Fundamentals **OR**	3
INMT 1343	CAD-CAM	(3)
DFTG 1405	Technical Drafting	4
+Elective	DFTG Course	2-4
SPCH 1311	Introduction to Speech Communication	3
		14-16
SEMESTER III		
++Elective	DFTG Course	3-4
++Elective	DFTG Course	3-4
PSYC 2302	Applied Psychology	3
++++Elective	Technical Elective **OR**	3-4
DFTG 2380	Cooperative Education – Drafting	(3)
+++Elective	Humanities/Fine Arts	3
		15-18
SEMESTER IV		
DFTG 1394	Special Topics in Electrical/Electronics Drafting **OR**	3
DFTG 2402	Machine Drafting **OR**	(4)
DFTG 2428	Architectural Drafting–Commercial	(4)
++Elective	DFTG Course **OR**	3-4
DFTG 2381	Cooperative Education – Drafting	(3)
+++++Elective	Natural Sciences/Mathematics	3-4
GOVT 2302	American Government **OR**	3
HIST 1302	History of the United States	(3)
++++Elective	Technical Elective	3-4
		15-19
Minimum Hours Required		60-71

+ DFTG Courses – must be selected from the following:

DFTG	1215	Architectural Blueprint Reading	2
DFTG	1224	Technical Reading and Sketching	2
DFTG	1329	Electro-Mechanical Drafting	3
DFTG	1333	Mechanical Drafting	3
DFTG	1344	Pipe Drafting	3
DFTG	1348	Topographical Drafting	3
DFTG	1358	Electrical/Electronics - Drafting	3
DFTG	1392	Special Topics in Architectural Drafting	3
DFTG	1394	Special Topics in Electrical/Electronics Drafting	3
DFTG	1395	Special Topics in Mechanical Drafting	3
DFTG	1417	Architectural Drafting - Residential	4
DFTG	1421	Architectural Illustration	4
DFTG	2419	Intermediate Computer-Aided Drafting	4
DFTG	2428	Architectural Drafting - Commercial	4

++DFTG Courses – must be selected from the following:

DFTG	1302	Introduction to Technical Animation and Rendering	3
DFTG	1341	Intermediate Technical Animation and Rendering	3
DFTG	1491	Special Topics in Drafting	4
DFTG	2304	Printed Circuit Board Design	3
DFTG	2310	Structural Drafting	3
DFTG	2312	Technical Illustration	3
DFTG	2336	Computer-Aided Drafting Programming	3
DFTG	2337	Advanced Technical Animation and Rendering	3
DFTG	2350	Geometric Dimensioning and Tolerancing	3
DFTG	2356	Advanced Printed Circuit Board Design	3
DFTG	2374	Integrated Circuit Design	3
DFTG	2375	Advanced Integrated Circuit Design	3
DFTG	2402	Machine Drafting	4
DFTG	2431	Advanced Technologies in Architectural Design And Drafting	4
DFTG	2432	Advanced Computer-Aided Drafting	4
DFTG	2435	Advanced Technologies in Mechanical Design And Drafting	4
DFTG	2440	Solid Modeling/Design	4

+++ Elective – must be selected from any three-credit DCCCD approved course from the Humanities/Fine Arts list.

(continued on next page)

++++ Electives – must be selected from the following[1]:

CETT	1403	DC Circuits	4
CETT	1425	Digital Fundamentals	4
ITNW	1321	Introduction to Networking	3
ITSC	1401	Introduction to Computers	4
ITSC	2435	Application Problem Solving	4
ITSC	1407	UNIX Operating System I	4
ITSE	1422	Introduction to C Programming	4
ITSC	1425	Personal Computer Hardware	4
SMFT	1343	Semiconductor Manufacturing Technology I	3
SRVY	1315	Surveying Calculations I	3
SRVY	1419	Introduction to Geographic Information Systems	4
SRVY	2305	Geographic Information Systems Applications	3
SRVY	1491	Special Topics in Surveying	4

[1] NOTE: Other 3 or 4 credit hour technical courses may be taken with the approval of the Computer Aided Design and Drafting Department.

+++++Elective - must be selected from any three-or four-credit courses from these disciplines: Biology (BIOL), Chemistry (CHEM), Geology (GEOL), Physics (PHYS) and Mathematics (MATH).

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Computer Aided Design and Drafting and provides the student advanced skills required by the industry to specialize in Computer-Aided Design and Drafting.

COMPUTER-AIDED DESIGN AND DRAFTING

Eastfield and Mountain View only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.CADD

		CREDIT HOURS
SEMESTER I		
DFTG 2336	Computer-Aided Drafting Programming **OR**	3
DFTG 1491	Special Topics in Drafting **OR**	(4)
DFTG 2380	Cooperative Education - Drafting	(3)
ITSC 1425	Personal Computer Hardware	4
ITSE 1407	Introduction to C++ Programming	4
ITNW 1321	Introduction to Networking	3
		14-15

Minimum Hours Required 14-15

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

COMPUTER-AIDED DESIGN AND DRAFTING – ARCHITECTURAL DRAFTING

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Eastfield and Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CADD.ARCH

This certificate program prepares a student to become certified as an entry-level CADD operator specializing in architectural drafting and design. Jobs performed would include the proficient use of the AutoCAD software in creating drawings to architectural specification and identifying construction methods and materials used in building design.

		CREDIT HOURS
SEMESTER I		
DFTG 1409	Basic Computer-Aided Drafting	4
DFTG 1417	Architectural Drafting – Residential	4
DFTG 1421	Architectural Illustration	4
		12
SEMESTER II		
CNBT 1411	Construction Methods and Materials	4
DFTG 2419	Intermediate Computer-Aided Drafting	4
DFTG 2428	Architectural Drafting – Commercial	4
		12
SEMESTER II		
DFTG 2431	Advanced Technologies in Architectural Design and Drafting	4
		4

Minimum Hours Required 28

COMPUTER-AIDED DESIGN AND DRAFTING – COMPUTER-AIDED DESIGN ADVANCED OPERATOR

Eastfield and Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.CADD.ADV.OPERAT

This certificate program prepares a student to become certified as an advanced CADD operator and enter the work force. Jobs performed would include making 2D and 3D CADD drawings using AutoCAD software. In addition, the student would be capable of customizing the AutoCAD program and have additional skills in solid modeling and specific areas of CADD.

		CREDIT HOURS
SEMESTER I		
DFTG 1405	Technical Drafting	4
DFTG 1409	Basic Computer Aided Drafting	4
DFTG 1271	CADD Operations	2
ITSC 1401	Introduction to Computers	4
		14
SEMESTER II		
DFTG 2432	Advanced Computer-Aided Drafting	4
MATH 1414	College Algebra **OR**	4
MATH 1314	College Algebra	(3)
ENGL 1301	Composition I	3
DFTG 2312	Technical Illustration **OR**	3
DFTG 2419	Intermediate Computer-Aided Drafting	(4)
+Elective	DFTG Course	2-4
		15-19
Minimum Hours Required		29-33

+DFTG Courses - must be selected from the following courses or other courses approved by the Computer-Aided Design and Drafting department:

DFTG	1215	Architectural Blueprint Reading	2
DFTG	1224	Technical Reading and Sketching	2
DFTG	1302	Introduction to Technical Animation and Rendering	3
DFTG	1329	Electro-Mechanical Drafting	3
DFTG	1333	Mechanical Drafting	3
DFTG	1341	Intermediate Technical Animation and Rendering	3
DFTG	1344	Pipe Drafting	3
DFTG	1348	Topographical Drafting	3
DFTG	1358	Electrical/Electronics Drafting	3
DFTG	1392	Special Topics in Architectural Drafting	3
DFTG	1394	Special Topics in Electrical/Electronics Drafting	3
DFTG	1395	Special Topics in Mechanical Drafting	3
DFTG	1417	Architectural Drafting - Residential	4
DFTG	1421	Architectural Illustration	4
DFTG	1491	Special Topics in Drafting	4
DFTG	2304	Printed Circuit Board Design	3
DFTG	2310	Structural Drafting	3
DFTG	2336	Computer-Aided Drafting Programming	3
DFTG	2337	Advanced Technical Animation and Rendering	3
DFTG	2350	Geometric Dimensioning and Tolerancing	3
DFTG	2356	Advanced Printed Circuit Board Design	3
DFTG	2374	Integrated Circuit Design	3
DFTG	2375	Advanced Integrated Circuit Design	3
DFTG	2402	Machine Drafting	4
DFTG	2428	Architectural Drafting - Commercial	4
DFTG	2431	Advanced Technologies in Architectural Design and Drafting	4
DFTG	2432	Advanced Computer - Aided Drafting	4
DFTG	2435	Advanced Technologies in Mechanical Design and Drafting	4
DFTG	2440	Solid Modeling/Design	4

COMPUTER-AIDED DESIGN AND DRAFTING -- COMPUTER-AIDED DESIGN OPERATOR

Eastfield and Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.CADD.OPERATOR

This certificate program prepares a student to become certified as an entry-level CADD operator and enter the work force. Jobs performed would entail 2D and 3D CADD drawings using AutoCAD software.

		CREDIT HOURS
SEMESTER I		
DFTG 1405	Technical Drafting	4
DFTG 1409	Basic Computer-Aided Drafting	4
		8
SEMESTER II		
DFTG 2312	Technical Illustration **OR**	3
DFTG 2419	Intermediate Computer-Aided Drafting	(4)
+Elective	DFTG Course	3-4
+Elective	DFTG Course	3-4
		9-12
Minimum Hours Required		17-20

+DFTG Courses - must be selected from the following courses or other technical courses approved by the Computer-Aided Design and Drafting department:

DFTG	1329	Electro-Mechanical Drafting 3
DFTG	1333	Mechanical Drafting 3
DFTG	1344	Pipe Drafting 3
DFTG	1348	Topographical Drafting 3
DFTG	1358	Electrical/Electronics Drafting 3
DFTG	1392	Special Topics in Architectural Drafting 3
DFTG	1394	Special Topics in Electrical/Electronics Drafting 3
DFTG	1395	Special Topics in Mechanical Drafting 3
DFTG	1417	Architectural Drafting – Residential 4
DFTG	1421	Architectural Illustration 4
DFTG	1491	Special Topics in Drafting 4
DFTG	2304	Printed Circuit Board Design 3
DFTG	2310	Structural Drafting 3
DFTG	2336	Computer-Aided Drafting Programming 3
DFTG	2419	Intermediate Computer-Aided Drafting 4
DFTG	2428	Architectural Drafting – Commercial 4
DFTG	2440	Solid Modeling/Design 4
DFTG	2350	Geometric Dimensioning and Tolerancing 3
DFTG	2356	Advanced Printed Circuit Board Design 3
DFTG	2374	Integrated Circuit Design 3
DFTG	2375	Advanced Integrated Circuit Design 3
DFTG	2402	Machine Drafting 4
DFTG	2431	Advanced Technologies in Architectural Design and Drafting 4
DFTG	2432	Advanced Computer-Aided Drafting 4
DFTG	2435	Advanced Technologies in Mechanical Design and Drafting 4

COMPUTER-AIDED DESIGN AND DRAFTING -- INTEGRATED CIRCUIT DESIGN

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.CADD.INTERGRATE

This certificate program provides courses work to assist the student to prepare for entry-level positions in Integrated Circuit Design. Emphasis is placed on working closely with all members of the semiconductor design team.

		CREDIT HOURS
SEMESTER I		
DFTG 1409	Basic Computer-Aided Drafting	4
DFTG 1358	Electrical/Electronics Drafting	3
CETT 1403DC	Circuits	4
DFTG 2374	Integrated Circuit Design	3
		14
SEMESTER II		
SMFT 1343	Semiconductor Manufacturing Technology I	3
CETT 1425	Digital Fundamentals	4
DFTG 2375	Advanced Integrated Circuit Design	3
ITSC 2435	Application Problem Solving	4
		14
Minimum Hours Required		28

COMPUTER-AIDED DESIGN AND DRAFTING -- INTEGRATED CIRCUIT DESIGN

Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CAD.INTEGRA.CIR

The Integrated Circuit Design program trains the student to prepare layout drawings and designs of integrated circuits from schematics using computer-aided design equipment. The program aids the student in developing the skills necessary to convert logic diagrams to cell drawings in accordance with design rules. Students will perform design rule checks and prepare databases for pattern generation. Emphasis is placed on working closely with all members of the semiconductor manufacturing design team.

		CREDIT HOURS
SEMESTER I		
SMFT 1343	Semiconductor Manufacturing Technology I	3
DFTG 1409	Basic Computer-Aided Drafting	4
ENGL 1301	Composition I	3
CETT 1403	DC Circuits	4
DFTG 1358	Electrical/Electronics Drafting	3
		17
SEMESTER II		
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
DFTG 2304	Printed Circuit Board Design	3
ITSC 2435	Application Problem Solving	4
DFTG 2374	Integrated Circuit Design	3
+Elective	Social/Behavioral Science	3
		16-17
SEMESTER III		
DFTG 2375	Advanced Integrated Circuit Design	3
ITSC 1407	UNIX Operating System I	4
CETT 1425	Digital Fundamentals	4
SPCH 1311	Introduction to Speech Communication	3
+++Elective	Technical Elective	3
		17
SEMESTER IV		
ITSE 1422	Introduction to C Programming	4
DFTG 1394	Special Topics in Electrical/Electronics Drafting	3
++Elective	Humanities/Fine Arts	3
+++Elective	Technical Elective	3
++++Elective	Natural Science	4
		17

Minimum Hours Required 67-68

+Elective –Social/Behavioral Science elective must be selected from the DCCCD approved course list.

++Elective – Humanities/Fine Arts elective must be selected from the DCCCD approved course list.

+++Elective – Technical elective must be selected from ITSC, ITNW, ITSW, DFTG, CETT, SMFT, GRPH or other technical courses approved by the Computer-Aided Design and Drafting program.

++++Elective must be selected from these disciplines: Biology, Chemistry, Geology, Physics, and Mathematics.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER GRAPHICS

Cedar Valley and North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.COMP.GRAPH

This program provides students the basic knowledge and skills to work effectively in entry-level positions such as a Computer Graphics Specialist. All courses taken in the certificate will apply to the AAS degree in Computer Graphics.

		CREDIT HOURS
SEMESTER I		
ARTS 1311	2-D Design	3
IMED 1301	Introduction to Multimedia	3
ARTC 1353	Computer Illustration	3
ARTC 1302	Digital Imaging I	3
		12
SEMESTER II		
ARTC 1301	Basic Animation	3
ARTC 1313	Digital Publishing I	3
ARTC 1345	3-D Modeling and Rendering	3
ARTS 1316	Drawing I	3
		12
SEMESTER III		
+Elective	Computer Graphics	3
ARTC 2335	Portfolio Development for Graphic Design	3
		6
Minimum Hours Required		30

+Elective: Computer Graphics elective must be selected from:

ARTC 1341	3-D Animation I	3
ARTC 2305	Digital Imaging II	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER GRAPHICS--COMPUTER GRAPHICS SPECIALIST

Cedar Valley and North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.COMP.GRAPH.SPEC

The Computer Graphics Specialist Certificate program is designed for students who wish to concentrate in a particular art area within the Computer Graphics field. Three curriculum options include emphasis in Print Graphics, Web Graphics, or Animation Graphics. The curriculum will familiarize students with art and technical concepts, skills, tools, and related computer software. With completion of the program, students should gain creative, conceptual, technical and communication skills needed for an entry-level position within the selected field.

		CREDIT HOURS
SEMESTER I		
ARTS 1316	Drawing I	3
ARTC 1302	Digital Imaging I	3
+Elective	Computer Graphics Emphasis	3
		9
SEMESTER II		
+Elective	Computer Graphics Emphasis (two courses)	6
ARTC 2335	Portfolio Development for Graphic Design	3
		9
Minimum Hours Required		18

+Electives must be selected from only one of the following Computer Graphics Emphasis areas (Print, Web or Animation):

Print Emphasis:

ARTC 1311	2D Design	3
ARTC 1353	Computer Illustration	3
ARTC 1313	Digital Publishing I	3

Web Emphasis:

ARTC 1311	2D Design	3
ARTC 1301	Basic Animation	3
ARTC 2305	Digital Imaging II	3

Animation Emphasis:

ARTC 1301	Basic Animation	3
ARTC 1341	3-D Animation I	3
ARTC 1345	3-D Modeling and Rendering	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER GRAPHICS

Cedar Valley and North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.COMP.GRAPH

This degree is designed to develop the hands-on skills and conceptual art knowledge necessary for a graduate to advance in career paths appropriate to their own interests and abilities. The program will allow students to gain skills in using industry standard equipment and software and will stress the role of motion graphics in designing and producing professional graphics for the web, animation, and video games.

		CREDIT HOURS
SEMESTER I		
ARTS 1311	2-D Design	3
ARTS 1316	Drawing I	3
ARTC 1353	Computer Illustration	3
ARTC 1302	Digital Imaging I	3
COSC 1401	Microcomputer Concepts and Applications **OR**	4
ITSC 1401	Introduction to Computers	(4)
		16
SEMESTER II		
+Elective	Art History or Studio Course	3
ARTS 1301	Art Appreciation	3
ENGL 1301	Composition I	3
IMED 1301	Introduction to Multimedia	3
ARTS 1312	3-D Design	3
		15
SEMESTER III		
+Elective	Art History or Studio Course	3
ARTC 1301	Basic Animation	3
ARTS 1317	Drawing II	3
ARTC 2305	Digital Imaging II	3
ARTC 1345	3-D Modeling and Rendering	3
		15
SEMESTER IV		
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
+++Elective	Computer Graphics	3
ARTC 2335	Portfolio Development for Graphic Design **OR**	3
ARTC 2341	3-D Animation II	(3)
++Elective	Social /Behavioral Sciences	3
		15-16
Minimum Hours Required		61-62

+Electives - Arts History or Studio course can be selected from the following:

ARTS	1303	Survey of Art History	3
ARTS	1304	Survey of Art History	3
ARTS	2311	Advanced Design	3
ARTS	2316	Painting I	3
ARTS	2323	Drawing III	3
ARTS	2326	Sculpture I	3
ARTS	2333	Printmaking I	3
ARTS	2346	Ceramics I	3
ARTS	2356	Photography I	3

++Social/Behavioral Science Elective - must be selected from the DCCCD Social/Behavioral Science Core list.

+++Elective – Computer Graphics course must be selected from the following:

ARTC	1313	Digital Publishing I	3
ARTC	1341	3-D Animation I	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER INFORMATION TECHNOLOGY -- CISCO NETWORKING ASSISTANT

El Centro and North Lake only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CISCO.ASSIST.04

This sequence is for students who wish to develop skills in managing traffic and networking devices in local area networks (LAN) and wide area network (WAN) services and management. Upon completion, the student will have acquired skills needed to prepare for certification as a Cisco Certified Networking Associate (CCNA).

Prerequisite: Basic understanding of local area networks design and protocols and basic router configuration obtained in ITCC 1402 (Cisco 1) and ITCC 1406 (Cisco 2) or equivalent experiences approved by an Information Technology faculty member.

		CREDIT HOURS
SEMESTER I		
ITCC 1442	CCNA 3: Switching Basic and Intermediate Routing	4
ITCC 1446	CCNA 4: WAN Technologies	4
		8
Minimum Hours Required		8

COMPUTER INFORMATION TECHNOLOGY -- CISCO NETWORKING INTERN

El Centro, North Lake and Richland only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CISCO.INTERN.04

This sequence is for students who wish to learn about design and installation of local area networks, and basic router configuration. Upon completion, the student will have acquired the skills needed for employment in the networking industry as an intern.

Prerequisite: A working knowledge and understanding of personal computers and operating systems obtained in ITSC 1401 (Introduction to Computers) or equivalent experiences approved by an Information Technology faculty member.

		CREDIT HOURS
SEMESTER I		
ITCC 1402	CCNA 1: Networking Basics	4
ITCC 1406	CCNA 2: Router and Routing Basics	4
		8
Minimum Hours Required		8

COMPUTER INFORMATION TECHNOLOGY – CLIENT SERVER PROGRAMMING AND ADMINISTRATION

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.CLIENT.SERV

This certificate option trains the student to develop applications using Oracle SQL and PL/SQL and to understand the duties of an Oracle Database Administrator. It prepares the student to enter the workforce as a member of an Oracle Development and Administration team.

		CREDIT HOURS
SEMESTER I		
ITSC 2435	Application Problem Solving	4
ITNW 1421	Introduction to Networking	4
ITSW 1407	Introduction to Database	4
		12
SEMESTER II		
ITSE 1445	Introduction to Oracle SQL and PL/SQL	4
ITSE 2456	Oracle Database Administration I	4
		8
SEMESTER III		
ITSE 2454	Advanced Oracle and PL/SQL	4
ITSE 2458	Oracle Database Administration II	4
		8
Minimum Hours Required		28

COMPUTER INFORMATION TECHNOLOGY -- C PROGRAMMING

Brookhaven only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CIT.C-PROG

This sequence is for students who wish to learn the C programming language in depth. It includes instruction and practice in writing, executing, testing and debugging C programs on a personal computer. Object-oriented techniques are also covered in detail, providing a set of complete, well-rounded C user skills.

		CREDIT HOURS
SEMESTER I		
ITSE 1422	Introduction to C Programming	4
		4
SEMESTER II		
ITSE 2455	Advanced C Programming	4
		4
SEMESTER III		
ITSE 2421	Introduction to Object-Oriented Programming	4
		4
Minimum Hours Required		12

COMPUTER INFORMATION TECHNOLOGY -- DBA

El Centro, North Lake and Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.DBACERT.04

This certificate option is designed to provide training for those desiring a basic understanding of the duties of an Oracle Database Administrator. Courses will assist the graduate in preparation for the Oracle certification exams. Students must complete the following Oracle courses in sequence: ITSE 1345/1445, ITSE 2356/2456, ITSE 2358/2458, and ITSE 2429.

Prerequisite: Basic understanding of problem solving, logic structures, and relational database concepts as obtained in ITSC 2435 and either ITSW 1307/1407, or ITSE 1346, or equivalent experiences approved by designated Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITSC 1407	UNIX Operating System I	4
ITSE 1345	Introduction to Oracle SQL **OR**	3
ITSE 1445	Introduction to Oracle SQL	(4)
ITSE 2356	Oracle Database Administration I **OR**	3
ITSE 2456	Oracle Database Administration I	(4)
		10-12
SEMESTER II		
ITSE 2358	Oracle Database Administration II **OR**	3
ITSE 2458	Oracle Database Administration II	(4)
ITSE 2429	Oracle Network Administration and Performance Tuning	4
ITSE 1391	Special Topics in Computer Programming **OR**	3
Elective	Any ITCC, ITSC, ITSE, ITNW, ITSW, ITSY, ITMC, INEW, BCIS, COSC, or CPMT course	(3-4)
		10-12

Minimum Hours Required 20-24

COMPUTER INFORMATION TECHNOLOGY – INFORMATION SECURITY

Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.INFO.SECUR.04

This certificate provides hands-on, in-depth training to meet industry demands and concerns in protecting critical information infrastructures against cyber threats. The graduate will be qualified for entry-level positions in a network environment dealing with security challenges.

The Information Security Certificate is an advanced certificate and requires extensive knowledge of the computer field. It is recommended that you have one or more of the following: Certificate and/or AAS in networking, BS or BA in Computer Science, or Cisco CCNA, Novell CNE, Microsoft MCSA and/or MCSE, A+ and Network+, SCSA, UNIX certification, or other vendor specific certifications or equivalent experience approved by designated Information Technology personnel. It is recommended that you discuss your computer knowledge with one of the instructors teaching the courses to insure you have the required foundation to succeed.

		CREDIT HOURS
SEMESTER I		
ITSY 1400	Fundamentals of Information Security	4
ITSY 1442	Information Technology Security	4
ITSY 2400	Operating System Security	4
ITSY 2401	Firewalls and Network Security	4
		16
SEMESTER II		
ITSY 2459	Security Assessments and Auditing	4
ITSY 2442	Incident Response and Handling	4
ITNW 1492	Special Topics in Computer Systems Networking and Telecommunications **OR**	4
ITSY 2441	Security Management Practices **OR**	(4)
ITSY 2443	Computer System Forensics	(4)
		12
Minimum Hours Required		28

[1] Course covers security concepts and terminology, in addition to secure communications and Operating System security.
Prerequisite: Documented operating system experience and instructor approval.

[2] Course (Network Security) covers Perimeter Security (Firewalls, IDS, Router security) and Secure Network Architecture (DMZ, Remote Access, and Infrastructure Connectivity). Prerequisite: ITNW 1412 (Fundamentals of Information Security).

[3] Course (Operating Systems Security) covers cryptography, authentication, access control, operating system security, and data backups. Prerequisite: ITNW 2417[2] (Network Security).

[4] Course (Subtitle: Securing Enterprise Applications) covers Application, Database, Web Application, and Web Server security and data backups. Prerequisite: ITNW 2476[3] (Operating Systems Security).

[5] Course (Security Assessments and Auditing) includes perimeter auditing, Operating System audits, and auditing tools.
Prerequisite: ITNW 2446[4] (Designing a Secure Network).

[6] Course (Incident Response and Handling) covers system forensics, investigation, incident response, and hacker techniques and exploits. Prerequisite: ITNW 2477[5] (Security Assessments and Auditing).

[7] Course (Subtitle: Security Management Practices) covers cyber law and ethics, policies and procedures, risk management, and disaster recover and business continuity planning. Prerequisite: ITNW 2478[6] (Incident Response and Handling).

COMPUTER INFORMATION TECHNOLOGY – HELP DESK/USER SUPPORT TECHNICIAN

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Offered at all seven campuses

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.HELP.DESK

This certificate is designed to provide lower level tech support skills needed to assist customers, clients, or members of a firm or organization. They field telephone calls, and email messages from customers seeking guidance on technical problems. They diagnose the problem patiently and walk the customer through the problem-solving steps. Strong problem-solving, analytical, and communication skills are needed.

Courses may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

Prerequisite: Keyboarding skills

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computer Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSW 1401	Introduction to Word Processing	4
ITSC 1405	Introduction to PC Operating Systems	4
		12
SEMESTER II		
ITSW 1404	Introduction to Spreadsheets	4
ITSW 1407	Introduction to Database	4
ITSC 2439	Personal Computer Help Desk	4
		12
Minimum Hours Required		24

COMPUTER INFORMATION TECHNOLOGY – INFORMATION TECHNOLOGY SUPPORT SPECIALIST I

El Centro only

(Marketable Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: MSA.CIT.SUPP.SPEC.1

This award is designed to provide training for those individuals interested in developing their knowledge and skills as application software professionals, with an emphasis in preparation for those wishing to take Proficient/Core level Microsoft Office 2000/2002 certification examinations.

		CREDIT HOURS
SEMESTER I		
ITSW 1401	Introduction to Word Processing	4
ITSW 1404	Introduction to Spreadsheets	4
ITSW 1407	Introduction to Database **OR**	4
ITSC 1409	Integrated Software Applications I	(4)
		12

Minimum Hours Required 12

COMPUTER INFORMATION TECHNOLOGY – INFORMATION TECHNOLOGY SUPPORT SPECIALIST II

El Centro only

(Marketable Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: MSA.CIT.SUPP.SPEC.2

This award is designed to provide training for those individuals continuing to develop their knowledge and skills as application software professionals using Microsoft Office 2000/2002.

Prerequisite: Students must be able to demonstrate mastery of Core level skills.

		CREDIT HOURS
SEMESTER I		
ITSW 2431	Advanced Word Processing	4
ITSW 2434	Advanced Spreadsheets	4
ITSW 2437	Advanced Database **OR**	4
ITSC 2431	Integrated Software Application II	(4)
		12

Minimum Hours Required 12

COMPUTER INFORMATION TECHNOLOGY – INFORMATION SECURITY

Brookhaven only

(Marketable Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CIT.INFO.SECUR

This sequence is for students interested in learning about solutions to safeguard information systems and networks from various forms of cyber threats. It includes courses covering security theory and preventative measures as well as attack detection and defense. Industry standard methods are reinforced with hands-on lab applications to provide the student with practical security maintenance experience.

		CREDIT HOURS
SEMESTER I		
ITSY 1400	Fundamentals of Information Security	4
		4
SEMESTER II		
ITSY 1442	Information Technology Security	4
		4
SEMESTER III		
ITSY 2400	Operating System Security	4
		4
Minimum Hours Required		12

COMPUTER INFORMATION TECHNOLOGY -- MIDRANGE SPECIALIST

El Centro only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CIT.MIDRNG.04

This associate degree program is designed to provide training in iSeries 400 system administration as well as midrange programming using the RPG language. Skills and knowledge of networking and hardware and PC operating systems are also developed. Graduates will be qualified to enter the midrange environment as a junior RPG programmer.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computer Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSC 1411	AS/400 Operating System I	4
ITSC 2435	Application Problem Solving	4
ENGL 1301	Composition I	3
		15
SEMESTER II		
ITSC 1402	Computer Control Language	4
ITSC 2442	AS/400 Operating System II	4
ITSC 1405	Introduction to PC Operating Systems **OR**	4
Elective	Any ITSE, ITSW, ITSY, ITSC, ITNW, ITCC, ITMC, INEW, BCIS, COSC, or CPMT course	(3-4)
MATH 2342	Introductory Statistics **OR**	3
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		17-19
SEMESTER III		
ITNW 1421	Introduction to Networking	4
ITSE 1414	Introduction to RPG Programming	4
ITSC 1425	Personal Computer Hardware	4
+Elective	Humanities/Fine Arts	3-4
		15-16
SEMESTER IV		
ITSE 2435	Advanced RPG Programming	4
ITNW/ITSC/ ITSE/ ITSW 1X8X	Cooperative Education course	3-4
Elective	Any ITCC, ITSC, ITSE, ITSW, ITSY, ITNW, ITMC, INEW, BCIS, COSC, or CPMT course	3-4
++Elective	Social/Behavioral Science	3
		13-15
Minimum Hours Required		60-65

+Elective - must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

++Elective - must be selected from the DCCCD Core Curriculum for Social/Behavioral Science.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER INFORMATION TECHNOLOGY -- MIDRANGE ASSISTANT

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.MIDRNG.AST.04

This one semester certificate option is designed to provide training primarily for persons with previous computer experiences who want to retrain quickly for iSeries 400 Midrange environments.

Graduates will be qualified to enter the midrange environment in an entry-level system administration or junior programmer position.

Prerequisite: Basic understanding of computer terminology, problem solving, and logic structures used with computers as obtained in ITSC 1401 or BCIS 1405 or COSC 1404 or equivalent experience approved by designated Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITNW 1421	Introduction to Networking **OR**	4
ITSC 1405	Introduction to PC Operating Systems	(4)
ITSC 1411	AS/400 Operating System I	4
ITSC 1402	Computer Control Language	4
ITSE 1414	Introduction to RPG Programming	4
		16
Minimum Hours Required		16

COMPUTER INFORMATION TECHNOLOGY -- MIDRANGE TECH SUPPORT

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.MIDRNG.TEC.04

This one-year certificate option is designed to provide training for any student wishing to enter the midrange field through system administration. Skills and knowledge of the iSeries 400 operating system environment, control language, pc operating systems, and introductory networking concepts are developed. The graduate will be qualified to enter the midrange environment as a systems operator/administration trainee.

Course(s) may be substituted for ITSC 1401, BCIS 1405 or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computers Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSC 1411	AS/400 Operating System I	4
ITSC 2435	Application Problem Solving	4
		12
SEMESTER II		
ITSC 2442	AS/400 Operating System II	4
ITSC 1402	Computer Control Language	4
ITNW 1421	Introduction to Networking	4
ITSC 1405	Introduction to PC Operating Systems **OR**	4
Elective	Any ITCC, ITSC, ITSE, ITSW, ITSY, ITNW, ITMC, INEW, BCIS, COSC, or CPMT course	(3-4)
		15-16
Minimum Hours Required		27-28

COMPUTER INFORMATION TECHNOLOGY – NETPLUS PREPARATION

Eastfield only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.CIT.NETPLUS.04

This certificate option will provide education and training for individuals interested in developing their knowledge and skills as networking professionals with an emphasis on preparation for those wishing to take the A+, Network+, Linux+, and Security+ certification exams.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications **OR**	(4)
BCIS 1405	Business Computer Applications	(4)
ITSC 1405	Introduction to PC Operating Systems	4
ITNW 1421	Introduction to Networking	4
ITSC 1425	Personal Computer Hardware	4
ITSC 1407	UNIX Operating System I	4
		20
SEMESTER II		
ITNW 1425	Fundamentals of Networking Technologies	4
ITNW 1416	Netware Administration	4
ITNW 2401	Administering Servers	4
ITNW 2421	Networking with TCP/IP	4
ITSC 2437	UNIX Operating System II	4
		20
SEMESTER III		
ITSY 1442	Information Technology Security	4
ITNW 1358	Network+	3
ITNW 2435	Network Troubleshooting and Support	4
MATH 1314	College Algebra **OR**	3
MATH 2342	Introductory Statistics **OR**	(3)
MATH 1324	Mathematics for Business and Economics I	(3)
ENGL 1301	Composition I	3
		17
Minimum Hours Required		57

COMPUTER INFORMATION TECHNOLOGY – NETWORK ADMINISTRATION

Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CIT.NETWK.ADM.04

This applied associate in science degree will provide education and training for individuals interested in developing their knowledge and skills needed for working as an entry level network administrator. Upon completing this applied associate degree, students will be prepared to take the A+, Network+, Linux+, and Security + certification exams.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications **OR**	(4)
BCIS 1405	Business Computers Applications	(4)
ITSC 2435	Application Problem Solving	4
ITSC 1405	Introduction to PC Operating Systems	4
ITNW 1421	Introduction to Networking	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		19
SEMESTER II		
ITSC 1425	Personal Computer Hardware	4
ITSC 1407	UNIX Operating System I	4
ITNW 1425	Fundamentals of Networking Technologies	4
ENGL 1301	Composition I	3
ITNW 2401	Administering Servers	4
		19
SEMESTER III		
ITNW 2421	Networking with TCP/IP	4
ITNW 1416	Netware Administration	4
MATH 1314	College Algebra **OR**	3
MATH 2342	Introductory Statistics **OR**	(3)
MATH 1324	Mathematics for Business and Economics I	(3)
ITSC 2437	UNIX Operating System II	4
		15
SEMESTER IV		
ITNW 1358	Network+	3
ITSY 1442	Information Technology Security	4
ITNW 2435	Network Troubleshooting and Support	4
+Elective	Social/Behavioral Science	3
ITNW 1280	Cooperative Education-Computer Systems Networking and Telecommunications	2
HUMA 1301	Introduction to the Humanities	3
		19
Minimum Hours Required		72

+Electives – must be selected from the DCCCD Core Curriculum for Social/Behavioral Science.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER INFORMATION TECHNOLOGY -- NETWORK ADMINISTRATOR AND SUPPORT

Brookhaven, Cedar Valley, El Centro, Mountain View, North Lake and Richland only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CIT.NWK.ADMIN.04

This associate degree program provides education and training for individuals interested in developing their knowledge and skills as networking professionals. The program also provides preparatory training for those wishing to take the MCSE, MCDBA, MCSD, MCSA, MCAD, CCNA, CCNP, or SCSA certification examinations. Students will select courses in their area of specialization. In order to be considered as having met the requirements for all awards, students must complete one Primary Specialization and one Secondary Specialty Track in Semesters III and/or IV.

Credit may be given and course substitutions made for those who have acquired A+ and/or Net+ certification.

		CREDIT HOURS
SEMESTER I		
[1]Primary Specialization Semester I (one course)		4
ITSC 1405	Introduction to PC Operating Systems	4
ITSC 1425	Personal Computer Hardware	4
ENGL 1301	Composition I	3
Elective	Any ITCC, ITSC, ITSE, ITSW, ITSY, ITNW, ITMC, INEW, BCIS, COSC, or CPMT course	3-4
		18-19
SEMESTER II		
[2]Primary Specialization Semester II (two or three courses – see track list)		8-12
MATH 1324	Mathematics for Business and Economics I **OR**	3
MATH 2342	Introductory Statistics **OR**	(3)
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		14-19

NOTE: Students must select and complete one secondary specialty track (see Secondary Track listing) in Semesters III and/or IV to be considered as having met the requirements for this award.

SEMESTER III		
[3]Primary Specialization Semester III (two courses – see track list)		7-8
+Elective	Social/Behavioral Science	3
++Elective	Humanities/Fine Arts	3-4
		13-15
SEMESTER IV		
[4]Primary/Secondary Specialization Semester IV (three or four courses – see track list)		15-16
		15-16
Minimum Hours Required		60-69

+Elective - must be selected from the DCCCD Core Curriculum for Social/Behavioral Science .

++Elective - must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

SEMESTER I PRIMARY SPECIALIZATION

Select *one* track

[1]CCNA Track—SEMESTER I (One Course)		
ITCC 1402	CCNA 1: Networking Basics	4
[1]MCSE Track —SEMESTER I (One Course)		
ITMC 1401	Microsoft Windows Network and Operating Systems Essentials	4
[1]MCDBA Track —SEMESTER I (One Course)		
ITMC 1401	Microsoft Windows Network and Operating Systems Essentials	4
[1]MCSD Track —SEMESTER I (One Course)		
ITMC 1401	Microsoft Windows Network and Operating Systems Essentials	4
[1]MCSA Track —SEMESTER I (One Course)		
ITMC 1401	Microsoft Windows Network and Operating Systems Essentials	4
[1]MCAD Track —SEMESTER I (One Course)		
ITMC 1401	Microsoft Windows Network and Operating Essentials	4

SEMESTER II PRIMARY SPECIALIZATION

Continue in Track Selected in Semester I

[2]CCNA Track —SEMESTER II (Two Courses)		
ITCC 1406	CCNA 2: Router and Routing Basics	4
ITCC 1442	CCNA 3: Switching Basics and Intermediate Routing	4
[2]MCSE Track —SEMESTER II (Two or Three Courses)		
ITMC 1441	Implementing Microsoft Windows Professional and Server	4
	OR	
ITMC 1419	Installing and Administering Microsoft Windows Server Operating Systems	(4)
	AND	

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ITMC 1458 Supporting Microsoft Windows Client Network Operating Systems
AND ..... (4)
ITMC 1442 Implementing a Microsoft Windows Network Infrastructure 4

[2]MCDBA Track —SEMESTER II (Two or Three Courses)
ITMC 1441 Implementing Microsoft Windows Professional and Server 4
OR
ITMC 1419 Installing and Administering Microsoft Windows Server Operating Systems..... (4)
AND
ITMC 1458 Supporting Microsoft Windows Client Network Operating Systems
AND ..... (4)
ITMC 1403 Querying Microsoft SQL Server with Transact-SQL 4

[2]MCSD Track —SEMESTER II (Three Courses)
ITSE 1422 Introduction to C Programming[A] 4
OR
ITSE 1431 Introduction to Visual BASIC Programming[A] ..... (4)
ITMC 1345 Enterprise Development Using Microsoft Visual Basic.NET[B] 3
OR
ITSE 1402 Computer Programming [B] ..... (4)
ITSE 2449 Advanced Visual BASIC Programming [C] 4
OR
ITSE 2455 Advanced C Programming [C] ..... (4)

[2]MCSA Track —SEMESTER II (Two or Three Courses)
ITMC 1441 Implementing Microsoft Windows Professional and Server 4
OR
ITMC 1419 Installing and Administering Windows ..... (4)
AND
ITMC 1458 Supporting Microsoft Windows Client Network Operating System
AND ..... (4)
ITNW 1492 Special Topics in Computer Systems Networking and Telecommunications 4

[2]MCAD Track —SEMESTER II (Three Courses)
ITSE 1422 Introduction to C Programming[A] 4
OR
ITSE 1431 Introduction to Visual BASIC Programming[A] ..... (4)
ITMC 1345 Enterprise Development Using Microsoft Visual Basic.NET[B] 3
OR
ITSE 1402 Computer Programming [B] ..... (4)
ITSE 2449 Advanced Visual BASIC Programming [C] 4
OR
ITSE 2455 Advanced C Programming [C] ..... (4)

SEMESTER III PRIMARY SPECIALIZATION
Continue in Track Selected in Semesters I and II

[3]CCNA Track —SEMESTER III (Two Courses)
ITCC 1446 CCNA 4: WAN Technologies 4

One Course from ***Secondary Specialty Track Listing** (CCNP, UNIX, AS/400, **OR** Microsoft)

[3]MCSE Track —SEMESTER III (Two courses)
ITMC 1443 Implementing and Administering Microsoft Directory Services 4

One Course from below:
ITMC 2431 Designing a Microsoft Windows Directory Services Infrastructure..... 4
ITMC 2432 Designing a Microsoft Windows Networking Services Infrastructure ... 4
ITMC 2433 Designing a Secure Microsoft Windows Network 4
ITNW 1403 Managing a Microsoft Windows Network Environment..... 4
ITNW 1492 Special Topics in Computer Systems Networking and Telecommunications 4

[3]MCDBA Track —SEMESTER III (Two Courses)
ITMC 2403 Administering a Microsoft SQL Server Database..... 4
ITMC 2437 Programming a Microsoft SQL Server Database..... 4

[3]MCSD Track —SEMESTER III (Two Courses)
ITSE 1302 Computer Programming [D]
OR..... 3
ITSE 1402 Computer Programming [D]
OR .....(4)
ITSE 2450 Mastering Enterprise Development Using Microsoft Visual Basic [D]
OR.....(4)
ITSE 2459 Advanced Computer Programming [D] .....(4)
ITSE 2402 Intermediate Web Programming [E] 4

[3]MCSA Track —SEMESTER III (Two Courses)
One Course from Microsoft MCSA Electives requirement:

ITMC 1442 Implementing a Microsoft Windows Network Infrastructure..... 4
ITNW 1492 Special Topics in Computer Systems Networking and Telecommunications 4
ITMC 2403 Administering a Microsoft SQL Server Database..... 4
ITMC 2404 Implementing and Managing Microsoft Exchange 4
ITSY 1442 Information Technology Security..... 4
ITMC 2436 Designing Microsoft Exchange for the Enterprise..... 4

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ITMC 2437	Programming a Microsoft SQL Server Database	4
ITMC 2455	Deploying and Managing Microsoft Internet Security and Acceleration Server	4
ITNW 1403	Managing a Microsoft Windows Network Environment	4

One Course from ***Secondary Specialty Track Listing** (CCNA, CCNP, UNIX, AS/400 **OR** Microsoft)

[3]MCAD Track —SEMESTER III (Two Courses)

ITSE 1302	Computer Programming[D]	3
	OR	
ITSE 1402	Computer Programming[D]	(4)
	OR	
ITSE 2450	Mastering Enterprise Development Using Microsoft Visual Basic[D]	(4)
	OR	
ITSE 2459	Advanced Computer Programming[D]	(4)
ITSE 2402	Intermediate Web Programming[E]	4

SEMESTER IV PRIMARY/SECONDARY SPECIALIZATION
Continue in Primary Track OR Select Secondary Specialty Track

[4]CCNA Track —SEMESTER IV (Four Courses)
Four Courses from ***Secondary Specialty Track Listing** (CCNP, UNIX, AS/400 **OR** Microsoft)

[4]MCSE Track —SEMESTER IV (Four courses)
Two courses from Microsoft MCSE Electives requirement:

ITMC 2409	Deploying and Supporting Microsoft SMS Server	4
ITNW 1492	Special Topics in Computer Systems Networking and Telecommunications	4
ITMC 2403	Administering a Microsoft SQL Server Database	4
ITMC 2404	Implementing and Managing Microsoft Exchange	4
ITMC 2408	Administering Microsoft Systems Management Server	4
ITSY 1442	Information Technology Security	4
ITMC 2431	Designing a Microsoft Windows Directory Services Infrastructure	4
ITMC 2432	Designing a Microsoft Windows Networking Services Infrastructure	4
ITMC 2433	Designing a Secure Microsoft Windows Network	4
ITMC 2436	Designing Microsoft Exchange for the Enterprise	4
ITMC 2437	Programming a Microsoft SQL Server Database	4
ITMC 2455	Deploying and Managing Microsoft Internet Security and Acceleration Server	4
ITNW 1403	Managing a Microsoft Windows Network Environment	4

Two Courses from ***Secondary Specialty Track Listing** (CCNA, CCNP, UNIX, AS/400 **OR** Microsoft)

[4]MCDBA Track —SEMESTER IV (Four Courses)

One Course from Microsoft MCDBA Electives requirement:

ITNW 1492	Special Topics in Computer Systems Networking and Telecommunications	4
ITMC 1442	Implementing a Microsoft Windows Network Infrastructure	4
ITSE 1444	Mastering Microsoft Visual Basic Development	4
ITSE 1491	Special Topics in Computer Programming	4
ITSE 2450	Mastering Enterprise Development Using Microsoft Visual Basic	4
ITMC 1345	Enterprise Development Using Microsoft Visual Basic.NET	3

Three Courses from ***Secondary Specialty Track Listing** (CCNA, CCNP, UNIX, AS/400 **OR** Microsoft)

[4]MCSD Track —SEMESTER IV (Four courses)

ITSE 2413	Web Authoring[F]	4
	OR	
ITSE 1440	Mastering Distributed Application Design and Development Using Microsoft Visual Studio[F]	(4)
	AND	
ITSE 1391	Special Topics in Computer Programming[G]	3
	OR	
ITSE 1491	Special Topics in Computer Programming[G]	(4)
	OR	
ITSE 2402	Intermediate Web Programming[H]	
	AND	(4)
ITSE 1440	Mastering Distributed Application Design and Development Using Microsoft Visual Studio[I]	4
	OR	
ITSE 1491	Special Topics in Computer Programming[I]	(4)

One Course from ***Secondary Specialty Track Listing** (CCNA, CCNP, UNIX, AS/400 **OR** Microsoft)

[4]MCSA Track —SEMESTER IV (Four Courses)
Four Courses from ***Secondary Specialty Track Listing** (CCNA, CCNP, UNIX, AS/400 **OR** Microsoft)

[4]MCAD Track —SEMESTER IV (Four Courses)

ITSE 2413	Web Authoring[F]	4
	OR	
ITSE 1440	Mastering Distributed Application Design and Development Using Microsoft Visual Studio[F]	(4)
	AND	

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ITSE 1391	Special Topics in Computer Programming[G]	3
	OR	
ITSE 1491	Special Topics in Computer Programming[G]	(4)
	OR	
ITSE 2402	Intermediate Web Programming[H]	
	AND	(4)
ITSE 1440	Mastering Distributed Application Design and Development Using Microsoft Visual Studio[I]	4
	OR	
ITSE 1491	Special Topics in Computer Programming[I]	(4)

One Course from ***Secondary Specialty Track Listing** (CCNA, CCNP, UNIX, AS/400 **OR** Microsoft)

***SECONDARY SPECIALTY TRACKS LISTING**
Select *one* Secondary Specialty Track

CCNA

ITCC 1402	CCNA 1: Networking Basics	4
ITCC 1406	CCNA 2: Router and Routing Basics	4
ITCC 1442	CCNA 3: Switching Basic and Intermediate Routing	4
ITCC 1446	CCNA 4: WAN Technologies	4

Any 4-credit hour ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, ITSY, INEW, BCIS, COSC or CPMT course, including but not limited to:

ITNW 1280 **AND** ITNW 1281 **OR** ITNW 1480 Cooperative Education—Business Systems Networking and Telecommunications **OR** EECT 1440 Telecommunications Transmission Media

CCNP

ITCC 2432	Advanced Routing: Cisco 5	4
ITCC 2436	Remote Access: Cisco 6	4
ITCC 2440	Multilayer Switching: Cisco 7	4
ITCC 2444	Network Troubleshooting: Cisco 8	4

Any 4-credit hour ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, ITSY, INEW, BCIS, COSC or CPMT course, including but not limited to:

ITNW 1280 **AND** ITNW 1281 **OR** ITNW 1480 Cooperative Education—Business Systems Networking and Telecommunications **OR** EECT 1440 Telecommunications Transmission Media

UNIX

ITSC 1402	Computer Control Language	4
ITSC 1407	UNIX Operating System I	4
ITSC 1429	Fundamentals of Solaris 8 Operating Environment (SA-118)	4
ITSC 2437	UNIX Operating System II	4
ITSC 1452	Solaris Operating Environment 8 Systems Administration II (SA-288)	4
ITSC 1454	Solaris Operating Environment 8 Systems Administration (SA-238)	4
ITSC 1456	Shell Programming (SL-120)	4

Any 4-credit hour ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, ITSY, INEW, BCIS, COSC or CPMT course, including but not limited to:

ITNW 1280 **AND** ITNW 1281 **OR** ITNW 1480 Cooperative Education—Business Systems Networking and Telecommunications **OR** EECT 1440 Telecommunications Transmission Media

AS/400

ITSC 1402	Computer Control Language	4
ITSC 1411	AS/400 Operating System I	4
ITSC 2442	AS/400 Operating System II	4
ITSE 1414	Introduction to RPG Programming	4
ITSE 2435	Advanced RPG Programming	4

Any 4-credit hour ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, ITSY, INEW, BCIS, COSC or CPMT course, including but not limited to:

ITNW 1280 **AND** ITNW 1281 **OR** ITNW 1480 Cooperative Education—Business Systems Networking and Telecommunications **OR** EECT 1440 Telecommunications Transmission Media

MICROSOFT

ITMC 1401	Microsoft Windows Network and Operating System Essentials	4
ITMC 1441	Implementing Microsoft Windows Professional and Server **OR**	4
ITMC 1419	Installing and Administering Microsoft Windows Server Operating System **AND**	(4)
ITMC 1458	Supporting Microsoft Windows Client Network Operating System	(4)
ITMC 1442	Implementing a Microsoft Windows Network Infrastructure	4
ITMC 1443	Implementing and Administering Microsoft Windows Directory Services	4
ITMC 2431	Designing a Microsoft Windows Directory Services Infrastructure	4
ITNW 1403	Managing a Microsoft Windows Network Environment	4

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Any 4-credit hour ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, ITSY, INEW, BCIS, COSC or CPMT course, including but not limited to:

ITNW 1280 **AND** ITNW 1281 **OR** ITNW 1480 Cooperative Education—Business Systems Networking and Telecommunications **OR** EECT 1440 Telecommunications Transmission Media

[A] Introduction to Microsoft Visual Basic.NET (MS 2559) or Introduction to C#.NET (MS 2609)

[B] Programming with Microsoft Visual Basic.NET (MS 2373) or Programming with C#.NET (MS 2124)

[C] Programming with the Microsoft .NET Framework (Visual Basic.NET—MS 2415) **OR** Programming with the Microsoft .NET Framework (Microsoft Visual C#.NET—MS 2349)

[D] Programming with ADO.NET (MS 2389)

[E] Introduction to Visual Studio.NET

[F] Developing Microsoft Web Applications Using ASP.NET and Microsoft Visual Studio.NET (MS 2310)

[G] Developing Microsoft .NET Applications for Windows (Visual Basic.NET—MS 2565) **OR** Developing Microsoft .NET Applications for Windows (Visual C#.NET—MS 2555)

[H] Developing XML Web Services Using Microsoft ASP.NET (MS 2524)

[I] Developing Component-based Applications Using Microsoft.NET Enterprise Services (MS 2557)

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER INFORMATION TECHNOLOGY – NETWORK OPERATION CENTER TECHNICIAN

Eastfield only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.CIT.NTWRK.OPER

This certificate program will provide education and training for individuals interested in developing their knowledge and skills needed for working as an entry level technician in a network operating center. This program gives the student an opportunity to combine computer skills with telecommunications knowledge that are required to work in a network operation center.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications **OR**	(4)
BCIS 1405	Business Computer Applications	(4)
MATH 2342	Introductory Statistics **OR**	3
MATH 1314	College Algebra **OR**	(3)
MATH 1324	Mathematics for Business and Economics I	(3)
ENGL 1301	Composition I	3
ITNW 1421	Introduction to Networking	4
EECT 1403	Introduction to Telecommunications	4
		18
SEMESTER II		
ITNW 1425	Fundamentals of Networking Technologies	4
ITNW 2421	Networking with TCP/IP	4
ITSC 2439	Personal Computer Help Desk	4
EECT 1346	Telecommunications Traffic Engineering	3
		15
SEMESTER III		
ITNW 2413	Networking Hardware	4
ITNW 2415	Wide Area Networks	4
EECT 2432	Telecommunications Signaling	4
EECT 2430	Telecommunications Switching	4
		16
Minimum Hours Required		49

COMPUTER INFORMATION TECHNOLOGY -- NETWORKING ASSOCIATE

El Centro, Mountain View, North Lake and Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.NWK.ASSOC.04

This certificate option will provide education and training for individuals interested in developing their knowledge and skills as networking professionals with an emphasis on preparation for those wishing to take the CCNA certification examination.

		CREDIT HOURS
SEMESTER I		
ITCC 1402	CCNA 1: Networking Basics	4
ITCC 1406	CCNA 2: Router and Routing Basics	4
		8
SEMESTER II		
ITCC 1442	CCNA 3: Switching Basic and Intermediate Routing	4
ITCC 1446	CCNA 4: WAN Technologies	4
		8
Minimum Hours Required		16

Upon completion of ITCC 1446 CCNA 4: WAN Technologies, the student is eligible to take the CCNA (Cisco Certified Networking Associate) credentialing exam.

COMPUTER INFORMATION TECHNOLOGY -- NETWORKING PROFESSIONAL

El Centro, Mountain View, North Lake and Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.NWK.PROF.04

This certificate will examine complex networking concepts, such as troubleshooting tools and more sophisticated configurations. Upon completion, the student will have acquired skills needed to prepare for certification as a Cisco Certified Network Professional.

Prerequisite: CCNA Certification and successful completion of skills-based exam or completion of Cisco 4 (ITCC 1446).

		CREDIT HOURS
SEMESTER I		
ITCC 2432	Advanced Routing : Cisco 5	4
ITCC 2436	Remote Access: Cisco 6	4
		8
SEMESTER II		
ITCC 2440	Multilayer Switching: Cisco 7	4
ITCC 2444	Network Troubleshooting: Cisco 8	4
		8
Minimum Hours Required		16

Upon completion of ITCC 2444, Network Troubleshooting: Cisco 8, the student is eligible to take the CCNP (Cisco Certified Networking Professional) credentialing exam.

COMPUTER INFORMATION TECHNOLOGY -- NETWORKING SUPPORT

Brookhaven, Cedar Valley, El Centro, Mountain View, North Lake and Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.NWK.SUPP.04

This certificate offers multiple specialty options for development of networking systems engineer, software developer, database administrator, and systems administrator. The program also provides preparatory training for those wishing to take the MCSE, MCDBA, MCSD, MCSA, and MCAD certification examinations.

NOTE: students must select and complete one specialty track to be considered as having met the requirement for this award.

Prerequisite: For all Tracks, basic understanding of personal computers/terminology and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by designated Information Technology personnel. MCSD and MCAD Tracks require problem solving and logic structures as obtained in ITSC 2435.

	CREDIT HOURS
SEMESTER I	
[1]MCSE Track (Two or Three Courses) **OR**	8-12
[1]MCDBA Track (Two or Three Courses) **OR**	(8-12)
[1]MCSD Track (Three Courses) **OR**	(11-12)
[1]MCSA Track (Two or Three Courses) **OR**	(8-12)
[1]MCAD TRACK (Three Courses)	(11-12)
	8-12
SEMESTER II	
[2]MCSE Track (Two Courses) **OR**	8
[2]MCDBA Track (Two Courses) **OR**	(8)
[2]MCSD Track (Two Courses) **OR**	(6-8)
[2]MCSA Track (Two Courses) **OR**	(8)
[2]MCAD TRACK (Two Courses)	(6-8)
	6-8
SEMESTER III	
[3]MCSE Track (Two Courses) **OR**	8
[3]MCDBA Track (Two Courses) **OR**	(7-8)
[3]MCSD Track (Two Courses) **OR**	(6-8)
[3]MCSA Track (Two Courses) **OR**	(8)
[3]MCAD TRACK (Two Courses)	(6-8)
	6-8
Minimum Hours Required	20-28

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[1]MCSE Track – Semester I (Two or Three Courses)

ITMC 1401	Microsoft Windows Network and Operating Systems Essentials	4
ITMC 1441	Implementing Microsoft Windows Professional and Server	4
	OR	
ITMC 1419	Installing and Administering Microsoft Windows Server Operating Systems	(4)
	AND	
ITMC 1458	Supporting Microsoft Windows Client Network Operating Systems	(4)

[1]MCDBA Track – Semester I (Two or Three Courses)

ITMC 1401	Microsoft Windows Network and Operating Systems Essentials	4
ITMC 1441	Implementing Microsoft Windows Professional and Server	4
	OR	
ITMC 1419	Installing and Administering Microsoft Windows Server Operating Systems	4
	AND	
ITMC 1458	Supporting Microsoft Windows Client Network Operating Systems	4

[1]MCSD Track – Semester I (Three Courses)

ITSE 1442	Introduction to C Programming[A] **OR**	4
ITSE 1431	Introduction to Visual Basic Programming[A]	(4)
ITMC 1345	Enterprise Development Using Microsoft Visual Basic.NET[B] **OR**	3
ITSE 1402	Computer Programming[B]	(4)
ITSE 2449	Advanced Visual BASIC Programming[C] **OR**	4
ITSE 2455	Advanced Programming[C]	(4)

[1]MCSA Track – Semester I (Two or Three Courses)

ITMC 1401	Microsoft Windows Network and Operating Systems Essentials	4
ITMC 1441	Implementing Microsoft Windows Professionals and Server	4
	OR	
ITMC 1419	Installing and Administering Microsoft Windows Server Operating Systems	(4)
	AND	
ITMC 1458	Supporting Microsoft Windows Client Network Operating Systems	(4)

[1]MCAD Track – Semester I (Three Courses)

ITSE 1442	Introduction to C Programming[A] **OR**	4
ITSE 1431	Introduction to Visual Basic Programming[A]	(4)
ITMC 1345	Enterprise Development Using Microsoft Visual Basic.NET[B] **OR**	3
ITSE 1402	Computer Programming[B]	(4)
ITSE 2449	Advanced Visual BASIC Programming[C] **OR**	4
ITSE 2455	Advanced Programming[C]	(4)

[2]MCSE Track – Semester II (Two Courses)

ITMC 1442	Implementing a Microsoft Windows Network Infrastructure	4
ITMC 1443	Implementing and Administering Microsoft Directory Services	4

[2]MCDBA Track – Semester II (Two Courses)

ITMC 1403	Querying Microsoft SQL Server with Transact-SQL	4
ITMC 2403	Administering a Microsoft SQL Server Database	4

[2]MCSD Track – Semester II (Two Courses)

ITSE 1302	Computer Programming[D] **OR**	3
ITSE 1402	Computer Programming[D] **OR**	(4)
ITSE 2450	Mastering Enterprise Development Using Microsoft Visual Basic[D] **OR**	(4)
ITSE 2459	Advanced Computer Programming[D]	(4)
ITSE 2302	Intermediate Web Programming[E] **OR**	3
ITSE 2402	Intermediate Web Programming[E]	(4)

[2]MCSA Track – Semester II (Two Courses)

ITNW 1492	Special Topics in Computer Systems Networking and Telecommunications	4

One Course from Microsoft MCSA Electives Requirement:

ITMC 1442	Implementing a Microsoft Windows Network Infrastructure	4
ITNW 1492	Special Topics in Computer Systems Networking and Telecommunications	4
ITMC 2403	Administering a Microsoft SQL Server Database	4
ITMC 2404	Implementing and Managing Microsoft Exchange	4
ITSY 1442	Information Technology Security	4
ITMC 2436	Designing Microsoft Exchange for the Enterprise	4
ITMC 2437	Programming a Microsoft SQL Server Database	4

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ITMC 2455 Deploying and Managing Microsoft Internet Security and Acceleration Server 4
ITNW 1403 Managing a Microsoft Windows Network Environment 4

Any ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, INEW, ITSY, BCIS, COSC or CPMT 4-credit-hour course.

[2]MCAD Track - Semester II (Two Courses)

ITSE 1302 Computer Programming [D] **OR** 3
ITSE 1402 Computer Programming [D] **OR** ..... (4)
ITSE 2450 Mastering Enterprise Development Using Microsoft Visual Basic [D] **OR** ..... (4)
ITSE 2459 Advanced Computer Programming [D] ..... (4)
ITSE 2302 Intermediate Web Programming [E] **OR** 3
ITSE 2402 Intermediate Web Programming [E] .... (4)

[3]MCSE Track – Semester III (Two Courses)
One Course from below:

ITMC 2431 Designing a Microsoft Directory Service Infrastructure 4
ITMC 2432 Designing a Microsoft Windows Networking Services Infrastructure ... 4
ITMC 2433 Designing a Secure Microsoft Windows Network 4
ITNW 1492 Special Topics in Computer Systems Networking and Telecommunications 4
ITNW 1403 Managing a Microsoft Windows Network Environment 4

One Course from Microsoft MCSE Electives requirement:

ITNW 1492 Special Topics in Computer Systems Networking and Telecommunications 4
ITMC 2403 Administering a Microsoft SQL Server Database 4
ITMC 2404 Implementing and Managing Microsoft Exchange 4
ITMC 2408 Administering Microsoft Systems Management Server 4
ITSY 1442 Information Technology Security 4
ITMC 2431 Designing a Microsoft Windows Directory Services Infrastructure 4
ITMC 2432 Designing a Microsoft Windows Networking Services Infrastructure 4
ITMC 2433 Designing a Secure Microsoft Windows Network 4
ITMC 2436 Designing Microsoft Exchange for the Enterprise 4
ITMC 2437 Programming a Microsoft SQL Server Database 4
ITMC 2455 Deploying and Managing Microsoft Internet Security and Acceleration Server 4
ITMW 1403 Managing a Microsoft Windows Network Environment 4

[3]MCDBA Track – Semester III (Two Courses)
ITMC 2437 Programming a Microsoft SQL Server Database 4

One Course from Microsoft MCDBA Electives requirement:

ITNW 1492 Special Topics in Computer Systems Networking and Telecommunications 4
ITMC 1442 Implementing a Microsoft Windows Network Infrastructure 4
ITSE 1444 Mastering Microsoft Visual Basic Development 4
ITSE 1491 Special Topics in Computer Programming 4
ITSE 2450 Mastering Enterprise Development Using Microsoft Visual Basic
ITMC 1345 Enterprise Development Using Microsoft Visual Basic.NET 3

[3]MCSD Track – Semester III (Two Courses)
ITSE 2413 Web Authoring [F] **OR** 4
ITSE 1440 Mastering Distributed Application Design and Development Using Microsoft Visual Studio [F] **OR** ..... (4)
ITSE 1391 Special Topics in Computer Programming [G] **OR** 3
ITSE 1491 Special Topics in Computer Programming [G] **OR** ..... (4)
ITSE 2302 Intermediate Web Programming [H] **OR** ..... (3)
ITSE 2402 Intermediate Web Programming [H] **AND** ..... (4)
ITSE 1440 Mastering Distributed Application Design and Development Using Microsoft Visual Studio [I] **OR** 4
ITSE 1391 Special Topics in Computer Programming [I] **OR** ..... (3)
ITSE 1491 Special Topics in Computer Programming [I] ..... (4)

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[3]MCSA Track – Semester III (Two Courses)

Any TWO ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, INEW, ITSY, BCIS, COSC, or CPMT 4-credit-hour courses.

[3]MCAD Track —SEMESTER III (Two Courses)

ITSE 2413	Web Authoring[F] **OR**	4
ITSE 1440	Mastering Distributed Application Design and Development Using Microsoft Visual Studio[F] **OR**	(4)
ITSE 1391	Special Topics in Computer Programming[G] **OR**	3
ITSE 1491	Special Topics in Computer Programming[G] **OR**	(4)
ITSE 2302	Intermediate Web Programming[H] **OR**	(3)
ITSE 2402	Intermediate Web Programming[H] **AND**	(4)
ITSE 1440	Mastering Distributed Application Design and Development Using Microsoft Visual Studio[I] **OR**	4
ITSE 1391	Special Topics in Computer Programming[I] **OR**	(3)
ITSE 1491	Special Topics in Computer Programming[I]	(4)

[A] Introduction to Microsoft Visual Basic.NET (MS 2559) or Introduction to C#.NET (MS 2609)

[B] Programming with Microsoft Visual Basic.NET (MS 2373) or Programming with C#.NET (MS 2124)

[C] Programming with the Microsoft .NET Framework (Visual Basic.NET—MS 2415) **OR** Programming with the Microsoft .NET Framework (Microsoft Visual C#.NET—MS 2349)

[D] Programming with ADO.NET (MS 2389)

[E] Introduction to Visual Studio.NET

[F] Developing Microsoft Web Applications Using ASP.NET and Microsoft Visual Studio.NET (MS 2310)

[G] Developing Microsoft .NET Applications for Windows (Visual Basic.NET—MS 2565) **OR** Developing Microsoft .NET Applications for Windows (Visual C#.NET—MS 2555)

[H] Developing XML Web Services Using Microsoft ASP.NET (MS 2524)

[I] Developing Component-based Applications Using Microsoft.NET Enterprise Services (MS 2557)

COMPUTER INFORMATION TECHNOLOGY -- ORACLE ASSOCIATE

El Centro, North Lake and Richland only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.ORACLE.ASST

This sequence is for students who wish to prepare for the Oracle Certified Associate (OCA) certification exam. At this apprentice skill level, Oracle Associates have a foundation knowledge that will allow them to act as a junior team member working with database administrators or application developers performing simple, operational tasks on an Oracle database with database software and graphical utilities associated with managing the database.

Prerequisite: Basic understanding of problem solving, logic structures, and relational database concepts as obtained in ITSC 2435, and either ITSW 1307/1407 or ITSE 1346 or equivalent experiences approved by designated Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITSE 1345	Introduction to Oracle SQL **OR**	3
ITSE 1445	Introduction to Oracle SQL	(4)
ITSE 2356	Oracle Database Administration I **OR**	3
ITSE 2456	Oracle Database Administration I	(4)
		6-8
Minimum Hours Required		6-8

COMPUTER INFORMATION TECHNOLOGY -- ORACLE PROFESSIONAL

El Centro, North Lake and Richland only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.ORACLE.PROF

This sequence is for students who wish to prepare for the Oracle Certified Professional (OCP) certification exam. At this skill level, Oracle Professionals have knowledge that will allow them to perform network administration duties of Backup/Recovery and Performance Tuning.

Prerequisite: Completion of ITSE 1345/1445 and ITSE 2346/2456 or equivalent experiences approved by designated Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITSE 2358	Oracle Database Administration II **OR**	3
ITSE 2458	Oracle Database Administration II	(4)
ITSE 2429	Oracle Database Administration and Performance Tuning	4
		7-8
Minimum Hours Required		7-8

COMPUTER INFORMATION TECHNOLOGY -- PERSONAL COMPUTER SUPPORT

Offered at all seven campuses

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CIT.PC.SUPP.04

This associate degree program trains the student to troubleshoot software and hardware problems, implementing corrections where possible; to evaluate new software and hardware; to install hardware and software, including equipment assembly and diagnostics; and to assist in the development and presentation of training courses for users. The graduate will be qualified to provide support for personal computer users in a corporate environment.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computer Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSC 2435	Application Problem Solving	4
ITSC 1405	Introduction to PC Operating Systems	4
ENGL 1301	Composition I	3
		15
SEMESTER II		
ITNW 1421	Introduction to Networking	4
ITSW 1401	Introduction to Word Processing **OR**	4
ITSW 2431	Advanced Word Processing	(4)
ITSW 1404	Introduction to Spreadsheets **OR**	4
ITSW 2434	Advanced Spreadsheets	(4)
MATH 2342	Introductory Statistics **OR**	3
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		18-19
SEMESTER III		
ITSW 1407	Introduction to Database **OR**	4
ITSW 2437	Advanced Database	(4)
ITSC 1425	Personal Computer Hardware	4
ITSW 1410	Introduction to Presentation Graphics Software **OR**	4
ITSC 1421	Intermediate PC Operating Systems	(4)
+Elective	Social/Behavioral Science	3
		15
SEMESTER IV		
ITSC 1413	Internet/Web Page Development	4
ITSC 2439	Personal Computer Help Desk	4
ITSC 1X8X	Cooperative Education **OR**	3-4
Elective	Any ITCC, ITMC, INEW, ITSC, ITSE, ITNW, ITSW, ITSY, BCIS, COSC, or CPMT course	(3-4)
++Elective	Humanities/Fine Arts	3-4
		14-16

Minimum Hours Required 62-65

+Elective must be selected from the DCCCD Core Curriculum for Social/Behavioral Science.

++Elective must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER INFORMATION TECHNOLOGY -- PERSONAL COMPUTER SPECIALIST

Offered at all seven campuses

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.CIT.PC.SPEC.04

This certificate option is designed to provide in-depth training in suite package software, operating systems, hardware, networking, and internet/web page development. The graduate will be qualified for a variety of entry-level positions in a pc-oriented environment.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computer Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITNW 1421	Introduction to Networking	4
ITSC 1405	Introduction to PC Operating Systems	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		15
SEMESTER II		
ITSC 2435	Application Problem Solving	4
ITSW 1401	Introduction to Word Processing **OR**	4
ITSW 2431	Advanced Word Processing	(4)
ITSW 1404	Introduction to Spreadsheets **OR**	4
ITSW 2434	Advanced Spreadsheets	(4)
ENGL 1301	Composition I	3
		15
SEMESTER III		
ITSW 1407	Introduction to Database **OR**	4
ITSW 2437	Advanced Database	(4)
ITSC 1425	Personal Computer Hardware	4
ITSW 1410	Introduction to Presentation Graphics Software **OR**	4
ITSC 1413	Internet/Web Page Development **OR**	(4)
ITSC 2439	Personal Computer Help Desk	(4)
Elective	Any ITCC, ITMC, INEW, ITSC, ITSE, ITNW, ITSW, ITSY, BCIS, COSC , or CPMT course	3-4
		15-16

Minimum Hours Required 45-46

COMPUTER INFORMATION TECHNOLOGY -- PERSONAL COMPUTER TECHNICIAN

Offered at all seven campuses

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.PC.TECH.03

This one-semester certificate option is designed to provide training for those who want to concentrate on troubleshooting and solving elementary operating system, hardware, and networking problems. The graduate will be qualified to perform entry-level troubleshooting on personal computers.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computer Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITNW 1421	Introduction to Networking	4
ITSC 1425	Personal Computer Hardware	4
ITSC 1405	Introduction to PC Operating Systems	4
		16

Minimum Hours Required 16

COMPUTER INFORMATION TECHNOLOGY -- PERSONAL COMPUTER USER

Offered at all seven campuses

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.PC.USER.03

This certificate option is designed to provide training for those wishing to have a basic understanding of word processing, spreadsheets, database, and PC operating systems. The graduate will be qualified to use software applications at a level required for appropriate certification.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computer Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSW 1401	Introduction to Word Processing **OR**	4
ITSW 2431	Advanced Word Processing	(4)
ITSW 1404	Introduction to Spreadsheets **OR**	4
ITSW 2434	Advanced Spreadsheets	(4)
		12
SEMESTER II		
ITSW 1407	Introduction to Database **OR**	4
ITSW 2437	Advanced Database	(4)
ITSW 1410	Introduction to Presentation Graphics Software **OR**	4
ITSC 1409	Integrated Software Applications I **OR**	(4)
ITSC 2431	Integrated Software Applications III **OR**	(4)
ITSC 1405	Introduction to PC Operating Systems	(4)
		8
Minimum Hours Required		20

COMPUTER INFORMATION TECHNOLOGY -- PERSONAL COMPUTER TECHNOLOGY

Brookhaven only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CIT.PC

This sequence is for students interested in learning what goes on "under the cover" of a modern IBM-type personal computer. Completers will learn how a PC works and will also be able to write specifications for PCs, perform routine maintenance and be able to troubleshoot and repair simple problems.

		CREDIT HOURS
SEMESTER I		
ITSC 1405	Introduction to PC Operating Systems	4
		4
SEMESTER II		
ITSC 1425	Personal Computer Hardware	4
ITSE 2437	Assembly Language Programming	4
		8
Minimum Hours Required		12

COMPUTER INFORMATION TECHNOLOGY -- SOFTWARE PROGRAMMER/ DEVELOPER

Offered at all seven campuses

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CIT.PROG.DEV.04

This associate degree program is designed to provide in-depth skills and knowledge in one primary programming language and an operating system from the same platform, plus additional knowledge of a secondary language. The graduate will be qualified to work as an entry-level programmer in an applications setting to support the information processing function of the organization.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computer Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSC 2435	Application Problem Solving	4
ITNW 1421	Introduction to Networking	4
ENGL 1301	Composition I	3
		15
SEMESTER II		
XXXX XXXX	Introductory Programming course-List A*	3-4
ITSW 1407	Introduction to Database	4
XXXX XXXX	Operating Systems course-List C	3-4
MATH 1414	College Algebra **OR**	4
MATH 1314	College Algebra **OR**	(3)
MATH 2342	Introductory Statistics	(3)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		16-19
SEMESTER III		
XXXX XXXX	Introductory Programming course-List A*	3-4
XXXX XXXX	Advanced Programming course-List B**	3-4
Elective	Any ITCC, ITSC, ITSE, ITSW, ITNW, ITMC, INEW, ITSY, BCIS, COSC or CPMT course	3-4
ITSW 1410	Introduction to Presentation Graphics Software **OR**	4
Elective	Any ITCC, ITSC, ITSE, ITSW, ITNW, ITMC, INEW, ITSY, BCIS, COSC or CPMT course	(3-4)
+Elective	Humanities/Fine Arts	3-4
		15-20
SEMESTER IV		
XXXX XXXX	Programming course-List A or B **OR**	3-4
XXXX XXXX	Application Development course-List D	(3-4)
ITSE 1350	System Analysis and Design **OR**	3
BCIS 2390	Systems Analysis and Design **OR**	(3)
ITSC/ITSE/ ITSW 1X8X	Cooperative Education Course	(3)
Elective	Any two ITCC, ITSC, ITSE, ITSW, ITNW, ITMC, INEW, ITSY, BCIS, COSC or CPMT course	6-8
++Elective	Social/Behavorial Science	3
		15-18

Minimum Hours Required 61-72

+Elective must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

++Elective must be selected from the DCCCD Core Curriculum for Social/Behavioral Science.

*First in a two-course programming language series

List A - Introductory Programming Courses

ITSC	1413	Internet/Web Page Development 4
ITSC	1329	Fundamental of Solaris 8 Operating Environment (SA-118) 3
ITSC	1429	Fundamental of Solaris 8 Operating Environment (SA-118) 4
ITSE	1345	Introduction to Oracle SQL 3
ITSE	1402	Computer Programming 4
ITSE	1407	Introduction to C++ Programming 4
ITSE	1411	Web Page Programming 4
ITSE	1414	Introduction to RPG Programming 4
ITSE	1418	Introduction to COBOL Programming 4
ITSE	1422	Introduction to C Programming 4
ITSE	1431	Introduction to Visual BASIC Programming 4
ITSE	1445	Introduction to Oracle SQL 4
ITSE	1491	Special Topics in Computer Programming 4
ITSE	2356	Oracle Database Administration I 3
ITSE	2401	Windows Programming Using C++ 4
ITSE	2405	Windows Programming 4
ITSE	2409	Database Programming 4
ITSE	2413	Web Authoring 4
ITSE	2417	JAVA Programming 4
ITSE	2421	Object-Oriented Programming 4
ITSE	2456	Oracle Database Administration I 4
BCIS	1431	Programming in Visual Basic 4
COSC	1415	Introduction to Computer Science and Programming 4
COSC	1430	Programming I 4

(continued on next page)

COSC	1436	Programming Fundamentals I	4
COSC	1437	Programming Fundamentals II	4
ITMC	1403	Querying Microsoft SQL Server with Transact-SQL	4
ITMC	2403	Administering a Microsoft SQL Server Database	4

**Second in a two-course programming language series

List B - Advanced Programming Language Courses

ITSC	1356	Shell Programming (SL 120)	3
ITSC	1456	Shell Programming (SL 120)	4
ITSE	1356	Introduction to XML	3
ITSE	1491	Special Topics in Computer Programming	4
ITSE	2354	Advanced Oracle PL/SQL	3
ITSE	2402	Intermediate Web Programming	4
ITSE	2409	Database Programming	4
ITSE	2413	Web Authoring	4
ITSE	2429	Oracle Network Administration and Performance Tuning	4
ITSE	2431	Advanced C++ Programming	4
ITSE	2435	Advanced RPG Programming	4
ITSE	2437	Assembly Language Programming	4
ITSE	2439	Advanced Windows Programming Using C++	4
ITSE	2443	Advanced Windows Programming	4
ITSE	2447	Advanced Database Programming	4
ITSE	2449	Advanced Visual BASIC Programming	4
ITSE	2451	Advanced COBOL Programming	4
ITSE	2454	Advanced Oracle SQL	4
ITSE	2455	Advanced C Programming	4
ITSE	2456	Oracle Database Administration I	4
ITSE	2457	Advanced Object-Oriented Programming	4
ITSE	2458	Oracle Database Administration II	4
ITSE	2459	Advanced Computer Programming	4
INEW	2434	Advanced Web Page Programming	4
INEW	2438	Advanced JAVA Programming	4
BCIS	2431	Advanced Programming in Visual BASIC	4
COSC	1437	Programming Fundamentals II	4
COSC	2415	Advanced Computer Science and Programming	4
COSC	2425	Computer Organization and Machine Language	4
COSC	2430	Programming II	4
COSC	2436	Programming Fundamentals III	4
COSC	2437	Programming a Microsoft SQL Server Database	4
IMED	2415	Web Page Design II	4

List C - Operating System Courses

ITSC	1352	Solaris Operating Environment 8 Systems Administrations II (SA-288)	3
ITSC	1354	Solaris Operating Environment 8 Systems Administrations II (SA-238)	3
ITSC	1405	Introduction to PC Operating Systems	4
ITSC	1407	UNIX Operating System I	4
ITSC	1411	AS/400 Operating System I	4
ITSC	1421	PC Operating Systems - Windows	4
ITSC	1447	UNIX System Administration II	4
ITSC	1452	Solaris Operating Environment 8 Systems Administrations II (SA-288)	4
ITSC	1454	Solaris Operating Environment 8 Systems Administrations II (SA-238)	4
ITSC	1458	UNIX System Administration I	4
ITSC	2437	UNIX Operating System II	4
ITSC	2442	AS/400 Operating System II	4
ITMC	1441	Implementing Microsoft Windows Professional and Server	4
ITMC	1442	Implementing Microsoft Windows Network Infrastructure	4
ITMC	1458	Supporting Microsoft Windows Client Network Operating Systems	4

List D - Application Development Courses

ITSW	1404	Introduction to Spreadsheets	4
ITSC	1413	Internet/Web Page Development	4
ITNW	1437	Introduction to the Internet	4
ITSE	2413	Web Authoring	4
ITSW	2437	Advanced Database	4
ITSE	2445	Data Structures	4
ARTC	1302	Digital Imaging I	3
ARTC	1391	Special Topics in Graphic Design, Commercial Art, and Illustration	3
ITSE	1356	Introduction to XML	3
ITSE	1359	Introduction to Scripting Languages	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER INFORMATION TECHNOLOGY -- SOFTWARE PROGRAMMER/ DEVELOPER ASSISTANT

Effective June 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before June 1, 2007. New students should not attempt to pursue this award.

Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland (see above)

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.SPD.ASST.04

This certificate option is designed to provide skills and knowledge in a primary programming language of choice, an operating system from the same platform, and database concepts. Graduates will be qualified to work as an assistant in a programming environment with data and coding.

Course(s) may be substituted for ITSC 1401, BCIS 1405 or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computers Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSC 2435	Application Problem Solving	4
XXXX XXXX	Introductory Programming course-List A*	3-4
ITXX XXXX	Operating Systems course-List C	3-4
		14-16
SEMESTER II		
ITSW 1407	Introduction to Database	4
XXXX XXXX	Advanced Programming Language course-List B**	3-4
ITSW 1410	Introduction to Presentation Graphics Software **OR**	4
Elective	Any ITCC, ITSC, ITSE, ITSW, ITNW, ITMC, INEW, ITSY, BCIS, COSC or CPMT course	(3-4)
		10-12
Minimum Hours Required		24-28

*First in a two-course programming language series

List A - Introductory Programming Courses

ITSC	1413	Internet/Web Page Development	4
ITSC	1329	Fundamental of Solaris 8 Operating Environment (SA-118)	3
ITSC	1429	Fundamental of Solaris 8 Operating Environment (SA-118)	4
ITSE	1345	Introduction to Oracle SQL	3
ITSE	1402	Computer Programming	4
ITSE	1407	Introduction to C++ Programming	4
ITSE	1411	Web Page Programming	4
ITSE	1414	Introduction to RPG Programming	4
ITSE	1418	Introduction to COBOL Programming	4
ITSE	1422	Introduction to C Programming	4
ITSE	1431	Introduction to Visual BASIC Programming	4
ITSE	1445	Introduction to Oracle SQL	4
ITSE	1491	Special Topics in Computer Programming	4
ITSE	2356	Oracle Database Administration I	3
ITSE	2401	Windows Programming Using C++	4
ITSE	2405	Windows Programming	4
ITSE	2409	Database Programming	4
ITSE	2413	Web Authoring	4
ITSE	2417	JAVA Programming	4
ITSE	2421	Object-Oriented Programming	4
ITSE	2456	Oracle Database Administration I	4
BCIS	1431	Programming in Visual Basic	4
COSC	1415	Introduction to Computer Science and Programming	4
COSC	1430	Programming I	4
COSC	1436	Programming Fundamentals I	4
COSC	1437	Programming Fundamentals II	4
ITMC	1403	Querying Microsoft SQL Server with Transact-SQL	4
ITMC	2403	Administering a Microsoft SQL Server Database	4

**Second in a two-course programming language series

List B - Advanced Programming Language Courses

ITSC	1356	Shell Programming (SL 120)	3
ITSC	1456	Shell Programming (SL 120)	4
ITSE	1356	Introduction to XML	3
ITSE	1491	Special Topics in Computer Programming	4
ITSE	2354	Advanced Oracle PL/SQL	3
ITSE	2356	Oracle Database Administration I	3
ITSE	2358	Oracle Database Administration II	3
ITSE	2402	Intermediate Web Programming	4
ITSE	2409	Database Programming	4
ITSE	2413	Web Authoring	4
ITSE	2429	Oracle Network Administration and Performance Tuning	4
ITSE	2431	Advanced C++ Programming	4
ITSE	2435	Advanced RPG Programming	4
ITSE	2437	Assembly Language Programming	4
ITSE	2439	Advanced Windows Programming Using C++	4
ITSE	2443	Advanced Windows Programming	4
ITSE	2447	Advanced Database Programming	4
ITSE	2449	Advanced Visual BASIC Programming	4
ITSE	2451	Advanced COBOL Programming	4
ITSE	2454	Advanced Oracle SQL	4
ITSE	2455	Advanced C Programming	4
ITSE	2456	Oracle Database Administration I	4
ITSE	2457	Advanced Object-Oriented Programming	4
ITSE	2458	Oracle Database Administration II	4
ITSE	2459	Advanced Computer Programming	4
INEW	2434	Advanced Web Page Programming	4
INEW	2438	Advanced JAVA Programming	4
BCIS	2431	Advanced Programming in Visual Basic	4
COSC	1437	Programming Fundamentals II	4
COSC	2415	Advanced Computer Science and Programming	4
COSC	2425	Computer Organization and Machine Language	4
COSC	2430	Programming II	4

(continued on next page)

COSC	2436	Programming Fundamentals III	4
COSC	2437	Programming a Microsoft SQL Server Database	4
IMED	2415	Web Page Design II	4

List C - Operating System Courses

ITSC	1352	Solaris Operating Environment 8 Systems Administrations II (SA-288)	3
ITSC	1354	Solaris Operating Environment 8 Systems Administrations (SA-238)	3
ITSC	1405	Introduction to PC Operating Systems	4
ITSC	1407	UNIX Operating System I	4
ITSC	1411	AS/400 Operating System I	4
ITSC	1421	PC Operating Systems - Windows	4
ITSC	1447	UNIX System Administration II	4
ITSC	1452	Solaris Operating Environment 8 Systems Administrations II (SA-288)	4
ITSC	1454	Solaris Operating Environment 8 Systems Administrations (SA-238)	4
ITSC	1458	UNIX System Administration I	4
ITSC	2437	UNIX Operating System II	4
ITSC	2442	AS/400 Operating System II	4
ITMC	1419	Installing and Administering Microsoft Windows Server Operating Systems	4
ITMC	1441	Implementing Microsoft Windows Professional and Server	4
ITMC	1442	Implementing Microsoft Windows Network Infrastructure	4
ITMC	1458	Supporting Microsoft Windows Client Network Operating Systems	4

COMPUTER INFORMATION TECHNOLOGY -- SOFTWARE PROGRAMMER/ DEVELOPER ASSOCIATE

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Richland Only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.PROG.ASSOC

This certificate option is designed to provide advanced skills and knowledge in a primary programming language of choice, introductory skills and knowledge in a second programming language, and additional knowledge in one individually chosen area of Information Technology (database, computer organization, etc.). Graduates will be qualified to work as associates in a technical programming environment.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computers Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
XXXX XXXX	Introductory Programming course - List A*	3-4
MATH 1314	College Algebra **OR**	3
	Higher Math Course	(4-5)
ENGL 1301	Composition I	3
		13-16
SEMESTER II		
XXXX XXXX	Introductory Programming course - List A*	3-4
ITSW 1407	Introduction to Database **OR**	4
Elective	Any ITCC, ITSC, ITSE, ITSW, ITNW, ITMC, INEW, ITSY, BCIS, COSC or CPMT course	(3-4)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking **OR**	(3)
SPCH 1321	Business and Professional Communication	(3)
XXXX XXXX	Advanced Programming Language course-List B**	3-4
		12-15
Minimum Hours Required		25-31

*First in a two-course programming language series

List A - Introductory Programming Courses

ITSC	1413	Internet/Web Page Development	4
ITSC	1329	Fundamental of Solaris 8 Operating Environment (SA-118)	3
ITSC	1429	Fundamental of Solaris 8 Operating Environment (SA-118)	4
ITSE	1345	Introduction to Oracle SQL	3
ITSE	1402	Computer Programming	4
ITSE	1407	Introduction to C++ Programming	4
ITSE	1411	Web Page Programming	4
ITSE	1414	Introduction to RPG Programming	4
ITSE	1418	Introduction to COBOL Programming	4
ITSE	1422	Introduction to C Programming	4
ITSE	1431	Introduction to Visual BASIC Programming	4
ITSE	1445	Introduction to Oracle SQL	4
ITSE	1491	Special Topics in Computer Programming	4
ITSE	2356	Oracle Database Administration I	3
ITSE	2401	Windows Programming Using C++	4
ITSE	2405	Windows Programming	4
ITSE	2409	Database Programming	4
ITSE	2413	Web Authoring	4
ITSE	2417	JAVA Programming	4
ITSE	2421	Object-Oriented Programming	4
ITSE	2456	Oracle Database Administration I	4
BCIS	1431	Programming in Visual Basic	4
COSC	1415	Introduction to Computer Science and Programming	4
COSC	1430	Programming I	4
COSC	1436	Programming Fundamentals I	4
COSC	1437	Programming Fundamentals II	4
ITMC	1403	Querying Microsoft SQL Server with Transact-SQL	4
ITMC	2403	Administering a Microsoft SQL Server Database	4

**Second in a two-course programming language series

List B - Advanced Programming Language Courses

ITSC	1356	Shell Programming (SL 120)	3
ITSC	1456	Shell Programming (SL 120)	4
ITSE	1356	Introduction to XML	3
ITSE	1491	Special Topics in Computer Programming	4
ITSE	2354	Advanced Oracle PL/SQL	3
ITSE	2356	Oracle Database Administration I	3
ITSE	2358	Oracle Database Administration II	3
ITSE	2402	Intermediate Web Programming	4
ITSE	2409	Database Programming	4
ITSE	2413	Web Authoring	4
ITSE	2429	Oracle Network Administration and Performance Tuning	4
ITSE	2431	Advanced C++ Programming	4
ITSE	2435	Advanced RPG Programming	4
ITSE	2437	Assembly Language Programming	4
ITSE	2439	Advanced Windows Programming Using C++	4
ITSE	2443	Advanced Windows Programming	4
ITSE	2447	Advanced Database Programming	4
ITSE	2449	Advanced Visual BASIC Programming	4
ITSE	2451	Advanced COBOL Programming	4
ITSE	2454	Advanced Oracle SQL	4
ITSE	2455	Advanced C Programming	4
ITSE	2456	Oracle Database Administration I	4
ITSE	2457	Advanced Object-Oriented Programming	4
ITSE	2458	Oracle Database Administration II	4
ITSE	2459	Advanced Computer Programming	4
INEW	2434	Advanced Web Page Programming	4
INEW	2438	Advanced JAVA Programming	4
BCIS	2431	Advanced Programming in Visual Basic	4
COSC	1437	Programming Fundamentals II	4
COSC	2415	Advanced Computer Science and Programming	4
COSC	2425	Computer Organization and Machine Language	4
COSC	2430	Programming II	4
COSC	2436	Programming Fundamentals III	4
COSC	2437	Programming a Microsoft SQL Server Database	4
IMED	2415	Web Page Design II	4

COMPUTER INFORMATION TECHNOLOGY -- SQL SERVER

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Cedar Valley, El Centro, Mountain View, North Lake and Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.SQL

This Certificate provides students with the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server™.

Prerequisite: Basic understanding of personal computer and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by designed Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITMC 1401	Microsoft Windows Network and Operating Systems Essentials	4
ITMC 1441	Implementing Microsoft Windows Professional and Server	4
	OR	
ITMC 1419	Installing and Administering Microsoft Windows Server Operating Systems **AND**	(4)
ITMC 1458	Supporting Microsoft Windows Client Network Operating Systems	(4)
ITSE 2409	Database Programming **OR**	4
ITMC 1403	Querying Microsoft SQL Server with Transact-SQL	(4)
		12-16
SEMESTER II		
ITMC 1442	Implementing a Microsoft Windows Network Infrastructure	4
ITMC 2403	Administering a Microsoft SQL Server Database	4
ITMC 2437	Programming a Microsoft SQL Server Database	4
		12
Minimum Hours Required		24-28

COMPUTER INFORMATION TECHNOLOGY -- UNIX

Effective June 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before June 1, 2007. New students should not attempt to pursue this award.

Brookhaven, North Lake and Richland (see above) only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CIT.UNIX.04

This associate degree program will provide training and education for individuals interested in developing their knowledge and skills as a UNIX user or system administrator. The objectives of the program are to provide instruction in both fundamental and advanced UNIX skills and to help the student acquire general knowledge about UNIX design and operation. Various versions of UNIX such as Solaris and/or Linux may be covered during the course of the program to better prepare students for real-world situations. The UNIX AAS degree includes all topics covered in the UNIX System Administrator certificate along with additional course work designed to provide a broad base of computer experience.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401, for those who demonstrate current computer literacy.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computers Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSC 2435	Application Problem Solving	4
ITSC 1405	Introduction to PC Operating Systems **OR**	4
ITSC 1417	PC Operating Systems – DOS	(4)
ENGL 1301	Composition I	3
		15
SEMESTER II		
ITSC 1407	UNIX Operating System I	4
ITSC 1425	Personal Computer Hardware	4
ITSC 1402	Computer Control Language[1]	4
ITNW 1421	Introduction to Networking	4
SPCH 1311	Introduction to Speech Communication	3
		19
SEMESTER III		
ITSC 2437	UNIX Operating System II	4
MATH 1414	College Algebra **OR**	4
MATH 2342	Introductory Statistics	(3)
Elective	Any ITCC, ITSC, ITSE, ITSW, ITSY, ITNW, ITMC, INEW, BCIS, COSC or CPMT course	3-4
+Elective	Humanities/Fine Arts	3-4
		13-16
SEMESTER IV		
ITSC 1458	UNIX System Administration I	4
Elective	Any ITCC, ITSC, ITSE, ITSW, ITSY, ITNW, ITMC, INEW, BCIS, COSC or CPMT course	3-4
ITSY 1400	Fundamentals of Information Security **OR**	4
ITSY 2442	Incident Response and Handling	(4)
++Elective	Social/Behavioral Science	3
		14-15
Minimum Hours Required		61-65

+Elective - must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

++Elective - must be selected from the DCCCD Core Curriculum for Social/Behavioral Science.

[1]Shell Scripting

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER INFORMATION TECHNOLOGY – UNIX SYSTEM ADMINISTRATOR

Richland only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CIT.UNIX.ADM

This associate degree program is designed to provide a basic understanding of the duties associated with an UNIX System Administrator. Courses will assist the graduate in preparation for the Sun Certified System Administrator credential (SCSA). Students must complete the following Solaris courses in sequence: ITSC 1429, ITSC 1456, ITSC 1454, and ITSC 1452.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computers Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSC 2435	Application Problem Solving	4
ITSC 1405	Introduction to PC Operating Systems	4
ITSC 1429	Fundamentals of Solaris 8 Operating Environment (SA-118)	4
		16
SEMESTER II		
ENGL 1301	Composition I	3
ITSC 1425	Personal Computer Hardware	4
ITSC 1456	Shell Programming (SL-120)	4
ITNW 1421	Introduction to Networking	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		18
SEMESTER III		
ITSC 1454	Solaris Operating Environment 8 Systems Administrations (SA-238)	4
MATH 1414	College Algebra **OR**	4
MATH 2342	Introductory Statistics	(3)
Elective	Any ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, ITSY, INEW, BCIS, COSC, or CPMT course	3-4
+Elective	Humanities/Fine Arts	3-4
		13-16
SEMESTER IV		
ITSC 1452	Solaris Operating Environment 8 Systems Administrations II (SA-288)	4
Elective	Any ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, ITSY, INEW, BCIS, COSC, or CPMT course	3-4
ITSY 1400	Fundamentals of Information Security	4
++Elective	Social/Behavioral Science	3
		14-15
Minimum Hours Required		61-65

+Elective - must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

++Elective - must be selected from the DCCCD Core Curriculum for Social/Behavioral Science.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER INFORMATION TECHNOLOGY -- UNIX ADMINISTRATOR

Effective June 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before June 1, 2007. New students should not attempt to pursue this award.

Brookhaven, North Lake and Richland (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.UNIX.ADMIN.04

This certificate option prepares the student to be a UNIX system administrator. Students will learn basic and advanced hands-on skills associated with the UNIX user interface environment, file system structure, account setup and maintenance, system security, shell scripting, and other general tasks associated with day-to-day UNIX management operations in both standalone and networked systems. Multiple versions of UNIX such as Solaris and/or Linux may be presented to better enable student success in varying commercial environments.

Course(s) may be substituted for ITSC 1401, BCIS 1405, or COSC 1401 for those who demonstrate current computer literacy.

		CREDIT HOURS
PREREQUISITES		
ITSC 1401	Introduction to Computers **OR**	4
BCIS 1405	Business Computer Applications **OR**	(4)
COSC 1401	Microcomputer Concepts and Applications	(4)
ITSC 2435	Application Problem Solving	4
ITNW 1421	Introduction to Networking	4
		12
SEMESTER I		
ITSC 1407	UNIX Operating System I	4
		4
SEMESTER II		
ITSC 2437	UNIX Operating System II	4
		4
SEMESTER III		
ITSC 1458	UNIX System Administration	4
Elective	Any ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, INEW, ITSY, BCIS, COSC or CPMT course	3-4
		7-8

Minimum Hours Required 27-28

COMPUTER INFORMATION TECHNOLOGY -- UNIX SYSTEM ADMINISTRATOR

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.UNIX.RLC

This certificate is designed to provide a basic understanding of the duties associated with an UNIX System Administrator. Courses will assist the graduate in preparation for the Sun Certified System Administrator credential (SCSA). Students must complete the following Solaris courses in sequence: ITSC 1429, ITSC 1456, ITSC 1454, and ITSC 1452.

Prerequisites: Basic understanding of terminology and operating systems used with computers as obtained in ITSC 1401, BCIS 1405, or COSC 1401 or equivalent experiences approved by designated Information Technology personnel.

		CREDIT HOURS
PREREQUISITES		
ITSC 2435	Application Problem Solving	4
ITNW 1421	Introduction to Networking	4
		8
SEMESTER I		
ITSC 1429	Fundamentals of Solaris 8 Operating Environment (SA-118)	4
ITSC 1456	Shell Programming (SL-120)	4
		8
SEMESTER II		
ITSC 1454	Solaris Operating Environment 8 Systems Administrations (SA-238)	4
		4
SEMESTER III		
ITSC 1452	Solaris Operating Environment 8 Systems Administrations II (SA-288)	4
Elective	Any ITSE, ITSW, ITSC, ITNW, ITCC, ITMC, INEW, ITSY, BCIS, COSC or CPMT course	3-4
		7-8

Minimum Hours Required 27-28

COMPUTER INFORMATION TECHNOLOGY -- UNIX

Brookhaven only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CIT.UNIX

This sequence is for students interested in learning the UNIX Operating System up to an intermediate level. Topics covered include UNIX commands, file system structure, system editors and simple shell programming.

		CREDIT HOURS
SEMESTER I		
ITSC 1407	UNIX Operating System I	4
		4
SEMESTER II		
ITSC 2437	UNIX Operating System II	4
		4
Minimum Hours Required		8

COMPUTER INFORMATION TECHNOLOGY -- VISUAL BASIC PROGRAMMING

Brookhaven only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CIT.VISUAL

This sequence is for students who wish to learn Visual BASIC programming. It includes instruction and practice in writing, executing, testing and debugging Visual BASIC programs on a personal computer. Topics such as forms, controls and interfacing with Windows applications are covered in detail.

		CREDIT HOURS
SEMESTER I		
ITSE 1431	Introduction to Visual BASIC Programming	4
		4
SEMESTER II		
ITSE 2449	Advanced Visual BASIC Programming	4
		4
Minimum Hours Required		8

COMPUTER INFORMATION TECHNOLOGY -- VISUAL STUDIO DEVELOPER

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.VISUAL.ST

This Certificate provides programmers with skills to evaluate Microsoft .NET tools and technologies, primarily Microsoft Visual Studio® .NET. The courses cover resources for creating applications, components, and services built on the .NET Framework.

Prerequisite: Prior programming language, preferably Visual Basic, C++, or C#.

		CREDIT HOURS
SEMESTER I		
ITSE 1431	Introduction to Visual BASIC Programming[1] **OR**	4
ITSE 2459	Advanced Computer Programming[2] **OR**	(4)
ITSE 1407	Introduction to C++ Programming[3]	(4)
ITSE 1346	Database Theory and Design	3
ITSE 2402	Intermediate Web Programming[4]	4
		11
SEMESTER II		
ITSE 1356	Introduction to XML	3
ITSE 1402	Computer Programming[5]	4
INEW 2430	Comprehensive Software Project I: Planning and Design[6]	4
		11
Minimum Hours Required		22

[1]Visual Basic.NET
[2]Visual C#.NET
[3]Visual C++
[4]ASP.NET
[5]ADO.NET
[6]Building Interactive Website with Database and Installation

COMPUTER INFORMATION TECHNOLOGY -- WEB DEVELOPER SPECIALIST

Effective June 1, 2003, this award has been deactivated for El Centro College. For current students, the award will be closed on or before June 1, 2006. New students should not attempt to pursue this award.

Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland (see above)

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.CIT.WEB.DEVEL.04

This certificate option trains the student to design and develop web pages and web business applications. It prepares the student to enter the workforce as a member of the company web development team for Internet/Intranet applications.

Prerequisite: Basic understanding of personal computer and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by designated Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITSC 2435	Application Problem Solving	4
ITNW 1437	Introduction to the Internet	4
ITXX 14XX	Introductory Web Course – List A	4
ITNW 1421	Introduction to Networking	4
ENGL 1301	Composition I	3
		19
SEMESTER II		
ITSE 1431	Introduction to Visual BASIC Programming **OR**	4
ITSE 1407	Introduction to C++ Programming	(4)
ITSW 1407	Introduction to Database	4
IXXX XXXX	Intermediate Web Course – List B	3-4
ITSC 1405	Introduction to PC Operating Systems **OR**	4
ITSC 1407	UNIX Operating Systems I	(4)
SPCH 1311	Introduction to Speech Communication	3
		18-19
SEMESTER III		
XXXX XXXX	Advanced Web Course – List C	3-4
XXXX XXXX	Web Elective – List D (2 courses)	6-8
ITSE 2417	JAVA Programming	4
IMED 2409	Internet Commerce	4
		17-20

Minimum Hours Required 54-58

List A			
ITSC	1413	Internet/Web Page Development**	4
ITSE	1411	Web Page Programming**	4
List B			
ITSE	2402	Intermediate Web Programming**	4
IMED	2415	Web Page Design II	4
ITSC	1413	Internet/Web Page Development**	4
ITSE	1356	Introduction to XML	3
ITSE	1359	Introduction to Scripting Languages**	3
List C			
ITSE	2413	Web Authoring**	4
INEW	2434	Advanced Web Page Programming**	4
ITSC	1413	Internet/Web Page Development**	4
ITSE	2402	Intermediate Web Programming**	4
ITSE	1356	Introduction to XML	3
List D			
ITNW	2454	Internet/Intranet Server	4
IMED	2349	Internet Communications	3
ITSE	1491	Special Topics in Computer Programming	4
ITSW	1410	Introduction to Presentation Graphics Software	4
INEW	2438	Advanced JAVA Programming	4
ITSE	2449	Advanced Visual BASIC Programming	4
ITSC	1413	Internet/Web Page Development**	4
ITSE	2402	Intermediate Web Programming**	4
ITSE	2413	Web Authoring**	4
INEW	2434	Advanced Web Page Programming**	4
ITSE	2431	Advanced C++ Programming	4
ARTC	1302	Digital Imaging I	3
ARTC	1391	Special Topics in Graphic Design, Commercial Art and Illustration	3
ITSE	1356	Introduction to XML	3
ITSE	1359	Introduction to Scripting Languages**	3

**Course may be repeated for credit when topics change.

COMPUTER INFORMATION TECHNOLOGY -- WEB PRODUCTION AND DESIGN

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Eastfield and North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CIT.WEB.PROD

This degree is designed to provide students with technical and artistic skills required to use the web as an interactive communications medium. Students pursuing this degree will learn basic and advanced page design skills, digital imaging techniques suitable for the web, basic client- and server-side programming methods (including form validation and shopping carts), problem-solving skills, interpersonal workgroup skills, and techniques for delivering video and audio over the Internet.

		CREDIT HOURS
SEMESTER I		
ARTS 1311	2D Design	3
ENGL 1301	Composition I	3
ITSC 2435	Application Problem Solving	4
ITSC 1413	Internet/Web Page Development **OR**	4
CPMT 1408	Fundamentals of Web Design	(4)
+Elective	Social/Behavioral Science	3
		17
SEMESTER II		
MATH 1332	College Mathematics I **OR**	3
MATH 1414	College Algebra	(4)
IMED 2415	Web Page Design II	4
ARTC 1402	Digital Imaging I	4
ITSW 1307	Introduction to Database **OR**	3
ITSW 1407	Introduction to Database	(4)
		14-16
SEMESTER III		
ITNW 1274	Managing Web Site Development Projects	2
MRKG 1311	Principles of Marketing	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
ITSE 1411	Web Page Programming[1]	4
INEW 1470	Web Animation and Interactivity	4
		16
SEMESTER IV		
ITSE 2402	Intermediate Web Programming[2]	4
IMED 2409	Internet Commerce	4
ITSW 1410	Introduction o Presentation Graphics Software[3]	4
++Elective	Web Design Elective	3-4
		15-16
Minimum Hours Required		62-65

+Elective must be selected from the DCCCD Core Curriculum for Social/Behavioral Science.

+Web Design Elective:

ITNW	2454	Internet/Intranet Server	4
INEW	2434	Advanced Web Page Programming[4]	4
ITSE	2413	Web Authoring	4
ITSW	1310	Introduction to Presentation Graphics Software	3
ITNW	2354	Internet/Intranet Server	3
INEW	2334	Advanced Web Page Programming	3

[1] Web Page Programming covers client-side programming techniques. Languages will vary but may include JavaScript, ActionScript, or other programming languages.

[2] Intermediate Web Programming covers server-side programming techniques. Languages will vary but may include ASP, ASP.NET, PHP, ColdFusion, or other languages.

[3] Introduction to Presentation Graphics Software (Local title: Web Multimedia). Course will cover how to develop and integrate graphics, video, sound, and PowerPoint presentations into web pages and web applications.

[4] Advanced Web Page Programming covers advanced topics in server- or client-side programming. Languages will vary but may include ASP, ASP.NET, PHP, ColdFusion, or other languages.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

COMPUTER INFORMATION TECHNOLOGY -- BASIC WEB PRODUCTION

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Eastfield and North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CIT.BASIC.WEB

This certificate will provide education and training for individuals who would like to explore basic techniques of web design in order to use the Internet as a communications medium. This program introduces students to Web Design through basic and advanced web design techniques, introductory web programming, digital imaging for the web, and design principals. It is available on-campus or online. All of the courses in this certificate are applicable to the Associate in Applied Sciences Degree in Web Programming and Design.

		CREDIT HOURS
SEMESTER I		
ARTS 1311	2D Design	3
ITSC 2435	Application Problem Solving	4
ITSC 1413	Internet/Web Page Development	
	OR	4
CPMT 1408	Fundamentals of Web Design	(4)
		11
SEMESTER II		
IMED 2415	Web Page Design II	4
ARTC 1402	Digital Imaging I	4
ITSE 1411	Web Page Programming[1]	4
+Elective	Web Design Elective	3-4
		15-16
Minimum Hours Required		26-27

+Web Design Elective:

ITSW	1410	Introduction to Presentation Graphics Software[2]	4
ITNW	2454	Internet/Intranet Server	4
ITSW	1307	Introduction to Database	3
ITSW	1407	Introduction to Database	4
INEW	1470	Web Animation and Interactivity	4
ITSW	1310	Introduction to Presentation Graphics Software	3
ITNW	2354	Internet/Intranet Server	3
INEW	2334	Advanced Web Page Programming	3

[1] Web Page Programming covers client-side programming techniques. Languages will vary but may include JavaScript, ActionScript, or other programming languages.

[2] Introduction to Presentation Graphics Software (Local title: Web Multimedia). Course will cover how to develop and integrate graphics, video, sound, and PowerPoint presentations into web pages and web applications.

COMPUTER INFORMATION TECHNOLOGY -- WEB PRODUCTION AND DESIGN

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Eastfield and North Lake only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.CIT.WEB.PROD

This certificate will provide education and training for individuals who would like to explore basic techniques of web design in order to use the Internet as an interactive communications medium. This program introduces students to Web Design through basic and advanced web design techniques, introductory web programming, digital imaging for the web, web/database operations (such as shopping carts), and basic design principals. It is available on-campus or online. All of the courses in this certificate are applicable to the Associate in Applied Sciences Degree in Web Programming and Design.

		CREDIT HOURS
SEMESTER I		
ARTS 1311	2D Design	3
ENGL 1301	Composition I	3
ITSC 2435	Application Problem Solving	4
ITSC 1413	Internet/Web Page Development	
	OR	4
CPMT 1408	Fundamentals of Web Design	(4)
		14
SEMESTER II		
IMED 2415	Web Page Design II	4
ARTC 1402	Digital Imaging I	4
ITSE 1411	Web Page Programming[1]	4
ITSW 1307	Introduction to Database **OR**	3
ITSW 1407	Introduction to Database	(4)
		15-16
SEMESTER III		
ITNW 1274	Managing Web Site Development Projects	2
ITSE 2402	Intermediate Web Programming[2]	4
SPCH 1311	Introduction to Speech Communication	
	OR	3
SPCH 1315	Fundamentals of Public Speaking	(3)
+Elective	Web Design Elective	3-4
		12-13
Minimum Hours Required		41-43

+Web Design Elective:

ITSW	1410	Introduction to Presentation Graphics Software[3]	4
ITNW	2454	Internet/Intranet Server	4
INEW	2434	Advanced Web Page Programming[4]	4
INEW	1470	Web Animation and Interactivity	4
ITSW	1310	Introduction to Presentation Graphics Software	3
ITNW	2354	Internet/Intranet Server	3
INEW	2334	Advanced Web Page Programming	3

[1] Web Page Programming covers client-side programming techniques. Languages will vary but may include JavaScript, ActionScript, or other programming languages.

[2] Intermediate Web Programming covers server-side programming techniques. Languages will vary but may include ASP, ASP.NET, PHP, ColdFusion, or other languages.

[3] Introduction to Presentation Graphics Software (Local title: Web Multimedia). Course will cover how to develop and integrate graphics, video, sound, and PowerPoint presentations into web pages and web applications.

[4] Advanced Web Page Programming covers advanced topics in server- or client-side programming. Languages will vary but may include ASP, ASP.NET, PHP, ColdFusion, or other languages.

CONSTRUCTION MANAGEMENT AND TECHNOLOGY

North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CONSTRUCT.MAN.02

Few careers provide for the opportunity to leave a legacy. Construction Management lets you say "I built that!". CMs provide leadership to the project, often from initial concept to completion.

Construction managers work in all phases of the construction business - public and private owners; small multi-family projects to the largest of skyscrapers and industrial projects; rural highways to major interstates. Whatever the project, CMs keep the project on track and within budget. Working closely with architects, engineers, owners and the various contractors on a job, the construction manager's duties are varied, challenging and rewarding, both emotionally and financially. Optionally, graduates can go into estimating, field engineering, project scheduling and other management levels, both at the general contractor level and for specialty contractors such as mechanical, plumbing and electrical contractors.

Fully accredited by the American Council for Construction Education, North Lake's Construction Management graduates are in demand in Texas with employment prospects throughout the country. Further educational opportunities allow program graduates to seek both Bachelor and Master's degrees in the field.

Roger Wilson, Program Coordinator, is available to help you structure your degree plan, guide you through course selection, and answer your question. You may contact him at (Rwilson@dcccd.edu).

		CREDIT HOURS
SEMESTER I		
CNBT 1301	Introduction to Construction	3
CNBT 1307	Commercial and Industrial Blueprint Reading	3
CNBT 1311	Construction Methods and Materials	3
MATH 1314	College Algebra	3
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER II		
OSHT 1313	Accident Prevention, Inspection and Investigation	3
+++Elective	Lab Science Elective	4
MATH 1316	Plane Trigonometry	3
ITSC 1401	Introduction to Computers	4
ENGL 1301	Composition I	3
		17
SEMESTER III		
CNBT 1302	Mechanical, Plumbing and Electrical Systems in Construction	3
BMGT 1303	Principles of Management	3
++Elective	Any ONE CNBT course	3
++++Elective	Social/Behavioral Science	3
+Elective	Humanities/Fine Arts	3-4
		15-16
SEMESTER IV		
CNBT 1346	Construction Estimating I	3
CNBT 2373	Introduction to Construction Management	3
CNBT 2380	Cooperative Education-Construction/ Building Technology/Technician	3
++Elective	Any TWO CNBT courses	6
		15
Minimum Hours Required		62-63

+Electives--must be selected from the following:

ANTH	2346	Introduction to Anthropology	3
ARTS	1301	Art Appreciation	3
GOVT	2301	American Government	3
HIST	1301	History of the United States **OR**	
HIST	1302	History of the United States	3
HIST	2311	Western Civilization **OR**	
HIST	2312	Western Civilization	3
HUMA	1301	Introduction to the Humanities	3
PHIL	1301	Introduction to Philosophy	3
SPAN	1411	Beginning Spanish	4

++Elective – a total of 9 credit hours must be selected from either or both options listed below:

GENERAL CONTRACTORS OPTION:

CNBT	1342	Building Codes and Inspections	3
CNBT	1344	Construction Material and Testing	3
CNBT	1391	Special Topics in Construction/Building Technology/Technician	3
CNBT	2304	Construction Materials, Methods, and Equipment II	3
CNBT	2332	Project Scheduling	3
CNBT	2335	Computer-Aided Construction Scheduling	3
CNBT	2315	Legal Responsibilities and Specifications for Contractors	3
CNBT	2371	Estimating for General/Specialty Commercial Contractors	3
DFTG	1309	Basic Computer-Aided Drafting	3
ENTC	1343	Statics	3
ENTC	1323	Strength of Materials	3
SRVY	1301	Introduction to Surveying	3
SRVY	1309	Surveying Measurement Practice	3

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MECHANICAL, ELECTRICAL, PLUMBING CONTRACTOR OPTION:

CNBT	1342	Building Codes and Inspections	3
CNBT	2332	Project Scheduling	3
CNBT	2335	Computer-Aided Construction Scheduling	3
CNBT	2340	Mechanical, Electrical and Plumbing Systems for Buildings II	3
CNBT	2378	Estimating Commercial Electrical Construction	3
CNBT	2379	Estimating Commercial Mechanical Construction	3
DFTG	1309	Basic Computer-Aided Drafting	3
DFTG	1333	Mechanical Drafting	3
DFTG	2334	Industrial Drafting Applications	3
ENTC	1343	Statics	3
ENTC	1323	Strength of Materials	3

+++Lab Science Elective – students must take any four-credit science course selected from the DCCCD approved list for lab sciences.

++++Elective – must be any three-credit course selected from the DCCCD approved list for Social/Behavioral Science.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

CONSTRUCTION TECHNOLOGY

North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CONSTRUCT.TECH

Students interested in a high demand career that is fast-paced with job opportunities--the Construction Industry is for you. The Construction Technology program is designed to develop the hands-on skills and technical knowledge necessary so that a graduate may advance in career paths appropriate to their own interests and abilities. Some of the exciting career options include: field engineer, estimator, building inspection, insurance and manufacturing representative, field supervisor, sub-contractor, and builder in either commercial or residential construction/home building. A graduate will have also covered skills in other areas such as planning, and organization, problem solving and decision making, related communication, and business and human relations.

		CREDIT HOURS
SEMESTER I		
CNBT 1170	Basic Construction Safety	1
CNBT 1301	Introduction to Construction	3
+Specialty Construction Technology Track Option		6
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra **OR**	(4)
TECM 1341	Technical Algebra	(3)
SPCH 1311	Introduction to Speech Communication	3
		16-17
SEMESTER II		
ARCT 1302	Architectural Materials and Methods of Construction **OR**	3
CNBT 1311	Construction Methods and Materials	(3)
CNBT 1305	Residential and Light Commercial Blueprint Reading **OR**	3
CNBT 1307	Commercial and Industrial Blueprint Reading	(3)
+Specialty Construction Technology Track Option		3
ENGL 1301	Composition I	3
++Elective	Humanities/Fine Arts	3
		15
SEMESTER III		
+Specialty Construction Technology Track Option		6
BMGT 1303	Principles of Management	3
+++Elective	Social/Behavioral Science	3
*Elective	Natural Science	3-4
		15-16
SEMESTER IV		
+Specialty Construction Technology Track Option		9
CNBT 2346	Construction Management III **OR**	3
CNBT 2373	Introduction to Construction Management	(3)
CNBT 2380	Cooperative Education – Construction/Building Technology/ Technician** **OR**	3
CNBT 2377	Building and Contracting #	(3)
		15

Minimum Hours Required 61-63

+Specialty Construction Technology Track Option -- Students must complete 24 total credit hours in a specialty Construction Track Option as cited below:

CARPENTRY – COMMERCIAL

CRPT	1329	Introduction to Carpentry	3
CRPT	1325	Forms and Foundations I	3
CRPT	1349	Forms and Foundations II	3
CRPT	2343	Specialty Wall Systems	3
CRPT	2339	Specialty Exterior Finish Systems	3
CRPT	2341	Specialty Interior Finish Systems	3
CRPT	1345	Conventional Interior Finish Systems	3
***Electives		Construction Technology Elective	3
			24

CARPENTRY – RESIDENTIAL

CRPT	1329	Introduction to Carpentry	3
CRPT	1325	Forms and Foundations I	3
CRPT	1315	Conventional Wall Systems	3
CRPT	1311	Conventional Roof Systems	3
CRPT	1341	Conventional Exterior Finish Systems	3
CRPT	1345	Conventional Interior Finish Systems	3
***Electives		Construction Technology Electives	6
			24

*****Electives for Carpentry-Commercial and Carpentry-Residential Options Only.**

CONSTRUCTION TECHNOLOGY ELECTIVES:

CNSE	1321	Job Site Layout and Development	3
CNBT	1342	Building Codes and Inspections	3
WDWK	1313	Cabinet Making	3
ENTC	1323	Strength of Materials **OR**	3
ENTC	1343	Statics	(3)
CRPT	2331	Advanced Roof Systems	3
CRPT	2347	Stairs	3
CRPT	1319	Engineered Roof Systems	3
CNBT	1302	Mechanical, Plumbing, and Electrical Systems In Construction	3
CNBT	1344	Construction Materials Testing	3
CNBT	1346	Construction Estimating I	3
CNBT	1391	Special Topics in Construction/Building Technology/Technician	3
CNBT	2304	Construction Materials, Methods, and Equipment II	3
CNBT	2315	Legal Responsibilities and Specifications for Contractors	3
CNBT	2332	Project Scheduling	3
CNBT	2335	Computer-Aided Construction Scheduling	3
CNBT	2342	Construction Management I	3
CNBT	2344	Construction Management II	3
CNBT	2378	Estimating Commercial Electrical Construction	3
CNBT	2379	Estimating Commercial Mechanical Construction	3
CNBT	2371	Estimating for General/Specialty Commercial Contractors	3
DFTG	1309	Basic Computer-Aided Drafting	3
DFTG	1333	Mechanical Drafting	3

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CONSTRUCTION TECHNOLOGY ELECTIVES (continued):

OSHT	1313	Accident Prevention, Inspection and Investigation	3
SRVY	1301	Introduction to Surveying	3
SRVY	1309	Surveying Measurement Practice	3

CRAFT OPTIONS:

ELECTRICAL – COMMERCIAL

ELPT	1321	Introduction to Electrical Safety and Tools	3
ELPT	1311	Basic Electrical Theory	3
HART	1301	Basic Electricity for HVAC	3
ELPT	1320	Fundamentals of Electricity II	3
ELPT	1345	Commercial Wiring	3
ELTN	1341	Basic Motor Controls	3
ELPT	1357	Industrial Wiring	3
ELTN	1343	Electrical Troubleshooting	3
			24

FIELD ENGINEERING

NOTE: Student must complete 24 total credit hours under this option. 18 of the 24 credit hours are listed below. The 6 additional credit hours must be chosen from the Construction Technology Elective section.

SRVY	1315	Surveying Calculations I	3
SRVY	1301	Introduction to Surveying	3
CNBT	1375	Field Engineering I	3
SRVY	1309	Surveying Measurement Practice	3
SRVY	1313	Plane Surveying	3
CNBT	2375	Field Engineering II	3
			18

GLAZING

NOTE: Student must complete 24 total credit hours under this option. 18 of the 24 credit hours are listed below. The 6 additional credit hours must be chosen from the Construction Technology Elective section.

GLZG	1370	Glazing I	3
GLZG	1371	Glazing II	3
GLZG	1372	Glazing III	3
GLZG	2370	Glazing IV	3
GLZG	2371	Glazing V	3
GLZG	2372	Glazing VI	3
			18

HVAC – COMMERCIAL

HART	1307	Refrigeration Principles	3
HART	1301	Basic Electricity for HVAC	3
CBFM	2317	Mechanical Maintenance	3
HART	1303	Air Conditioning Control Principles	3
HART	2336	Air Conditioning Troubleshooting	3
HART	2341	Commercial Air Conditioning	3
CBFM	2311	Building Maintenance II	3
HART	2302	Commercial Air Conditioning System Design	3
			24

MASONRY – COMMERCIAL

NOTE: Student must complete 24 total credit hours under this option. 20 of the 24 credit hours are listed below. The 4 additional credit hours must be chosen from the Construction Technology Elective section.

MBST	1407	Masonry I	4
MBST	1409	Masonry II	4
MBST	2407	Masonry III	4
MBST	2409	Masonry IV	4
MBST	2447	Masonry V	4
			20

PIPEFITTING

NOTE: Student must complete 24 total credit hours under this option. 23 of the 24 credit hours are listed below. The 1 additional credit hour must be chosen from the Construction Technology Elective section.

PFPB	1308	Introduction to Pipefitting	3
PFPB	2301	Pipe Fabrication and Installation I	3
PFPB	2341	Pipe Fabrication and Installation II	3
WLDG	1435	Introduction to Pipe Welding	4
WLDG	1217	Introduction to Layout and Fabrication	2
WLDG	2206	Intermediate Pipe Welding	2
PFPB	2343	Pipe Practices	3
PFPB	2347	Plumbing and Pipefitting Equipment and Safety	3
			23

PLUMBING - COMMERCIAL

PFPB	1313	Introduction to the Plumbing Trade	3
PFPB	1319	Commercial Plumbing I	3
PFPB	2301	Pipe Fabrication and Installation I	3
PFPB	1353	Commercial Plumbing II	3
PFPB	2343	Pipe Practices	3
PFPB	1345	Commercial Construction and Fixture Setting	3
PFPB	1355	Industrial Plumbing	3
PFPB	2347	Plumbing and Pipefitting Equipment and Safety	3
			24

RESIDENTIAL BUILDER/CONTRACTOR

NOTE: Student must complete 24 total credit hours under this option. 15 of the 24 credit hours are listed below. The 9 additional credit hours must be chosen from the Construction Technology Elective section.

CRPT	1325	Forms and Foundations I	3
CRPT	1315	Conventional Wall Systems	3
RELE	1301	Principles of Real Estate	3
BMGT	1301	Supervision	3
BUSI	1301	Introduction to Business	3
			15

SHEET METAL

MCHN	1301	Sheet Metal I	3
MCHN	1349	Sheet Metal II	3
MCHN	1370	Sheet Metal IV	3
MCHN	1371	Sheet Metal V	3
MCHN	1372	Sheet Metal VI	3
MCHN	2370	Sheet Metal VII	3
MCHN	2371	Sheet Metal VIII	3
MCHN	2372	Sheet Metal IX	3
			24

SPRINKLER FITTING

SPFT	1371	Sprinkler Fitter I	3
SPFT	1372	Sprinkler Fitter II	3
SPFT	1373	Sprinkler Fitter III	3
SPFT	1374	Sprinkler Fitter IV	3
SPFT	2370	Sprinkler Fitter V	3
SPFT	2371	Sprinkler Fitter VI	3
SPFT	2372	Sprinkler Fitter VII	3
SPFT	2373	Sprinkler Fitter VIII	3
			24

WELDING

NOTE: Student must complete 24 total credit hours under this option. 14 of the 24 credit hours are listed below. The 10 additional credit hours must be chosen from the Construction Technology Elective section.

WLDG	1323	Welding Safety, Tools, and Equipment	3
WLDG	1307	Introduction to Welding Using Multiple Processes	3
WLDG	1257	Intermediate Shielding Metal Arc Welding (SMAW)	2
WLDG	1234	Introduction to Gas Tungsten Arc (GTAW) Welding	2
WLDG	2213	Intermediate Welding Using Multiple Processes	2
WLDG	2214	Intermediate Welding Using Multiple Processes	2
			14

++Humanities/Fine Arts course: Any three-credit course from the Humanities/Fine Arts DCCCD CORE.

+++Social/Behavioral Science course: Any three-credit course from the Social/Behavioral Science DCCCD CORE.

*Natural Science Elective – Any three- or four-credit course from the DCCCD Natural Science list.

**CNBT 2380, Cooperative Education-Construction/Building Technology/Technician may only be taken in SEMESTER III or IV. Craft specific licensing exam may be substituted for CNBT 2380, Cooperative Education -Construction/Building Technology/Technician.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

CONSTRUCTION TECHNOLOGY

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.CONSTRUCT.TECH

This is a one-year certificate that provides the student with the technical knowledge and hands-on skills required to work as a craftsperson in one of the following career fields: Carpentry, Electrical Field Engineering, Glazing, HVAC, Masonry, Pipefitting, Plumbing, Residential Builder, Sheet Metal Sprinkler Fitting, and Welding. In addition, the student will cover basic planning and materials estimating, problem solving, and human relations skills.

		CREDIT HOURS
SEMESTER I		
CNBT 1170	Basic Construction Safety	1
CNBT 1301	Introduction to Construction **OR**	3
CNBT 1305	Residential and Light Commercial Blueprint Reading **OR**	(3)
CNBT 1307	Commercial and Industrial Blueprint Reading	(3)
+Specialty Construction Track Option		7-12
		11-16
SEMESTER II		
CNBT 2380	Cooperative Education –Construction/ Building Technology/Technician*	3
+Specialty Construction Track Option		7-12
		10-15
Minimum Hours Required		21-31

+Elective: only one option may be selected from the certificate craft options listed below. Students must complete all of the courses and/or electives listed in the one selected option to receive full credit toward a one-year certificate.

Certificate Craft Options (SELECT ONLY ONE OPTION PER CERTIFICATE):
Carpentry – Commercial
Carpentry – Residential
Electrical – Commercial
Field Engineering
Glazing
HVAC – Commercial Option
Masonry – Commercial
Pipefitting
Plumbing – Commercial
Residential Builder/Contractor
Sheet Metal
Sprinkler Fitting
Welding

+Specialty Construction Track Option -- Students must complete all course work in a specialty Construction Track Option as cited below:

CARPENTRY – COMMERCIAL

CRPT	1329	Introduction to Carpentry	3
CRPT	1325	Forms and Foundations I	3
CRPT	1349	Forms and Foundations II	3
CRPT	2343	Specialty Wall Systems	3
CRPT	2339	Specialty Exterior Finish Systems	3
CRPT	2341	Specialty Interior Finish Systems	3
CRPT	1345	Conventional Interior Finish Systems	3
			21

CARPENTRY – RESIDENTIAL

CRPT	1329	Introduction to Carpentry	3
CRPT	1325	Forms and Foundations I	3
CRPT	1315	Conventional Wall Systems	3
CRPT	1311	Conventional Roof Systems	3
CRPT	1341	Conventional Exterior Finish Systems	3
CRPT	1345	Conventional Interior Finish Systems	3
			18

ELECTRICAL - COMMERCIAL

ELPT	1321	Introduction to Electrical Safety and Tools	3
ELPT	1311	Basic Electrical Theory	3
HART	1301	Basic Electricity for HVAC	3
ELPT	1320	Fundamentals of Electricity II	3
ELPT	1345	Commercial Wiring	3
ELTN	1341	Basic Motor Controls	3
ELPT	1357	Industrial Wiring	3
ELTN	1343	Electrical Troubleshooting	3
			24

FIELD ENGINEERING

SRVY	1315	Surveying Calculations I	3
SRVY	1301	Introduction to Surveying	3
CNBT	1375	Field Engineering I	3
SRVY	1309	Surveying Measurement Practice	3
SRVY	1313	Plane Surveying	3
CNBT	2375	Field Engineering II	3
			18

GLAZING

GLZG	1370	Glazing I	3
GLZG	1371	Glazing II	3
GLZG	1372	Glazing III	3
GLZG	2370	Glazing IV	3
GLZG	2371	Glazing V	3
GLZG	2372	Glazing VI	3
			18

HVAC - COMMERCIAL

HART	1307	Refrigeration Principles	3
HART	1301	Basic Electricity for HVAC	3
CBFM	2317	Mechanical Maintenance	3
HART	1303	Air Conditioning Control Principles	3
HART	2336	Air Conditioning Troubleshooting	3
HART	2341	Commercial Air Conditioning	3
CBFM	2311	Building Maintenance II	3
HART	2302	Commercial Air Conditioning Systems Design	3
			24

MASONRY – COMMERCIAL

MBST	1407	Masonry I	4
MBST	1409	Masonry II	4
MBST	2407	Masonry III	4
MBST	2409	Masonry IV	4
MBST	2447	Masonry V	4
			20

PIPEFITTING

PFPB	1308	Introduction to Pipefitting	3
PFPB	2301	Pipe Fabrication and Installation I	3
PFPB	2341	Pipe Fabrication and Installation II	3
WLDG	1435	Introduction to Pipe Welding	4
WLDG	1217	Introduction to Layout and Fabrication	2
WLDG	2206	Intermediate Pipe Welding	2
PFPB	2343	Pipe Practices	3
PFPB	2347	Plumbing and Pipefitting Equipment and Safety	3
			23

(continued on next page)

PLUMBING - COMMERCIAL

PFPB	1313	Introduction to the Plumbing Trade	3
PFPB	1319	Commercial Plumbing I	3
PFPB	2301	Pipe Fabrication and Installation I	3
PFPB	1353	Commercial Plumbing II	3
PFPB	2343	Pipe Practices	3
PFPB	1345	Commercial Construction and Fixture Setting	3
PFPB	1355	Industrial Plumbing	3
PFPB	2347	Plumbing and Pipefitting Equipment and Safety	3
			24

RESIDENTIAL BUILDER/CONTRACTOR

CRPT	1325	Forms and Foundations I	3
CRPT	1315	Conventional Wall Systems	3
RELE	1301	Principles of Real Estate	3
BMGT	1301	Supervision	3
BUSI	1301	Introduction to Business	3
			15

SHEET METAL

MCHN	1301	Sheet Metal I	3
MCHN	1349	Sheet Metal II	3
MCHN	1370	Sheet Metal IV	3
MCHN	1371	Sheet Metal V	3
MCHN	1372	Sheet Metal VI	3
MCHN	2370	Sheet Metal VII	3
MCHN	2371	Sheet Metal VIII	3
MCHN	2372	Sheet Metal IX	3
			24

SPRINKLER FITTING

SPFT	1371	Sprinkler Fitter I	3
SPFT	1372	Sprinkler Fitter II	3
SPFT	1373	Sprinkler Fitter III	3
SPFT	1374	Sprinkler Fitter IV	3
SPFT	2370	Sprinkler Fitter V	3
SPFT	2371	Sprinkler Fitter VI	3
SPFT	2372	Sprinkler Fitter VII	3
SPFT	2373	Sprinkler Fitter VIII	3
			24

WELDING

WLDG	1323	Welding Safety, Tools, and Equipment	3
WLDG	1307	Introduction to Welding Using Multiple Processes	3
WLDG	1257	Intermediate Shielding Metal Arc Welding (SMAW)	2
WLDG	1234	Introduction to Gas Tungsten Arc (GTAW) Welding	2
WLDG	2213	Intermediate Welding Using Multiple Processes	2
WLDG	2214	Intermediate Welding Using Multiple Processes	2
			14

*CNBT 2380, Cooperative Education - Construction/Building Technology/Technician may only be taken in SEMESTER II. Craft specific licensing exam may be substituted for CNBT 2380, Cooperative Education – Construction/Building Technology/Technician.

CRIMINAL JUSTICE

Cedar Valley, Eastfield, and Mountain View only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CRIMINAL.JUST.03

The curriculum is designed for those with Criminal Justice backgrounds as well as for recent high school graduates interested in preparing for employment in the fields of law enforcement, corrections, probation and parole or private security.

		CREDIT HOURS
SEMESTER I		
CRIJ 1310	Fundamentals of Criminal Law	3
CRIJ 1301	Introduction to Criminal Justice	3
ENGL 1301	Composition I	3
PSYC 2301	Introduction to Psychology	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
		15-16
SEMESTER II		
CRIJ 1306	Court Systems and Practices	3
CRIJ 1307	Crime in America	3
ENGL 1302	Composition II	3
SPCH 1311	Introduction to Speech Communication	3
SOCI 1301	Introduction to Sociology	3
		15
SEMESTER III		
+++Electives		6-8
		6-8
SEMESTER IV		
GOVT 2301	American Government	3
+Electives	Humanities /Fine Arts	3-4
++Electives	Required Support Courses	6-7
Elective	Any Non-Criminal Justice Course	3
		15-17
SEMESTER V		
ITSC 1401	Introduction to Computers	4
+++Electives	Criminal Justice Elective	3-4
PSYC 2314	Developmental Psychology **OR**	3
SOCI 1306	Social Problems	(3)
++Electives	Required Support Courses	3-4
		13-15

Minimum Hours Required 64-71

+Electives - must be selected from the following:

ARTS	1301	Art Appreciation	3
DRAM	1310	Introduction to the Theatre	3
ENGL		2000 Level Literature Course	3
Foreign Language or American Sign Language			4
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3

++ Required Support Courses - must be chosen from the following. Students cannot take more than one cooperative education course during the same semester.

CRIJ	2314	Criminal Investigation	3
CRIJ	2323	Legal Aspects of Law Enforcement	3
CRIJ	2328	Police Systems and Practices	3
CJSA	1382	Cooperative Education-Criminal Justice Studies	3
CJSA	1482	Cooperative Education-Criminal Justice Studies	4
CJSA	2382	Cooperative Education-Criminal Justice Studies	3
CJSA	2482	Cooperative Education-Criminal Justice Studies	4

+++Criminal Justice Electives- must be chosen from the following:

CRIJ	1313	Juvenile Justice System	3
CRIJ	2313	Correctional Systems and Practices	3
CRIJ	2301	Community Resources in Corrections	3
SPAN	1411	Beginning Spanish*	4
SPAN	1412	Beginning Spanish*	4

*American Sign Language may not be substituted for this course.

The following courses are to be taken only after completing thirty semester hours of approved academic courses, to include fifteen hours of the transfer curriculum in Criminal Justice:

CJLE	2420	Texas Peace Officer Procedures	4
CJLE	2421	Texas Peace Officer Law	4
CJLE	2522	Texas Peace Officer Skills	5

A student enrolling in the Criminal Justice program must meet the Texas Commission on Law Enforcement Officer Standards and Education Requirements for minimum standards if you plan to seek employment in the law enforcement field. Licensing: (a) not currently on probation for any criminal offense; (b) not convicted of a Class B misdemeanor in the last six (6) months, or a Class A misdemeanor in the last twelve (12) months, or DWI or DWD in the last two (2) years; (c) never been convicted of a felony.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

TECH PREP ENHANCED SKILLS CERTIFICATES

These Enhanced Skills Certificates are attached to the Associate in Applied Sciences Degree in Criminal Justice and provide the student advanced skills required by the industry to specialize in Human Services or Law Enforcement.

HUMAN SERVICES

Eastfield and Mountain View only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.CRIJ.HUMSER.03

		CREDIT HOURS
SEMESTER I		
SCWK 2331	Abnormal Behavior	3
DAAC 1343	Current Issues	3
CJSA 2382	Cooperative Education-Criminal Justice Studies	3
SOCI 2319	Race, Ethnicity and Community	3
SOCI 2371	Urban Social Problems	3
		15

Minimum Hours Required 15

LAW ENFORCEMENT

Cedar Valley, Eastfield, and Mountain View only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.CRIJ.LAW.ENF.03

		CREDIT HOURS
SEMESTER I		
DAAC 1343	Current Issues	3
FIRT 1303	Fire and Arson Investigation I	3
SCWK 2331	Abnormal Behavior	3
CJSA 2382	Cooperative Education – Criminal Justice Studies	3
		12

Minimum Hours Required 12

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

CRIMINAL JUSTICE

Cedar Valley, Eastfield, and Mountain View only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.CRIM.JUST.O3

This certificate is attached to the Associate in Applied Sciences Degree in Criminal Justice and provides the student the skills and academic requirements necessary to qualify for a law enforcement agency with a minimum 45 semester-hour requirement.

		CREDIT HOURS
SEMESTER I		
CRIJ 1310	Fundamentals of Criminal Law	3
CRIJ 1301	Introduction to Criminal Justice	3
ENGL 1301	Composition I	3
PSYC 2301	Introduction to Psychology	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
		15-16
SEMESTER II		
CRIJ 1306	Court Systems and Practices	3
CRIJ 1307	Crime in America	3
CRIJ 2328	Police Systems and Practices	3
SPCH 1311	Introduction to Speech Communication	3
SOCI 1301	Introduction to Sociology	3
		15
SEMESTER III		
CRIJ 2313	Correctional Systems and Practices	3
CRIJ 2314	Criminal Investigation	3
CRIJ 1313	Juvenile Justice System	3
PSYC 2314	Developmental Psychology	3
GOVT 2301	American Government	3
		15

Minimum Hours Required 45-46

CRIMINAL JUSTICE

Cedar Valley, Eastfield, and Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CRIM.JUST.03

This certificate is attached to the Associate in Applied Sciences Degree in Criminal Justice and provides the student the skills and academic requirements necessary to qualify for a law enforcement agency with a minimum 30 semester-hour requirement.

		CREDIT HOURS
SEMESTER I		
CRIJ 1310	Fundamentals of Criminal Law	3
CRIJ 1301	Introduction to Criminal Justice	3
ENGL 1301	Composition I	3
		9
SEMESTER II		
CRIJ 1306	Court Systems and Practices	3
CRIJ 1307	Crime in America	3
SPCH 1311	Introduction to Speech Communication	3
GOVT 2301	American Government	3
		12
SEMESTER III		
CRIJ 2328	Police System and Practices	3
PSYC 2301	Introduction to Psychology	3
SOCI 1301	Introduction to Sociology	3
		9
Minimum Hours Required		30

CRIMINAL JUSTICE--BASIC CRIMINAL JUSTICE

Cedar Valley, Eastfield, and Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CRIJ.BASIC.CJ

This certificate is attached to the Associates in Applied Sciences Degree in Criminal Justice and the transfer Field of Study degree in Criminal Justice. It is designed for students who would like exposure to the basic elements of the criminal justice system but who also have the intent of transferring to a Baccalaureate degree-granting institution.

		CREDIT HOURS
SEMESTER I		
CRIJ 1310	Fundamentals of Criminal Law	3
CRIJ 1301	Introduction to Criminal Justice	3
		6
SEMESTER II		
CRIJ 1306	Court Systems and Practices	3
CRIJ 2313	Correctional Systems and Practices	3
CRIJ 2328	Police Systems and Practices	3
		9
Minimum Hours Required		15

DIAGNOSTIC MEDICAL SONOGRAPHY

El Centro only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.DM.SONOGRAPHY.03

The Diagnostic Medical Sonography program prepares the student to function as a diagnostic medical sonographer.

The diagnostic medical sonographer performs sonography examinations using high frequency sound waves to visualize soft tissue structures, including the gall bladder, kidneys, pregnant uterus and other organs as requested by the physician.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208: Telephone number 312.553.9355) and (JRC-DMS, 2025 Woodlane Dr. St Paul, Minn. 55125; Telephone number 651.731.7244) in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, rank ordering by grade point, interviews and recommendation letters, and completion of all requirements for admission as a full-time student to the college. Contact the Assessment Center at El Centro College to sign up for the assessment tests and, Health Occupations Admissions to receive an information packet.

		CREDIT HOURS
PREREQUISITES:		
BIOL 2401	Anatomy and Physiology I **OR**	4
SCIT 1407	Human Anatomy and Physiology I	(4)
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
		10
SEMESTER I		
BIOL 2402	Anatomy and Physiology II **OR**	4
SCIT 1408	Human Anatomy and Physiology II	(4)
PSYC 2301	Introduction to Psychology	3
HPRS 1204	Basic Health Profession Skills	2
HPRS 1202	Wellness and Health Profession	2
HPRS 2231	General Health Professions Management	2
		13
SEMESTER II		
SPCH 1311	Introduction to Speech Communication	3
+Elective	Humanities/Fine Arts	3
HPRS 1291	Special Topics in Health Professions and Related Sciences, Other	2
HPRS 2300	Pharmacology for Health Professions	3
HPRS 2201	Pathophysiology	2
		13
SEMESTER III		
DMSO 2343	Advanced Ultrasound Physics	3
		3
SEMESTER IV		
DMSO 1351	Sonographic Cross Sectional Anatomy	3
DMSO 1366	Practicum (or Field Experience)-Diagnostic Medical Sonography	3
DMSO 1405	Sonography of Abdominopelvic Cavity	4
		10
SEMESTER V		
DMSO 2170	Ultrasound Advanced Topics	1
DMSO 2405	Sonography of Obsterics/ Gynecology	4
DMSO 2366	Practicum (or Field Experience) - Diagnostic Medical Sonography	3
DMSO 1355	Sonographic Pathophysiology	3
		11
SEMESTER VI		
DMSO 2262	Clinical - Diagnostic Medical Sonography	2
DMSO 2253	Sonography of Superficial Structures	2
		4
SEMESTER VII		
DMSO 2263	Clinical - Diagnostic Medical Sonography	2
		2
SEMESTER VIII		
DMSO 2345	Advanced Sonography Practices	3
DMSO 2367	Practicum (or Field Experience) - Diagnostic Medical Sonography	3
		6
Minimum Hours Required		72

+ Humanities/Fine Arts Elective - must be selected from any 3 credit hour DCCCD Humanities/Fine Arts CORE list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

DIAGNOSTIC MEDICAL SONOGRAPHY

El Centro only

(Advanced Technical Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ATC.DM.SONOGRAPHY.03

The Diagnostic Medial Sonography Certificate Option is for students having at least a previous Associate Degree in a designated allied health field or a B.S. degree with a major in a science discipline. Potential students will be considered on an individual basis to determine if they have an adequate background in anatomy and physiology, math and physics. Upon completion, an Advanced Technical Certificate will be awarded.

The diagnostic medical sonographer performs sonography examinations using high-frequency sound waves to visualize soft tissue structures including the gall bladder, kidneys, pregnant uterus, and other organs as requested by the physician.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208: Telephone number 312.553.9355) and (JRC-DMS, 2025 Woodlane Dr. St Paul, Minn. 55125; Telephone number 651.731.7244) in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, rank ordering by grade point, interviews and recommendation letters, and completion of all requirements for admission as a full-time student to the college. Contact the Assessment Center at El Centro College to sign up for the assessment test and Health Occupations Admissions to receive and information packet.

		CREDIT HOURS
PREREQUISITES:		
Certificate applicants must have two of the three common learning courses prior to acceptance into the program. These courses include:		
MATH 1314	College Algebra	3
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
SEMESTER I		
DMSO 2343	Advanced Ultrasound Physics	3
		3
SEMESTER II		
DMSO 1351	Sonographic Cross Sectional Anatomy	3
DMSO 1366	Practicum (or Field Experience)-Diagnostic Medical Sonography	3
DMSO 1405	Sonography of Abdominopelvic Cavity	4
		10
SEMESTER III		
DMSO 2405	Sonography of Obstetrics/ Gynecology	4
DMSO 2366	Practicum (or Field Experience) - Diagnostic Medical Sonography	3
DMSO 1355	Sonographic Pathophysiology	3
DMSO 2170	Untrasound Advanced Topics	1
		11
SEMESTER IV		
DMSO 2253	Sonography of Superficial Structures	2
DMSO 2262	Clinical - Diagnostic Medical Sonography	2
		4
SEMESTER V		
DMSO 2263	Clinical - Diagnostic Medical Sonography	2
		2
SEMESTER VI		
DMSO 2345	Advanced Sonography Practices	3
DMSO 2367	Practicum (or Field Experience) - Diagnostic Medical Sonography	3
		6
Minimum Hours Required		45

DIESEL TRUCK AND HEAVY EQUIPMENT

Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.DIESEL.HVY.EQ

This degree is designed to prepare students for various career opportunities in diesel truck and heavy equipment maintenance and repair. Emphasis is placed on heavy truck and diesel equipment systems maintenance, diagnosis and repair. Focus on operational theory, practical skills and accepted shop practice. This program is intended to provide a foundation on which the graduate can build a career through expanded experience and/or further education.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
DEMR 1410	Diesel Engine Testing and Repair I	4
++++ Elective	Social/Behavioral Sciences	3
		13
SEMESTER II		
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Automotive Suspension and Steering Systems	3
DEMR 1411	Diesel Engine Testing and Repair II	4
ENGL 1301	Composition I	3
		13
SEMESTER III		
AUMT 1345	Automotive Heating and Air Conditioning	3
AUMT 2325	Automotive Automatic Transmission and Transaxle	3
DEMR 1229	Preventative Maintenance	2
SPCH 1311	Introduction to Speech Communication	3
		11
SEMESTER IV		
AUTM 2317	Automotive Engine Performance Analysis I	3
AUTM 2334	Automotive Engine Performance Analysis II	3
DEMR 1416	Basic Hydraulics	4
+Elective	Math Elective **OR**	3-5
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(4)
		13-17
SEMESTER V		
AUMT 2311	Automotive Electronic Controls	3
AUMT 2313	Automotive Drive Train and Axles	3
DEMR 1317	Basic Brake Systems	3
DEMR 2348	Failure Analysis	3
+++Elective	Humanities/Fine Arts	3
		15

Minimum Hours Required 65-69

+MATH elective – Student must take MATH 1314 or any higher level MATH course.

++Elective – must be selected from the DCCCD Natural Sciences Core list.

+++Elective – must be selected from the DCCCD Humanities/Fine Arts Core list.

++++Elective – must be selected from the DCCCD Social/Behavioral Sciences Core list.

Note: Some students enrolling in this program may plan to transfer to a four-year institution. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

DIESEL TRUCK AND HEAVY EQUIPMENT -- PREVENTIVE MAINTENANCE TECHNICIAN

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.DIESEL.PREV

This certificate is designed to prepare students for various career opportunities in diesel truck and heavy equipment maintenance and repair. Emphasis is placed on heavy truck and heavy equipment maintenance including component service, removal and replacement. This program is intended to provide a foundation on which the graduate can build a career through expanded experience and/or further education.

		CREDIT HOURS
SEMESTER I		
AUMT 1305	Introduction to Automotive Technology	3
AUMT 1307	Automotive Electrical Systems	3
DEMR 1410	Diesel Engine Testing and Repair I	4
		10
SEMESTER II		
AUMT 1310	Automotive Brake Systems	3
AUMT 1316	Automotive Suspension and Steering Systems	3
DEMR 1411	Diesel Engine Testing and Repair II	4
		10
SEMESTER III		
AUMT 1345	Automotive Heating and Air Conditioning	3
DEMR 1229	Preventative Maintenance	2
		5
Minimum Hours Required		25

DIESEL TRUCK AND HEAVY EQUIPMENT TECHNICIAN

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.DIESEL.TECH

This certificate is designed to prepare students for various career opportunities in diesel truck and heavy equipment maintenance and repair. Emphasis is placed on operational theory, practical skills and accepted shop practices. This program is intended to provide a foundation on which the graduate can build a career through expanded experience and/or further education.

		CREDIT HOURS
SEMESTER I		
AUMT 1317	Automotive Engine Performance Analysis I	3
AUMT 2334	Automotive Engine Performance Analysis II	3
DEMR 1416	Basic Hydraulics	4
		10
SEMESTER II		
AUMT 2311	Automotive Electronic Control	3
AUMT 1313	Automotive Drive Train and Axle	3
DEMR 1317	Basic Brake Systems	3
		9
SEMESTER III		
AUMT 2325	Automotive Automatic Transmission and Transaxle	3
DEMR 2348	Failure Analysis	3
		6
Minimum Hours Required		25

DIGITAL IMAGING TECHNOLOGY

Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.DIGITAL.IMAG.TEC

This program focuses on the application of computer technology in the area of digital publishing, preparing the student for employment in the areas of commercial printing, electronic pre-press, multimedia publishing, desktop publishing, or graphic design. A strong background in traditional skills is stressed and strengthened with training in contemporary software and business management techniques. Advanced students serve as professional interns or participate in a cooperative work program to gain practical job experience preparing them for full-time employment.

		CREDIT HOURS
SEMESTER I		
GRPH 1305	Introduction to Graphic Arts and Printing	3
GRPH 1309	Press Operations I	3
ARTC 1392	Special Topics in Design and Visual Communications	3
ARTC 1313	Digital Publishing I	3
+Elective	Math Elective **OR**	3-4
TECM 1341	Technical Algebra **AND**	(3)
++++Elective	Natural Science	(4)
		15-19
SEMESTER II		
ARTC 1302	Digital Imaging I	3
ARTC 2313	Digital Publishing II	3
ENGL 1301	Composition I	3
++ Elective	Humanities/Fine Arts	(3)
+++ Elective	Chosen From the Designated List	3-4
		15-16
SEMESTER III		
ARTC 2305	Digital Imaging II	3
ARTC 1353	Computer Illustration	3
SPCH 1311	Introduction to Speech Communication	3
PSYC 2301	Introduction to Psychology	3
+++ Elective	Chosen From the Designated List	3-4
		15-16
SEMESTER IV		
GRPH 2309	Electronic Pre-Press	3
ARTC 1391	Special Topics in Graphic Design, Commercial Art and Illustration	3
ARTC 2348	Digital Publishing III	3
GRPH 2381	Cooperative Education-Prepress/Desktop Publishing and Digital Imaging Design	3
+++ Elective	Chosen From the Designated List	3-4
		15-16
Minimum Hours Required		60-67

+Math Elective - must be selected from the following:

MATH	1332	College Mathematics I	3
MATH	2342	Introductory Statistics	3
MATH	1414	College Algebra	4
MATH	1314	College Algebra	3

++Humanities/Fine Arts Elective - must be selected from the DCCCD Humanities/Fine CORE list.

+++Electives:

Designated Arts and Humanities Electives

ARTS	1311	2D Design	3
ARTS	1312	3D Design	3
ARTS	1316	Drawing I	3
ARTS	1317	Drawing II	3
ARTS	2316	Painting I	3
ENGL	1302	Composition II*	3
		*Prerequisites: ENGL 1301	

Designated Drafting Electives

DFTG	1329	Electro-Mechanical Drafting	3
DFTG	1333	Mechanical Drafting	3
DFTG	2328	Architectural Drafting-Commercial	3
DFTG	1373	CAD/Graphic Process	3
DFTG	1392	Special Topics in Architectural Drafting And Architectural CAD/CADD	3
DFTG	1394	Special Topics in Electrical/Electronics Drafting And Electrical/Electronics CAD/CADD	3
DFTG	1405	Technical Drafting	4
DFTG	1409	Basic Computer-Aided Drafting	4
DFTG	1417	Architectural Drafting-Residential	4
DFTG	1421	Architectural Illustration	4
DFTG	2419	Intermediate Computer-Aided Drafting	4
DFTG	2428	Architectural Drafting-Commercial	4
DFTG	1491	Special Topics in Drafting and Design Technology/Technician, General	4
DFTG	2312	Technical Illustration	3

(continued on next page)

Designated Computer Information Science Electives

ITNW	1321	Introduction to Networking	3
ITNW	1425	Fundamentals of Networking Technologies	4
ITNW	1437	Introduction to Internet	4
ITNW	2415	Wide Area Networks	4
ITSC	1401	Introduction to Computers	4
ITSC	1405	Introduction to PC Operating Systems	4
ITSC	1407	UNIX Operating System I	4
ITSC	1413	Internet/Web Page Development	4
ITSC	1417	PC Operating Systems – DOS	4
ITSC	1421	Intermediate PC Operating Systems	4
ITSC	1425	Personal Computer Hardware	4
ITSC	2401	Personal Computer Problem Solving	4
ITSC	2435	Application Problem Solving	4
ITSC	2439	Personal Computer Help Desk	4
ITSW	1401	Introduction to Word Processing	4
ITSW	1410	Introduction to Presentation Graphics Software	4
COSC	1300	Computer Literacy	3
COSC	1415	Introduction to Computer Science and Programming	4
COSC	1430	Programming I	4
CPMT	1403	Introduction to Computer Technology	4
CPMT	1447	Computer System Peripherals	4
CPMT	1449	Computer Networking Technology	4

Designated Journalism Electives

JOUR	1307	Introduction to Mass Communications	3
JOUR	1335	Survey of Broadcasting	3
JOUR	2309	News Editing and Copy Reading	3
JOUR	2311	News Gathering and Writing I	3
JOUR	2315	News Gathering and Writing II	3
JOUR	2327	Principles of Advertising	3

Designated Photography Electives

PHOT	1316	Introduction to Photography and Photojournalism	3
PHOT	1317	Advanced Photography and Photojournalism	3
PHOT	2324	Introduction to Multimedia	3
PHOT	2325	Introduction to Digital Imaging	3
PHOT	2326	Advanced Digital Imaging	3
PHOT	2356	Commercial Photography I	3
PHOT	2357	Commercial Photography II	3

++++Natural Science elective - must be selected from the DCCCD Natural Science CORE list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

DIGITAL IMAGING TECHNOLOGY -- DIGITAL PHOTOGRAPHY

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.DIGITAL.PHOTO

The digital photography one year certificate program is designed to give students the necessary skills to work in the growing field of digital imaging and photography. Students will use computer software, traditional and digital darkroom techniques, and technical and artistic skills in photography, to communicate visually. Film based cameras as well as digital cameras will be used, in addition to film scanners, flatbed scanners, inkjet printers, color laser printers, and other equipment used in the digital imaging arena.

		CREDIT HOURS
SEMESTER I		
GRPH 1305	Introduction to Graphic Arts and Printing **OR**	3
+Elective	Chosen from the Designated list	(3)
ARTC 1302	Digital Imaging I	3
PHTC 1349	Photo Digital Imaging I	3
		9
SEMESTER II		
PHTC 2349	Photo Digital Imaging II	3
PHTC 1380	Cooperative Education -Commercial Photography	3
++Elective		3
ARTC 2305	Digital Imaging II	3
		12
Minimum Hours Required		21

+ Electives - must be selected from the following:

ARTS	1316	Drawing I	3
ARTS	1317	Drawing II	3
PHOT	1316	Introduction to Photography and Photojournalism	3
ARTS	1311	2D Design	3
ARTS	2316	Painting I	3

++ Electives – Students must select from the following:

ENGL	1301	Composition I	3
MATH	1314	College Algebra	3
MATH	1332	College Mathematics I	3
MATH	2342	Introductory Statistics	3
SPCH	1311	Introduction to Speech Communication	3

DIGITAL IMAGING TECHNOLOGY -- ELECTRONIC PRE-PRESS

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.DIGITAL.PRESS

This program provides students with entry level digital imaging production skills. Students use state of the art computer software and hardware to professionally design images for print and electronic publication.

		CREDIT HOURS
SEMESTER I		
GRPH 1305	Introduction to Graphic Arts and Printing	3
ARTC 1313	Digital Publishing I	3
ENGL 1301	Composition I	3
		9
SEMESTER II		
ARTC 1302	Digital Imaging I	3
ARTC 1353	Computer Illustration	3
ARTC 2313	Digital Publishing II	3
+Elective	Math Elective **OR**	3-4
TECM 1341	Technical Algebra **AND**	(3)
+++Elective	Natural Science	(4)
		12-16
SEMESTER III		
GRPH 2309	Electronic Pre-Press	3
ARTC 2348	Digital Publishing III	3
GRPH 2381	Cooperative Education – Prepress Desktop Publishing and Digital Imaging Design **OR**	3
++Elective	Chosen from the Designated List	(3)
		9
Minimum Hours Required		30-34

+Math Electives - must be select from the following:

MATH	1332	College Mathematics I	3
MATH	2342	Introductory Statistics	3
MATH	1414	College Algebra	4
MATH	1314	College Algebra	3

++Electives – Students must select from the following:

ARTS	1311	2D Design	3
ARTS	1312	3D Design	3
ARTS	1316	Drawing I	3
ARTS	1317	Drawing II	3
ARTS	2316	Painting I	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ECHOCARDIOLOGY TECHNOLOGY

El Centro only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ECHOCARD.03

The Echocardiology Technology program is a two-year program that prepares students to function as an Echocardiographer. The first year of the program consists of general education and health occupations core courses. The second year of the program provides intensive didactic and clinical training in the medical specialty of Echocardiology.

The Echocardiology technologist performs cardiovascular examinations to produce a picture of a heart and great vessels using high-frequency sound waves. These examinations are used to diagnose congenital heart disease, valvular disease, pericardial disease, cardiomyopathy, and other cardiovascular disorders. Types of examinations include 2D and 3D Echo, M-mode and color flow Doppler, as well as Transesophageal and Stress Studies. The Echocardiographer may work in hospitals, clinics and physicians offices

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208: Telephone number 312-553-9355) in cooperation with the Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT, 3525 Ellicott Mills Drive, Suite N, Ellicott City, Maryland 21043-4547, telephone number: 410 418 4805).

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point of 2.85 or higher, completion of all requirements for admissions as a full-time student to the college. Applicants are rank-ordered for admission based on grade point earned on prerequisite courses, interviews and recommendation letters. Contact the Assessment Center at El Centro College to sign up for the assessment tests and, Health Occupations Admissions to receive an information packet.

		CREDIT HOURS
SEMESTER I		
HPRS 1204	Basic Health Profession Skills	2
HPRS 1202	Wellness and Health Promotion	2
HPRS 2231	General Health Professions Management	2
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
SCIT 1407	Human Anatomy and Physiology I **OR**	4
BIOL 2401	Anatomy and Physiology I	(4)
+ Elective	Humanities/Fine Arts	3
		19-20
SEMESTER II		
HPRS 2300	Pharmacology for Health Professions	3
HPRS 1291	Special Topics in Health Professions and Related Sciences, Other...	2
HPRS 2201	Pathophysiology	2
SCIT 1408	Human Anatomy and Physiology II **OR**	4
BIOL 2402	Anatomy and Physiology II	(4)
PSYC 2301	Introduction to Psychology	3
SPCH 1311	Introduction to Speech Communication	3
		17
SEMESTER III		
DSAE 2303	Cardiovascular Concepts	3
DMSO 2343	Advanced Ultrasound Physics	3
DSAE 1203	Introduction to Echocardiography Techniques	2
DSAE 1260	Clinical – Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	2
		10
SEMESTER IV		
DSAE 2404	Echocardiographic Evaluation of Pathology I	4
DSAE 2660	Clinical – Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	6
DSAE 2235	Advanced Echocardiography	2
		12
SEMESTER V		
DSAE 2437	Echocardiographic Evaluation of Pathology II	4
DSAE 2661	Clinical – Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	6
DMSO 2170	Ultrasound Advanced Topics	1
		11
Minimum Hours Required		69-70

+ Humanities/Fine Arts Elective- must be selected from any 3-credit hour course in the DCCCD Humanities/Fine Arts Core list.

ECHOCARDIOLOGY TECHNOLOGY

El Centro only

(Advanced Technical Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ATC.ECHOCARD.03

The Echocardiology Technology Certificate Option is for a student having at least a previous Associate Degree in a designated allied health field or a B.S. degree with a major in a science discipline. Potential students will be considered on an individual basis to determine if they have an adequate background in anatomy and physiology and math and physics. A background in basic ECGs and pharmacology is also required. Upon completion, a certificate will be awarded.

The Echocardiology technologist performs cardiovascular examinations to produce a picture of a heart and great vessels using high-frequency sound waves. These examinations are used to diagnose congenital heart disease, valvular disease, pericardial disease, cardiomyopathy, and other cardiovascular disorders. Types of examinations include 2D and 3D Echo, M-mode and color flow Doppler, as well as Transesophageal and Stress Studies. The Echocardiographer may work in hospitals, clinics and physicians offices

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illlinois 60601-2208: Telephone number 312-553-9355) in cooperation with the Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT, 3525 Ellicott Mills Drive, Suite N, Ellicott City, Maryland 21043-4547, telephone number: 410 418 4805).

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade-point of 2.85 or higher, completion of all requirements for admissions as a full-time student to the college. Applicants are rank-ordered for admission based on grade point earned on prerequisite courses, interviews and recommendation letters. Contact the Assessment Center at El Centro College to sign up for the assessment tests and, Health Occupations Admissions to receive an information packet.

		CREDIT HOURS
PREREQUISITES		
Students must have completed an AAS in an Allied Health Profession.		
SPCH 1311	Introduction to Speech Communication	3
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
		9-10
SEMESTER I		
DSAE 2303	Cardiovascular Concepts	3
DMSO 2343	Advanced Ultrasound Physics	3
DSAE 1203	Introduction to the Echocardiography Techniques	2
DSAE 1260	Clinical – Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	2
		10
SEMESTER II		
DSAE 2404	Echocardiographic Evaluation of Pathology I	4
DSAE 2660	Clinical – Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	6
DSAE 2235	Advanced Echocardiography	2
		12
SEMESTER III		
DSAE 2437	Echocardiographic Evaluation of Pathology II	4
DSAE 2661	Clinical – Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	6
DMSO 2170	Ultrasound Advanced Topics	1
		11
Minimum Hours Required		42-43

EDUCATIONAL PERSONNEL

Richland only (El Centro is an authorized site)

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ED.PERSONNEL

This program is designed to prepare educational personnel in a wide range of competencies needed for effective roles in public and nonpublic schools. A student can take courses required for the one year Educational Assistant Certificate and continue in the program to receive the two-year Associate in Applied Sciences Degree.

Educational personnel are employed under job titles such as teacher aide, assistant teacher, library assistant, P.E. aide, study hall teacher, tutor, tutoring coordinator, youth worker, special education aides, etc. Individuals working with handicapped children have found this program to be especially beneficial.

The courses offered at both El Centro College and Richland College are under the administration of Richland College. Students apply for admission and attend classes at El Centro or Richland but receive their degrees from Richland.

Ask about special articulation agreements that utilize this program as the first two years of area University Teacher Education Programs.

		CREDIT HOURS
SEMESTER I		
TECA 1354	Child Growth and Development	3
EDTC 1301	Instructional Practices: Educational Processes	3
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
HIST 1301	History of the United States	3
		15
SEMESTER II		
EDTC 1325	Principles and Practices of Multicultural Education	3
COSC 1300	Computer Literacy **OR**	3
COSC 1401	Microcomputer Concept and Applications	(4)
ENGL 1302	Composition II	3
HIST 1302	History of the United States	3
+Elective	Social Science	3
		15-16
SEMESTER III		
CDEC 1359	Children with Special Needs	3
ENGL	Any 2000 level English Literature	3
GOVT 2301	American Government	3
++Elective	Humanities/Fine Arts	3
+++Elective	Lab Science	4
		16
SEMESTER IV		
EDTC 1164	Practicum (or Field Experience) – Teacher Assistant/Aide **OR**	1
EDTC 1364	Practicum (or Field Experience) – Teacher Assistant/Aide	(3)
EDTC 1294	Special Topics in Teacher Assistant/Aide **OR**	2
EDTC 1194	Special Topics in Teacher Assistant/Aide	(1)
GOVT 2302	American Government	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
+++Elective	Lab Science	4
++++Elective		3
		15-19
Minimum Hours Required		61-66

+Elective - - must be selected from the following:

PSYC	2301	Introduction to Psychology	3
PSYC	2314	Developmental Psychology	3
SOCI	1306	Social Problems	3
SOCI	2319	Race, Ethnicity and Community	3

++Elective -- must be selected from the following:

ARTS	1301	Art Appreciation	3
MUSI	1306	Music Appreciation	3

+++ Elective must be selected from the following:

BIOL	1408	Biological Science	4
BIOL	1409	Biological Science	4
PHYS	1415	Physical Science	4
PHYS	1417	Physical Science	4
GEOL	1403	Physical Geology	4
GEOL	1404	Historical Geology	4

++++ Elective must be selected from the following:

CUST	2370	Cultural Studies	3
HIST	2321	World Civilizations	3
HIST	2380	The Heritage of Mexico	3
HIST	2381	African-American History	3
MATH	1350	Fundamentals of Mathematics I	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

EDUCATIONAL PERSONNEL -- BILINGUAL/ESL OPTION

Richland only (El Centro is an authorized site)

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.EDU.PERS.BIL/ESL

The Bilingual/ESL Option in the Educational Personnel Program is designed to prepare the student to assist in the instructional development of children who have a limited English proficiency.

The Associate in Applied Sciences Degree is awarded for successful completion of at least 64 credit hours as outlined.

Ask about special articulation agreements that utilize this program as the first two years of area University Teacher Education Programs.

		CREDIT HOURS
SEMESTER I		
EDTC 1301	Instructional Practices: Educational Processes	3
EDTC 1325	Principles and Practices Multicultural Education	3
ENGL 1301	Composition I	3
HIST 1301	History of the United States	3
++Elective	Lab Science	4
		16
SEMESTER II		
TECA 1354	Child Growth and Development	3
ENGL 1302	Composition II	3
HIST 1302	History of the United States	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
		12-13
SEMESTER III		
EDTC 1321	Bilingual Education	3
COSC 1300	Computer Literacy **OR**	3
COSC 1401	Microcomputer Concept and Applications	(4)
PSYC 2301	Introduction to Psychology	3
SPCH 1311	Introduction to Speech Communication	3
+Elective	Humanities/Fine Arts	3
GOVT 2301	American Government	3
		18-19
SEMESTER IV		
EDTC 1391	Special Topics in English Teacher Education	3
CDEC 1359	Children with Special Needs	3
EDTC 1164	Practicum (or Field Experience) – Teacher Assistant/Aide **OR**	1
EDTC 1364	Practicum (or Field Experience) – Teacher Assistant/Aide	(3)
EDTC 1294	Special Topics in Teacher Assistant/Aide **OR**	2
EDTC 1194	Special Topics in Teacher Assistant/Aide	(1)
GOVT 2302	American Government	3
++Elective	Lab Science	4
		15-18

Minimum Hours Required 61-66

+Elective - must be selected from the following:

ARTS	1301	Art Appreciation	3
MUSI	1306	Music Appreciation	3

++Elective – must be selected from the following:

BIOL	1408	Biological Science	4
BIOL	1409	Biological Science	4
PHYS	1415	Physical Science	4
PHYS	1417	Physical Science	4
GEOL	1403	Physical Geology	4
GEOL	1404	Historical Geology	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

EDUCATIONAL PERSONNEL -- EDUCATIONAL ASSISTANT

Richland only (El Centro is an authorized site)

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.EDUC.ASSISTANT

This Educational Assistant certificate program provides the student with the basic knowledge and skills to work effectively in public schools as an educational aide or teacher assistant. All courses taken in this certificate program will apply to the Associate in Applied Sciences Degree program in Educational Personnel as well as to the Bilingual/ESL Option.

		CREDIT HOURS
SEMESTER I		
EDTC 1307	Teaching Reading in the Elementary School **OR**	3
TECA 1354	Child Growth and Development	(3)
EDTC 1325	Principles and Practices of Multicultural Education	3
SPCH 1311	Introduction to Speech Communication	3
+Elective		3-4
+Elective		3-4
		15-17
SEMESTER II		
EDTC 1301	Instructional Practices: Educational Processes	3
CDEC 1359	Children with Special Needs	3
ENGL 1301	Composition I	3
+Elective		3-4
		12-13
Minimum Hours Required		27-30

+Elective - must be selected from the following:

ARTS	1301	Art Appreciation	3
COSC	1300	Computer Literacy **OR**	3
COSC	1401	Microcomputer Concept and Applications	(4)
EDTC	1164	Practicum (or Field Experience) - Teacher Assistant/Aide	1
EDTC	1165	Practicum (or Field Experience) - Teacher Assistant/Aide	1
EDTC	1321	Bilingual Education	3
EDTC	1341	Computer Instruction for Educators	3
EDTC	1364	Practicum (or Field Experience) - Teacher Assistant/Aide	3
EDTC	1365	Practicum (or Field Experience) - Teacher Assistant/Aide	3
EDTC	1391	Special Topics in English Teacher Education	3
EDTC	1394	Special Topics in Teacher Assistant/Aide	3
EDUC	1301	Introduction to Education	3
EDUC	1325	Principles and Practices of Multicultural Education	3
EDUC	2301	Introduction to Special Education	3
ENGL	1302	Composition II	3
ENGL	23XX	(2000 Level Literature Course)	3
MATH	1314	College Algebra **OR**	3
MATH	1414	College Algebra	(4)
MUSI	1306	Music Appreciation	3
PHED	1306	Advanced First Aide and Emergency Care	3
PSYC	2301	Introduction to Psychology	3
PSYC	2314	Developmental Psychology	3
SOCI	1301	Introduction to Sociology	3
SOCI	1306	Social Problems	3
SOCI	2319	Race, Ethnicity and Community	3
TECA	1303	Family and the Community	3
TECA	1311	Introduction to Early Childhood Education	3

Students may ONLY take one (1) Special Topics course for this certificate.

ELECTRICAL TECHNOLOGY

North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ELECTRICAL.TECH

The Electrical Technology program prepares the student for career opportunities by developing technical knowledge and practical skills necessary to enter or advance in the electrical technology field.

Students wishing to earn an Associate in Applied Sciences Degree with a major in Electrical Technology must complete all of the courses listed below.

		CREDIT HOURS
SEMESTER I		
ELPT 1215	Electrical Calculations I **AND**	2
ECOL 1305	People and Their Environment **OR**	
MATH 1314	College Algebra	3
ELPT 1411	Basic Electrical Theory	4
ELPT 1221	Introduction to Electrical Safety and Tools	2
IEIR 1412	Distribution Systems	4
SPCH 1311	Introduction to Speech Communication	3
		16-18
SEMESTER II		
EEIR 1307	Introductory Security Systems	3
ELPT 1329	Residential Wiring	3
ELPT 1349	Electrical Blueprint Reading	3
ELPT 1325	National Electrical Code I	3
ELTN 1380	Cooperative Education - Electrician	3
ENGL 1301	Composition I	3
		18
SEMESTER III		
ELPT 1345	Commercial Wiring	3
ELPT 1351	Electrical Machines	3
ELPT 1357	Industrial Wiring	3
ELPT 2443	Electrical Systems Design	4
HUMA 1301	Introduction to Humanities **OR**	
MUSI 1304	Music Appreciation **OR**	
ARTS 1301	Art Appreciation	3
		16
SEMESTER IV		
CETT 1429	Solid State Devices	4
ELPT 1441	Motor Control	4
ELPT 2437	Electrical Planning and Estimating	4
ELTN 1381	Cooperative Education – Electrician	3
PSYC 2302	Applied Psychology **OR**	
HDEV 2315	Principles and Processes of Personal and Social Adjustment	3
		18
Minimum Hours Required		68-70

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ELECTRICAL TECHNOLOGY

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ELEC.TECH

Completion of all courses listed below qualifies a student for a Certificate in Electrical Technology. The courses may be taken in any order after consultation with the instructor.

		CREDIT HOURS
SEMESTER I		
ELPT 1215	Electrical Calculations I **AND**	2
ECOL 1305	People and Their Environment **OR**	
MATH 1314	College Algebra	3
ELPT 1411	Basic Electrical Theory	4
ELPT 1221	Introduction to Electrical Safety and Tools	2
IEIR 1412	Distribution Systems	4
SPCH 1311	Introduction to Speech Communication	3
		16-18
SEMESTER II		
EEIR 1307	Introductory Security Systems	3
ELPT 1329	Residential Wiring	3
ELPT 1349	Electrical Blueprint Reading	3
ELPT 1325	National Electrical Code I	3
ELTN 1380	Cooperative Education - Electrician	3
ENGL 1301	Composition I	3
		18

Minimum Hours Required 34-36

ELECTRICAL TECHNOLOGY -- ELECTRICAL CONSTRUCTION

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ELECT.CONSTRUCT

In partnership with the Dallas Electrical Joint Apprenticeship and Training Committee, this program will prepare students for employment as a Journeyman Electrician. Successful completion of all phases of the curriculum and the on-the-job training prepares the student for numerous career opportunities in the field of Electrical Construction. In addition to providing the specified technical skills and knowledge required to be successful in the industry, this program also covers skills in other related areas such as organization and planning, supervision, and problem-solving and decision-making.

Electrical Construction is a nationally approved apprenticeship program. Additional admission requirements are necessary for enrollment in this program.

		CREDIT HOURS
SEMESTER I		
ELPT 1215	Electrical Calculations I **AND**	2
+Elective	Natural Science **OR**	4
MATH 1414	College Algebra	(4)
ELTN 1470	Electrical Construction I	4
ELTN 1471	Electrical Construction II	4
PSYC 2302	Applied Psychology **OR**	3
HDEV 2315	Principles and Processes of Personal and Social Adjustment	(3)
		15-17
SEMESTER III		
ELTN 1472	Electrical Construction III	4
ELTN 1473	Electrical Construction IV	4
ENGL 1301	Composition I	3
BCIS 1405	Business Computer Applications	4
		15
SEMESTER III		
ELTN 1474	Electrical Construction V	4
ELTN 1475	Electrical Construction VI	4
HUMA 1301	Introduction to the Humanities **OR**	3
ARTS 1301	Art Appreciation **OR**	(3)
MUSI 1306	Music Appreciation	(3)
ELTN 1476	Electrical Construction VII	4
		15
SEMESTER IV		
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
ELTN 1477	Electrical Construction VIII	4
ELTN 1478	Electrical Construction IX	4
ELTN 1479	Electrical Construction X	4
		15
Minimum Hours Required		60-62

+Elective –must be selected from the DCCCD Core Curriculum for the Natural Sciences.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ELECTRICAL TECHNOLOGY -- ELECTRICAL CONSTRUCTION

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ELECT.CONST

In partnership with the Dallas Electrical joint Apprenticeship and Training Committee, this program provides a one-year certificate in Electrical when the students complete the technical and on-the-job training outlined in the certificate for Electrical listed below. Topics include: electrical theory, fundamentals of electrical, electrical job information, electrical calculations, circuits and systems, commercial and industrial wiring, motor controls, basic motor controls with an emphasis on safety.

Electrical Construction is a nationally approved apprenticeship program. Additional admission requirements are necessary for enrollment in this program.

		CREDIT HOURS
SEMESTER I		
ELTN 1470	Electrical Construction I	4
ELTN 1471	Electrical Construction II	4
ELTN 1472	Electrical Construction III	4
ELTN 1473	Electrical Construction IV	4
		16
SEMESTER II		
ELTN 1474	Electrical Construction III	4
ELTN 1475	Electrical Construction IV	4
ELTN 1476	Electrical Construction VII	4
		12
SEMESTER III		
ELTN 1477	Electrical Construction VIII	4
ELTN 1478	Electrical Construction IX	4
ELTN 1479	Electrical Construction X	4
		12
Minimum Hours Required		40

ELECTRONIC COMMERCE

Brookhaven, Eastfield, Mountain View, North Lake and Richland only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ELECT.COMM.03

The degree is designed to meet the needs of professionals in the rapidly changing world of Internet commerce. Electronic Commerce includes all aspects of business processes enabled by Internet technologies. The increasing volume of transactions that take place electronically is a revolution in business practices. This program introduces students to Electronic Commerce through marketing, management, communications, and Web site design and development. It is available on-campus or online. Most of the classes in this degree transfer to the University of Texas at Arlington's Web Design/E-Commerce Bachelor of Arts Degree in Interdisciplinary Studies.

		CREDIT HOURS
SEMESTER I		
BUSI 1301	Introduction to Business	3
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications **OR**	(4)
BCIS 1405	Business Computer Applications	(4)
ARTS 1301	Art Appreciation	3
ENGL 1301	Composition I	3
ITSC 1413	Internet/Web Page Development** **OR**	4
IMED 1316	Web Page Design I	(3)
		16-17
SEMESTER II		
MRKG 1311	Principles of Marketing **OR**	3
MRKG 2312	e-Commerce	(3)
MATH 2342	Introductory Statistics	3
ITSC 2435	Application Problem Solving	4
ENGL 1302	Composition II	3
SPCH 1311	Introduction to Speech Communications	3
		16
SEMESTER III		
BUSI 2301	Business Law	3
ENGL 2311	Technical Writing	3
ECON 2301	Principles of Economics I	3
ITSW 1407	Introduction to Database	4
ITNW 1321	Introduction to Networking	3
		16
SEMESTER IV		
IMED 2409	Internet Commerce	4

Select either Technical Specialization **OR** Business Specialization:

TECHNICAL SPECIALIZATION***

IMED	2349	Internet Communications	3
ITSE	2417	JAVA Programming **OR**	4
ITSE	1407	Introduction to C++ Programming **OR**	(4)
ITSE	1431	Introduction to Visual BASIC Programming	(4)
IMED	2415	Web Page Design II	4
ITSE	2409	Introduction to Database Programming	4
			19

BUSINESS SPECIALIZATION***

HRPO	2307	Organizational Behavior	3
ACCT	2301	Principles of Accounting I	3
BMGT	1303	Principles of Management **OR**	3
BUSG	1302	E-Business Management	(3)
BUSG	2309	Small Business Management **OR**	3
MRKG	2381	Cooperative Education - Business Marketing and Marketing Management	(3)
			16

Technical Specialization:
Minimum Hours Required 67-68

OR

Business Specialization:
Minimum Hours Required 64-65

** Coppell ISD, Forney ISD, Garland ISD, Irving ISD and Richardson ISD use the Web Mastering course. Dallas ISD, Denton ISD and Irving ISD use the Business Image Management and Multimedia (BIMM) course.

*** Select EITHER Technical Specialization **OR** Business Specialization

ELECTRONIC COMMERCE--BUSINESS SPECIALIST

Brookhaven, Eastfield, Mountain View, North Lake and Richland only

(Certificate, Tech Prep)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ELECOMM.BUS.SP.03

This certificate will provide education and training for individuals who would like to use the web to market and promote their products on the Internet. This program introduces students to Electronic Commerce through marketing, management, communications, and Web site design and development. It is available on-campus or online. Most of the classes in this certificate transfer to the University of Texas at Arlington's Web Design/E-Commerce Bachelor of Arts Degree in Interdisciplinary Studies.

		CREDIT HOURS
SEMESTER I		
BUSI 1301	Introduction to Business	3
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications **OR**	(4)
BCIS 1405	Business Computer Applications	(4)
ITSC 1413	Internet/Web Page Development* **OR**	4
IMED 1316	Web Page Design I	(3)
ECON 2301	Principles of Economics I	3
		13-14
SEMESTER II		
MRKG 1311	Principles of Marketing **OR**	3
MRKG 2312	e-Commerce	(3)
IMED 2409	Internet Commerce	4
BUSG 2309	Small Business Management **OR**	3
BUSG 1302	E-Business Management	(3)
		10

Minimum Hours Required 23-24

* Coppell ISD, Forney ISD, Garland ISD, Irving ISD and Richardson ISD use the Web Mastering course. Dallas ISD, Denton ISD and Irving ISD use the Business Image Management and Multimedia (BIMM) course.

ELECTRONIC COMMERCE--TECHNOLOGY SPECIALIST

Brookhaven, Eastfield, Mountain View and North Lake only

(Certificate, Tech Prep)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ELEC.COMM.SPEC.03

This certificate will provide education and training for individuals who would like to explore the technical aspects of using the web for promoting and marketing their products. This program introduces students to Electronic Commerce by evaluating current technological advancements, system integration techniques, and web site design and development. It is available on-campus or online. Most of the classes in this certificate transfer to the University of Texas at Arlington's Web Design/E-Commerce Bachelor of Arts Degree in Interdisciplinary Studies.

		CREDIT HOURS
SEMESTER I		
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications **OR**	(4)
BCIS 1405	Business Computer Applications	(4)
ITSC 1413	Internet/Web Page Development* **OR**	4
IMED 1316	Web Page Design I	(3)
		7-8
SEMESTER II		
IMED 2415	Web Page Design II	4
IMED 2409	Internet Commerce	4
ITSE 2417	JAVA Programming **OR**	4
ITSC 1407	UNIX Operating System I **OR**	(4)
ITSE 1431	Introduction to Visual BASIC Programming	(4)
		12

Minimum Hours Required 19-20

* Coppell ISD, Forney ISD, Garland ISD, Irving ISD and Richardson ISD use the Web Mastering course. Dallas ISD, Denton ISD and Irving ISD use the Business Image Management and Multimedia (BIMM) course.

ELECTRONIC TELECOMMUNICATIONS

Eastfield only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ELECTRONIC.TELEC

This program is designed to prepare students to work as hardware technicians in the field of telecommunications. The student will be trained to test, interface, troubleshoot, and repair equipment for the telecommunications industry. The student will learn schematic interpretation, test equipment usage, and technical communications.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
CETT 1425	Digital Fundamentals	4
ENGL 1301	Composition I	3
+Elective	Mathematics **OR**	3-4
TECM 1303	Technical Mathematics **AND**	(3)
++Elective	Natural Science	(4)
		14-18
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
EECT 1403	Introduction to Telecommunications	4
SPCH 1311	Introduction to Speech Communication	3
+++Elective	Social/Behavioral Science	3
		18
SEMESTER III		
CETT 1441	Solid State Circuits	4
CETT 1457	Linear Integrated Circuits	4
EECT 2430	Telecommunications Switching	4
EECT 2439	Communication Circuits	4
		16
SEMESTER IV		
CPMT 1449	Computer Networking Technology	4
EECT 2440	Telecommunications Central Office Equipment	4
++++Elective	Telecommunication Elective	4
+++++Elective	Humanities/Fine Arts Elective	3
		15
Minimum Hours Required		63-67

+College level MATH course should be chosen from the following:

MATH	1332	College Mathematics I	3
MATH	2342	Introductory Statistics	3
MATH	1314	College Algebra	3
MATH	1414	College Algebra	4

++Natural Science/Mathematics elective must be selected from any DCCCD approved Natural Science/Mathematics Elective.

+++Social/Behavioral Science Elective must be selected from any DCCCD approved Social/Behavioral Science Elective.

++++Telecommunications Electives – 4 credit hours must be selected from the following:

EECT	1191	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	1
EECT	1291	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	2
EECT	1391	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	1491	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	4
EECT	2380	Cooperative Education - Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	2381	Cooperative Education - Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	2432	Telecommunications Signaling	4
EECT	2437	Wireless Telephony Systems	4
LOTT	1401	Introduction to Fiber Optics	4

+++++Humanities/Fine Arts elective must be selected from any DCCCD approved Humanities/Fine Arts electives.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Electronic Telecommunications and provide the student advanced skills required by the industry to specialize as a Telephony Supervisor.

TELEPHONY SUPERVISOR

Eastfield only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.TELEPHONY

		CREDIT HOURS
SEMESTER I		
EECT 1444	Telecommunications Broadband Systems	4
EECT 1346	Telecommunications Trafficking Engineering	3
		7
SEMESTER II		
EECT 1442	Telecommunications Outside Plant	4
+Elective	Telephony Supervisor Elective	3-4
		7-8

Minimum Hours Required 14-15

+Telephony Supervisor elective must be selected from the following:

EECT	1300	Technical Customer Service	3
BMGT	1301	Supervision	3
BMGT	1303	Principles of Management	3
ACNT	1303	Introduction to Accounting I	3
ACCT	2301	Principles of Accounting I	3
ACCT	2401	Principles of Accounting I	4

ELECTRONIC TELECOMMUNICATIONS

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ELET.TELECOMM

This one-year program provides the student with the basic skills needed in the electronic telecommunications industry. All of the courses for the one-year certificate are applicable to the Associate in Applied Sciences Degree in Electronic Telecommunications.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
CETT 1425	Digital Fundamentals	4
+Elective	Mathematics **OR**	3-4
TECM 1303	Technical Mathematics **AND**	(3)
++Elective	Natural Science	(4)
		11-15
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
EECT 1403	Introduction to Telecommunications	4
SPCH 1311	Introduction to Speech Communication **OR**	
ENGL 1301	Composition I	3
		15
SEMESTER III		
EECT 2430	Telecommunications Switching	4
EECT 2439	Communication Circuits	4
LOTT 1401	Introduction to Fiber Optics	4
		12

Minimum Hours Required 38-42

+College level MATH course may be chosen from the following:

MATH	1332	College Mathematics I	3
MATH	2342	Introductory Statistics	3
MATH	1314	College Algebra	3
MATH	1414	College Algebra	4

++Natural Science/Mathematics elective must be selected from any DCCCD approved Natural Science/Mathematics Elective.

ELECTRONIC TELECOMMUNICATIONS -- TECHNICAL PLATFORM

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ELET.PLATFORM

This certificate is designed to prepare students for entry-level jobs in the electronics industry. All of the courses in this certificate are applicable to the Associate in Applied Sciences Degree in Electronics/Computer Technology or Electronic Telecommunications.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
CETT 1425	Digital Fundamentals	4
		8
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
		8
Minimum Hours Required		16

ELECTRONIC TELECOMMUNICATIONS -- WIRELESS COMMUNICATIONS TECHNOLOGY

Eastfield only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ELET.WIRELESS

This certificate is designed to prepare students for employment in the telecommunications industry. This certificate program provides students broad-based knowledge of wireless technology and its associated hardware. All of the courses for this certificate are applicable to the Associate in Applied Sciences Degree in Electronic Telecommunications.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
CETT 1425	Digital Fundamentals	4
SPCH 1311	Introduction to Speech Communication **OR**	
ENGL 1301	Composition I	3
		11
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
EECT 1403	Introduction to Telecommunications	4
+Elective	Mathematics **OR**	3-4
TECM 1303	Technical Mathematics **AND**	(3)
++Elective	Natural Science	(4)
		15-19
SEMESTER III		
EECT 2430	Telecommunications Switching	4
EECT 2439	Communication Circuits	4
		8
SEMESTER IV		
EECT 2432	Telecommunications Signaling	4
EECT 2437	Wireless Telephony Systems	4
EECT 2440	Telecommunications Central Office Equipment	4
		12
Minimum Hours Required		46-50

+College level MATH course may be chosen from the following:

MATH	1332	College Mathematics I	3
MATH	2342	Introductory Statistics	3
MATH	1314	College Algebra	3
MATH	1414	College Algebra	4

++Natural Science/Mathematics elective must be selected from any DCCCD approved Natural Science/Mathematics Elective.

ELECTRONIC TELECOMMUNICATIONS -- CONVERGENCE TECHNOLOGY

North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ELET.TELEC.CONV

This program is designed to prepare students for a career in telecommunications. In partnership with NEC of America Corporation, North Lake College will prepare students to enter the field of electronics digital telephony and telecommunications. As part of their education, students will receive training on state-of-the-art telephony equipment at NEC's national training facility located in Irving, Texas.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra **OR**	(4)
TECM 1341	Technical Algebra **AND**	(3)
PHYS 1405	Concepts in Physics	(4)
		10-14
SEMESTER II		
EECT 1403	Introduction to Telecommunications	4
CETT 1405	AC Circuits	4
EECT 2433	Telephone Systems	4
+Elective	Social/Behavioral Science	3
		15
SEMESTER III		
EECT 2432	Telecommunications Signaling	4
CETT 1429	Solid State Devices	4
SPCH 1311	Introduction to Speech Communication	3
EECT 2430	Telecommunications Switching	4
++Elective	Telecommunications Electives	3-4
		18-19
SEMESTER IV		
EECT 1491	Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician	4
CETT 1441	Solid State Circuits	4
CETT 1457	Linear Integrated Circuits	4
+++Elective	Humanities/Fine Arts	3-4
EECT 2380	Cooperative Education – Electrical, Electronic and Communications Engineering Technology/ Technician	3
		18-19
Minimum Hours Required		61-67

+Electives must be selected from the following: Any GOVT, HDEV, HIST, or PSYC course.

++Telecommunications Electives must be selected from the following:

EECT	2381	Cooperative Education-Electrical, Electronic and Communications Engineering Technology/Technician 3
EECT	2432	Telecommunications Signaling 4
EECT	2437	Wireless Telephony Systems 4
EECT	2440	Telecommunications Central Office Equipment 4

+++Electives must be selected from any 3 credit or 4 credit DCCCD approved Humanities/Fine Arts course.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ELECTRONIC TELECOMMUNICATIONS -- AUDIO VISUAL

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ELET.AUDIO.VISUAL

Students who complete this certificate will be prepared for opportunities in the industry as manufacturers, dealers and end-users of electronics products. Current sophisticated audiovisual systems, and the technicians who design, install and support them, are indispensable resources in corporate boardrooms, classrooms, conference and convention centers, museums, libraries, theaters and homes.

		CREDIT HOURS
SEMESTER I		
CETT 1407	Fundamentals of Electronics	4
CPMT 1307	Electronic and Computer Skills	3
EEIR 1311	Introductory Television Systems	3
CPMT 2232	Introductory Television Systems	2
		12
SEMESTER II		
ITNW 2315	Wide Area Networks	3
CPMT 2233	Computer Integration	2
EEIR 1291	Special Topics in Electrical and Electronics Equipment Installer and Repair	2
MUSC 2343	Audio Engineering Electronics Troubleshooting	3
		10
Minimum Hours Required		22

ELECTRONIC TELECOMMUNICATIONS-- CONVERGENCE TECHNOLOGY

Effective January 1, 2004, this award has been deactivated for North Lake College. For current students, the award will be closed on or before January 1, 2007. New students should not attempt to pursue this award.

North Lake (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ELET.TELEC.CON

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
EECT 1403	Introduction to Telecommunications	4
SPCH 1311	Introduction to Speech Communication	3
		11
SEMESTER II		
CETT 1405	AC Circuits	4
ENGL 1301	Composition I	3
CETT 1429	Solid State Devices	4
		11
SEMESTER III		
EECT 2432	Telecommunication Signaling	4
CETT 1457	Linear Integrated Circuits	4
EECT 2430	Telecommunications Switching	4
EECT 2380	Cooperative Education - Electrical, Electronic and Communications Engineering Technology/Technician	3
		15
Minimum Hours Required		37

ELECTRONIC TELECOMMUNICATIONS -- TECHNICAL PLATFORM

North Lake only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ELET.PLATFORM.NLC

This certificate is designed to prepare students for entry-level jobs in the electronics industry. All of the courses in this certificate are applicable to the Associate in Applied Sciences Degree in Electronics/Computer Technology or Electronic Telecommunications.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
CETT 1457	Linear Integrated Circuits	4
		16

Minimum Hours Required 16

ELECTRONICS/COMPUTER TECHNOLOGY

Eastfield only

(Associate in Applied Science Degree, Tech Prep Enhanced Skills Certificates)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ELET.COMPUTER

This curriculum is designed to prepare a graduate to work as a technician on devices that require digital circuits such as computers, test equipment, automatic control units and central distribution systems. The student will learn schematic interpretation, test equipment usage, and technical communications.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
CETT 1425	Digital Fundamentals	4
ENGL 1301	Composition I	3
+ Elective	Math Elective **OR**	3-4
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(4)
		14-18
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
ITNC 1307	Electronic Test Equipment	3
SPCH 1311	Introduction to Speech Communication	3
+++Elective	Social/Behavioral Science	3
		17
SEMESTER III		
CETT 1441	Solid State Circuits	4
CETT 1445	Microprocessor	4
CETT 1449	Digital Systems	4
++++Elective	Technical Elective	3-4
		15-16
SEMESTER IV		
CETT 1457	Linear Integrated Circuits	4
CETT 2435	Advanced Microprocessors **OR**	4
++++++Elective	Electronics Elective	(3-4)
CETT 2449	Research and Project Design	4
+++++Elective	Humanities/Fine Arts	3
		14-15
Minimum Hours Required		60-66

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

+MATH course should be chosen from the following:

MATH	1332	College Mathematics I	3
MATH	2342	Introductory Statistics	3
MATH	1314	College Algebra **OR**	3
MATH	1414	College Algebra	(4)

++Natural Science elective - must be selected from the DCCCD Natural Science Core list.

+++Social/Behavioral Science Elective - must be selected from the DCCCD Social/Behavioral Science Core list.

++++Technical Electives- must be selected from the following list (a minimum of three-credit hours required):

ITSE	1402	Computer Programming	4
CETT	2433	Digital Computer Circuits	4
COSC	1315	Computer Science I	3
CPMT	1449	Computer Networking Technology	4
CPMT	2437	Microcomputer Interfacing	4
EECT	1104	Electronic Soldering	1
EECT	1191	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	1
EECT	1204	Electronic Soldering	2
EECT	1291	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	2
EECT	1391	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	1403	Introduction to Telecommunications	4
EECT	1491	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	4
EECT	2380	Cooperative Education - Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	2381	Cooperative Education - Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	2430	Telecommunications Switching	4
EECT	2437	Wireless Telephony Systems	4
EECT	2439	Communications Circuits	4
INTC	1307	Electronic Test Equipment	3
LOTT	1401	Introduction to Fiber Optics	4
MATH	1314	College Algebra **OR**	3
MATH	1414	College Algebra	(4)
MATH	1316	Plane Trigonometry	3
MATH	1348	Analytic Geometry	3

+++++Humanities/Fine Arts elective - must be selected from the DCCCD Humanities/Fine Arts Core list.

++++++Electronics Elective - must be selected from the following list (a minimum of three-credit hours required):

CPMT	1449	Computer Networking Technology	4
EECT	1191	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	1
EECT	1291	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	2
EECT	1391	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	1491	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	4
EECT	2380	Cooperative Education - Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	2381	Cooperative Education - Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	2432	Telecommunications Signaling	4
EECT	2439	Communications Circuits	4

TECH PREP ENHANCED SKILLS CERTIFICATES

These Enhanced Skills Certificates are attached to the Associate in Applied Sciences Degree in Electronics/Computer Technology and provide the student advanced skills required by the industry to specialize in Computer Technology or Telecommunications.

COMPUTER TECHNOLOGY

Eastfield only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.ELET.COMP.TECH

		CREDIT HOURS
SEMESTER I		
CPMT 2445	Computer System Troubleshooting	4
CPMT 1447	Computer System Peripherals	4
CPMT 1449	Computer Networking Technology	4
CETT 2435	Advanced Microprocessors	4
		16

Minimum Hours Required 16

TELECOMMUNICATIONS

Eastfield only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.ELET.TELECOMM

		CREDIT HOURS
SEMESTER I		
EECT 1403	Introduction to Telecommunications	4
EECT 2430	Telecommunications Switching	4
EECT 2432	Telecommunications Signaling	4
		12

Minimum Hours Required 12

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills Certificate need to consult with their advisor.

ELECTRONICS/COMPUTER TECHNOLOGY -- BASIC ELECTRONICS TECHNOLOGY

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ELET.COMP.BASIC

This one-year program provides the student with the basic skills needed in the electronic industry. All of the courses for the one-year certificate are applicable to the Associate in Applied Sciences Degree in Electronics/ Computer Technology.

		CREDIT HOURS
FIRST YEAR		
SEMESTER I		
CETT 1403	DC Circuits	4
CETT 1425	Digital Fundamentals	4
TECM 1303	Technical Mathematics	3
EECT 1104	Electronic Soldering	1
		12
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
INTC 1307	Electronic Test Equipment	3
SPCH 1311	Introduction to Speech Communication **OR**	3
ENGL 1301	Composition I	(3)
		14
SECOND YEAR		
SEMESTER III		
CETT 1441	Solid State Circuits	4
CETT 1445	Microprocessor	4
CETT 1449	Digital Systems	4
		12

Minimum Hours Required 38

ELECTRONICS/COMPUTER TECHNOLOGY -- SEMICONDUCTOR MANUFACTURING TECHNOLOGY

Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ELET.COMP.SEMI4

This program prepares the student to perform the technical tasks within a wafer fabrication area and includes monitoring process output parameters, analyzing and troubleshooting process related problems, analyzing various chemical reactions, and making decisions which will improve yield of various wafer lots. The course of study may involve participating in wafer experiments or designing of experiments to find the source of process problems or measurement of process limits. Emphasis is placed on working closely with all members of the semiconductor manufacturing team.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
ENGL 1301	Composition I	3
TECM 1303	Technical Mathematics **OR**	3
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
HYDR 1445	Hydraulics and Pneumatics	4
		14-15
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
RBTC 2445	Robot Application, Set-Up and Testing	4
CHEM 1405	Introductory Chemistry I **OR**	4
CHEM 1411	General Chemistry I	(4)
+Elective	Humanities/Fine Arts	3
		19
SEMESTER III		
CETT 1425	Digital Fundamentals **OR**	4
CPMT 1403	Introduction to Computer Technology	(4)
CETT 1457	Linear Integrated Circuits	4
SMFT 1343	Semiconductor Manufacturing Technology I	3
CHEM 1407	Introductory Chemistry II **OR**	4
CHEM 1412	General Chemistry II **OR**	(4)
PHYS 1415	Physical Science **OR**	(4)
PHYS 1405	Concepts in Physics	4
		15
SEMESTER IV		
ELMT 2433	Industrial Electronics	4
SMFT 2231	RF Power Systems	2
QCTC 1343	Quality Assurance	3
SMFT 2343	Semiconductor Manufacturing Technology II **OR**	
EECT 2380	Cooperative Education – Electrical, Electronic and Communication Engineering Technology/ Technician	(3)
SPCH 1311	Introduction to Speech Communication	3
++Elective	Social/Behavioral Science	3
		18
Minimum Hours Required		66-67

+Elective - must be selected from the DCCCD Humanities/Fine Arts Core list.

++Elective - must be selected from the DCCCD Social/Behavioral Science Core list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ELECTRONICS TECHNOLOGY

Mountain View and North Lake only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ELECTRONICS.TECH

This program prepares students for entry-level electronic technician positions by providing training in digital and analog theory and practical skills.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
ENGL 1301	Composition I	3
TECM 1341	Technical Algebra **OR**	3
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
+Elective	Humanities/ Fine Arts	1-3
++Elective	Social/Behavioral Science	3
		14-17
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
INTC 1307	Electronic Test Equipment	3
SPCH 1311	Introduction to Speech Communication	3
PHYS 1405	Concepts in Physics **OR**	4
PHYS 1407	Concepts in Physics	(4)
		18
SEMESTER III		
CETT 1449	Digital Systems	4
CPMT 1403	Introduction to Computer Technology	4
+++Electives	Technical	8
		16
SEMESTER IV		
CETT 2433	Digital Computer Circuits	4
+++Electives	Technical	10
++++Electives		3-4
		17-18
Minimum Hours Required		65-69

+Elective must be selected from the following:
Any ARTS, HUMA, MUSI, or PHIL course.

++ Elective must be selected from the following:
Any GOVT, HDEV, HIST or PSYC course

+++ Electives - Technical electives must be selected from the following with the approval of an Electronics Technology professor:

AVNC	1303	Introduction to Aircraft Electronic Systems	3
AVNC	1443	Aircraft Electrical and Electronic Systems Installation	4
AVNC	1453	Operational Testing of Aircraft Electronic Systems	4
CETT	1457	Linear Integrated Circuits	4
CETT	2443	Principles of Color Television	4
CETT	2449	Research and Project Design	4
CPMT	1447	Computer System Peripherals	4
CPMT	1449	Computer Networking Technology	4
CPMT	2437	Microcomputer Interfacing	4
CPMT	2445	Computer System Troubleshooting	4
EECT	1191	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	1
EECT	1291	Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician	2
EECT	1391	Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician	3
EECT	1440	Telecommunications Transmission Media	4
EECT	1491	Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician	4
EECT	2380	Cooperative Education - Electrical, Electronic and Communications Engineering Technology/Technician	3
EECT	2439	Communications Circuits	4
ELMT	2433	Industrial Electronics	4
HYDR	1445	Hydraulics and Pneumatics	4
ITCC	1402	Local Area Networks Design and Protocols: Cisco 1	4
ITCC	1406	Basic Router Configuration: Cisco 2	4
ITCC	1442	Local Area Management (LAN): Cisco 3	4
ITCC	1446	Wide Area Management (WAN): Cisco 4	4
ITMC	1401	Microsoft Windows 2000 Network and Operating Systems Essentials (MS 2151)	4
ITMC	1419	Installing and Administering Windows 2000	4
ITMC	1442	Implementing a Microsoft Windows 2000 Network Infrastructure (MS 2153)	4
ITMC	1443	Implementing and Administering Microsoft Windows 2000 Directory Services (MS 2154)	4
ITMC	1458	Supporting Microsoft Windows 2000	4
ITMC	2431	Designing a Microsoft Windows 2000 Directory Services Infrastructure (MS 1561)	4
LOTT	2340	Microwave Fundamentals	3
RBTC	2445	Robot Application, Set-up and Testing	4

++++ Electives- Technical electives must be selected from the following with the approval of an Electronics Technology professor and must be a separate course than those chosen to meet the +++Elective:

CETT	2449	Research and Project Design	4
CPMT	2437	Microcomputer Interfacing	4
EECT	1391	Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician	3
EECT	1491	Special Topics in Electrical, Electronic and Communications Engineering/ Technology/ Technician	4
EECT	2380	Cooperative Education - Electrical, Electronic and Communications Engineering Technology/ Technician	3
RBTC	2445	Robot Application, Set-up and Testing	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

TECH PREP ENHANCED SKILLS CERTIFICATES

These Enhanced Skills Certificates are attached to the Associate in Applied Sciences Degree in Electronics Technology and provide the student advanced skills required by the industry to specialize in Automated Manufacturing or Computer Maintenance.

AUTOMATED MANUFACTURING

Effective January 1, 2004, this award has been deactivated for North Lake. For current students, the award will be closed on or before January 1, 2007. New students should not attempt to pursue this award.

Mountain View and North Lake (see above) only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.ELET.AUTOMATED.04

		CREDIT HOURS
SEMESTER I		
HYDR 1445	Hydraulics and Pneumatics	4
ELMT 2433	Industrial Electronics	4
RBTC 2445	Robot Application, Set-Up and Testing	4
		12

Minimum Hours Required.....12

COMPUTER MAINTENANCE

Effective January 1, 2004, this award has been deactivated for North Lake. For current students, the award will be closed on or before January 1, 2007. New students should not attempt to pursue this award.

Mountain View and North Lake (see above) only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.ELET.COMP.MAIN.04

		CREDIT HOURS
SEMESTER I		
CPMT 1447	Computer System Peripherals	4
CPMT 1449	Computer Networking Technology	4
CPMT 2445	Computer System Troubleshooting	4
		12

Minimum Hours Required.....12

This is a Tech-Prep program. Students interested in pursuing the Tech Prep Enhanced Skills Certificate need to consult with their advisor.

ELECTRONICS TECHNOLOGY -- NETWORKING SPECALIST

Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ELEC.NWK.SPEC

This certificate is designed to prepare students for an entry level position in the networking or telecommunications industries. Course options will be typically selected either in the Microsoft MCSE or Cisco CCNA certification areas. All of the courses in the certificate are applicable to the Associate in Applied Sciences degree in Electronics Technology.

		CREDIT HOURS
SEMESTER I		
ITMC 1419	Installing and Administering Windows 2000 **OR**	4
ITCC 1402	Local Area Networks Design and Protocols: Cisco 1	(4)
ITMC 1458	Supporting Microsoft Windows 2000 **OR**	4
ITCC 1406	Basic Router Configuration: Cisco 2	(4)
EECT 1440	Telecommunications Transmission Media	4
		12
SEMESTER II		
ITMC 1443	Implementing and Administering Microsoft Windows 2000 Directory Services **OR**	4
ITCC 1442	Local Area Management (LAN) Cisco 3	(4)
ITNW 2452	Administering Microsoft SQL Server 7.0 **OR**	4
ITCC 1446	Wide Area Management (WAN): Cisco 4	(4)
		8

Minimum Hours Required 20

ELECTRONICS TECHNOLOGY -- TECHNICAL PLATFORM

Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ELEC.TECH.PLAT

This certificate is designed to prepare students for an entry or intern level position in the electronics manufacturing or service industry. All of the courses in the certificate are applicable to the Associate in Applied Sciences degree in Electronics Technology.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
CPMT 1403	Introduction to Computer Technology	4
		8
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
		8

Minimum Hours Required 16

ELECTRONICS TECHNOLOGY -- SEMICONDUCTOR MANUFACTURING TECHNOLOGY

Mountain View and North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ELET.SEMI

This program prepares the student to perform the technical tasks within a wafer fabrication area and includes monitoring process output parameters, analyzing and troubleshooting process related problems, analyzing various chemical reactions, and making decisions which will improve yield of various wafer lots. The course of study may involve participating in wafer experiments or designing of experiments to find the source of process problems or measurement of process limits. Emphasis is placed on working closely with all members of the semiconductor manufacturing team.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
ENGL 1301	Composition I	3
TECM 1341	Technical Algebra **OR**	
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
HYDR 1445	Hydraulics and Pneumatics	4
		14-15
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
RBTC 2445	Robot Application, Set-Up and Testing	4
CHEM 1405	Introductory Chemistry I **OR**	
CHEM 1411	General Chemistry	4
+Elective	Humanities/Fine Arts	3
		19
SEMESTER III		
CETT 1425	Digital Fundamentals **OR**	
CPMT 1403	Introduction to Computer Technology	4
CETT 1457	Linear Integrated Circuits	4
SMFT 1343	Semiconductor Manufacturing Technology I	3
CHEM 1407	Introductory Chemistry II **OR**	
CHEM 1412	General Chemistry **OR**	
PHYS 1415	Physical Science **OR**	
PHYS 1405	Concepts in Physics	4
		15
SEMESTER IV		
ELMT 2433	Industrial Electronics	4
SMFT 2231	RF Power Systems	2
QCTC 1343	Quality Assurance	3
SMFT 2343	Semiconductor Manufacturing Technology II **OR**	
CETT 2380	Cooperative Education – Computer Engineering Technology/ Technician	3
SPCH 1311	Introduction to Speech Communication	3
++Elective	Social/Behavioral Science	3
		18
Minimum Hours Required		66-67

+Elective - must be selected from the following:

Any ARTS, HUMA, MUSI or PHIL course.

++Elective - must be selected from the following:

Any GOVT, HDEV, HIST or PSYC course.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

EMERGENCY MEDICAL SERVICES -- PARAMEDICINE

Brookhaven only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.EMS.PARAMED.04

Emergency medical technicians-paramedics, working under the direction of a physician (often through radio communication), recognize, assess, and manage medical emergencies of acutely ill or injured patients in pre-hospital care settings. EMT-Paramedics work principally in advanced life-support units and ambulance services under medical supervision and direction.

This degree plan combines classroom teaching with supervised clinical and field experience for the emergency medical health professional. Upon successful completion of all course work for the degree, the student is eligible to take the exam for registration as an Emergency Medical Technician-Paramedic through the National Registry of EMT. Upon successful completion of that exam, the student is eligible to apply for license as an EMT-Paramedic in the State of Texas.

		CREDIT HOURS
SEMESTER I		
EMSP 1501	Emergency Medical Technician – Basic	5
EMSP 1160	Clinical-Emergency Medical Technology/Technician (EMT Paramedic)	1
EMSP 2332	Mass Disaster Response	3
SCIT 1407	Human Anatomy and Physiology I	4
ENGL 1301	Composition I	3
		16
SEMESTER II		
EMSP 1438	Introduction to Advanced Practice	4
EMSP 1355	Trauma Management	3
EMSP 1356	Patient Assessment and Airway Management	3
SCIT 1408	Human Anatomy and Physiology II	4
		14
SEMESTER III		
EMSP 2544	Cardiology **OR**	5
EMSP 2444	Cardiology	(4)
EMSP 2434	Medical Emergencies	4
EMSP 2260	Clinical-Emergency Medical Technology/Technician (EMT Paramedic)	2
MATH 2342	Introductory Statistics **OR**	3
MATH 1324	Mathematics for Business and Economics **OR**	(3)
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
		13-15
SEMESTER IV		
EMSP 2430	Special Populations	4
EMSP 2261	Clinical-Emergency Medical Technology/Technician (EMT Paramedic)	2
HPRS 2300	Pharmacology for Health Professions	3
PSYC 2301	Introduction to Psychology	3
		12
SEMESTER V		
EMSP 2338	EMS Operations	3
EMSP 2143	Assessment Based Management	1
EMSP 2463	Clinical-Emergency Medical Technology/Technician (EMT Paramedic)	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
+Elective	Humanities/Fine Arts	3-4
		14-15
Minimum Hours Required		69-72

+Humanities/Fine Arts Elective must be a 3 or 4 semester credit hour course selected from the following list:

SPAN 1311	Introduction to Spanish	3
SPAN 1411	Beginning Spanish II	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

EMERGENCY MEDICAL SERVICES -- PARAMEDICINE

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Brookhaven only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.EMS.PARAMED

This Level II Certificate combines classroom teaching with supervised clinical and field experience for the emergency medical health professional. Upon successful completion of all course work for the certificate, the student is eligible to take the exam for certification as an Emergency Medical Technician-Paramedic through the National Registry of EMT. Upon successful completion of that examination, the student is eligible to apply for certification as an EMT-Paramedic in the State of Texas.

		CREDIT HOURS
SEMESTER I		
EMSP 1501	Emergency Medical Technician – Basic	5
EMSP 1160	Clinical-Emergency Medical Technology/Technician (EMT Paramedic)	1
EMSP 1438	Introduction to Advanced Practice	4
MATH 2342	Introductory Statistics **OR**	3
MATH 1324	Mathematics for Business and Economics **OR**	(3)
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
		13-14
SEMESTER II		
EMSP 1355	Trauma Management	3
EMSP 1356	Patient Assessment and Airway Management	3
EMSP 2544	Cardiology **OR**	5
EMSP 2444	Cardiology	(4)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking **OR**	(3)
ENGL 1301	Composition I	(3)
EMSP 2434	Medical Emergencies	4
		17-18
SEMESTER III		
EMSP 2260	Clinical-Emergency Medical Technology/Technician (EMT Paramedic)	2
EMSP 2430	Special Populations	4
EMSP 2261	Clinical-Emergency Medical Technology/Technician (EMT Paramedic)	2
EMSP 2338	EMS Operations	3
EMSP 2143	Assessment Based Management	1
EMSP 2463	Clinical-Emergency Medical Technology/Technician (EMT Paramedic)	4
		16
Minimum Hours Required		46-48

EMERGENCY MEDICAL SERVICES -- EMERGENCY MEDICAL TECHNICIAN BASIC

Brookhaven only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.EMS.EMT.BASIC.04

This certificate plan combines classroom teaching with supervised clinical and field experience for the emergency medical health professional. Upon successful completion of all course work for the certificate, the student is eligible to take the exam for registration as an Emergency Medical Technician-Basic through the National Registry of EMTs. Successful completion of that exam is necessary to apply for certification as an EMT-Basic to the Texas Department of Health.

		CREDIT HOURS
SEMESTER I		
EMSP 1501	Emergency Medical Technician – Basic	5
EMSP 2332	Mass Disaster Response	3
EMSP 1160	Clinical-Emergency Medical Technology/Technician (EMT Paramedic)	1
SCIT 1407	Human Anatomy and Physiology I	4
ENGL 1301	Composition I	3
		16
Minimum Hours Required		16

ENGINE TECHNOLOGY -- MOTORCYCLE MECHANICS

Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ENGINE.MOTORCYC

This program is designed to train students to meet entry level requirements in the field of motorcycle mechanics. This will include diagnosis, repair, and maintenance of foreign and domestic motorcycles. Included in this program is the study of carburetion, ignition, and electrical systems, engine overhaul and tune-up, and motorcycle chassis. Throughout the entire program an emphasis is placed on the latest factory recommended techniques.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

		CREDIT HOURS
SEMESTER I		
MTRC 1405	Motorcycle Service Principles	4
MTRC 1402	Motorcycle Tune Up	4
SMER 1416	Motorcycle Two Stroke Engine/Transmission	4
		12
SEMESTER II		
SMER 1419	Motorcycle Four Stroke Engine/Transmission	4
SMER 1422	Motorcycle Electrical Systems	4
MTRC 1408	Motorcycle Chassis and Drive Systems	4
		12
SEMESTER - SUMMER SESSION		
SMER 1371	Service Department Operations **OR**	
MTRC 1366	Practicum (or Field Experience)- Motorcycle Mechanic and Repairer **OR**	
MTRC 1380	Cooperative Education - Motorcycle Mechanic and Repairer	3
		3
Minimum Hours Required		27

ENGINE TECHNOLOGY -- OUTBOARD ENGINE

Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ENGINE.OUTBOARD

This program is designed to train students to meet entry level requirements in the field of outboard marine engine mechanics. This will include theory, diagnosis, repair, overhaul and maintenance of outboard marine engines. Included in this program is the study of outboard marine engine fuel, electrical and ignition systems, engine overhaul and tune-up, and lower units. Throughout the entire program an emphasis is placed on accepted shop techniques used throughout the outboard marine engine service industry.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

		CREDIT HOURS
SEMESTER I		
SMER 1404	Outboard Service Principles	4
SMER 1401	Outboard Tune Up	4
SMER 1407	Outboard Powerhead Overhaul	4
		12
SEMESTER II		
SMER 1410	Outboard Lower Units	4
SMER 1413	Outboard Electrical Systems	4
SMER 1371	Service Department Operations **OR**	
SMER 1366	Practicum (or Field Experience) - Small Engine Mechanic and Repairer **OR**	
SMER 1380	Cooperative Education - Small Engine Mechanic and Repairer	3
		11
Minimum Hours Required		23

ENGINE TECHNOLOGY -- SMALL ENGINE

Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ENGINE.SMALL

This program is designed to train students to meet entry level requirements in the field of small engine mechanics. This will include theory, diagnosis, repair, overhaul and maintenance of small engines used on lawn mowers, garden tractors, and other small equipment. Included in this program is the study of small engine carburetion and electrical systems, engine overhaul and tune-up, and belt, chain, and direct drive power systems. Throughout the entire program an emphasis is placed on accepted shop techniques used throughout the small engine powered equipment industry.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

		CREDIT HOURS
SEMESTER I		
SMER 1428	Small Engine Service Principles	4
SMER 1431	Small Engine Tune Up	4
SMER 1434	Small Engine Two Stroke Overhaul	4
		12
SEMESTER II		
SMER 1437	Small Engine Four Stroke Overhaul	4
SMER 1425	Small Engine Electrical Systems	4
SMER 1371	Service Department Operations **OR**	
SMER 1366	Practicum (or Field Experience) - Small Engine Mechanic And Repairer **OR**	
SMER 1380	Cooperative Education – Small Engine Mechanic and Repairer	3
		11
Minimum Hours Required		23

ENGINEERING TECHNOLOGY -- ELECTRONICS TECHNOLOGY

Richland only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ENGINEER.ELECTRO

To meet the needs of the rapidly changing and expanding field of industrial electronics, this program stresses electronic principles and hands-on experience that can be applied to many aspects of advanced electronics. The Electronics core is complemented by Engineering Technology instruction in areas such as CAD, Fluid Power, Mechanics and Manufacturing. This program prepares individuals for technician level employment in electronics and related industries.

		CREDIT HOURS
SEMESTER I		
DFTG 1309	Basic Computer-Aided Drafting	3
QCTC 1343	Quality Assurance	3
MCHN 1352	Intermediate Machining I	3
CETT 1403	DC Circuits	4
TECM 1341	Technical Algebra **OR**	3
MATH 1414	College Algebra	(4)
		16-17
SEMESTER II		
ENGL 1301	Composition I	3
INTC 1307	Electronic Test Equipment	3
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
TECM 1317	Technical Trigonometry **OR**	3
MATH 1316	Plane Trigonometry	(3)
		17
SEMESTER III		
CETT 1331	Technical Programming **OR**	3
INMT 1447	Industrial Automation	(4)
CETT 1425	Digital Fundamentals	4
HYDR 1445	Hydraulics and Pneumatics	4
PHYS 1401	Introductory General Physics	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		18-19
SEMESTER IV		
CETT 1457	Linear Integrated Circuits **OR**	4
CETT 2337	Microcomputer Control **OR**	(3)
ENTC 2380	Cooperative Education – Engineering Technology, General	(3)
+Elective	Social/Behavioral Science	3
++Elective	Humanities/Fine Arts	3
PHYS 1402	Introductory General Physics	4
TECM 1349	Technical Math Applications **OR**	3
MATH 2513	Calculus I	(5)
		16-19
Minimum Hours Required		67-72

+Must be selected from the DCCCD Social/Behavioral Science CORE list.

++Must be selected from the DCCCD Humanities/Fine Arts CORE list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an engineering technology faculty member regarding transfer requirements and the transferability of these course to the four-year institution.

ENGINEERING TECHNOLOGY -- ELECTRONICS TECHNOLOGY

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ENGR.ELECTRONICS

This one-year program develops the basic skills necessary for entry-level positions in electronics and related industries. Computer-aided instruction and analysis studies include electronic devices and their application in analog and digital circuits. All courses required for the certificate are applicable to the Associate in Applied Sciences Degree in Electronic Technology.

		CREDIT HOURS
SEMESTER I		
CETT 1403	DC Circuits	4
TECM 1341	Technical Algebra **OR**	3
MATH 1414	College Algebra	(4)
CETT 1425	Digital Fundamentals	4
DFTG 1309	Basic Computer-Aided Drafting	3
MCHN 1352	Intermediate Machining I	3
		17-18
SEMESTER II		
CETT 1405	AC Circuits	4
CETT 1429	Solid State Devices	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
TECM 1317	Technical Trigonometry **OR**	3
MATH 1316	Plane Trigonometry	(3)
		14
SEMESTER III		
CETT 1331	Technical Programming **OR**	3
INMT 1447	Industrial Automation	(4)
ENTC 1307	Electronic Test Equipment	3
		6-7
Minimum Hours Required		37-39

ENGINEERING TECHNOLOGY -- CAD/CAM

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.ENGR.CAD/CAM

This certificate has been developed to provide skills for entry level CAD positions as well as the manufacturing specialists who requires training necessary for the integration of CAD and the CNC machines.

		CREDIT HOURS
SEMESTER I		
QCTC 1343	Quality Assurance	3
MCHN 1352	Intermediate Machining I	3
DFTG 1309	Basic Computer-Aided Drafting	3
TECM 1341	Technical Algebra **OR**	3
MATH 1414	College Algebra	(4)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		15-16
SEMESTER II		
DFTG 2350	Geometric Dimensioning and Tolerancing	3
INMT 1343	CAD-CAM **OR**	3
ENTC 1380	Cooperative Education – Engineering Technology, General	(3)
DFTG 1405	Technical Drafting	4
TECM 1317	Technical Trigonometry **OR**	3
MATH 1316	Plane Trigonometry	(3)
		13
Minimum Hours Required		28-29

ENGINEERING TECHNOLOGY -- COMPUTER AIDED DESIGN

Richland only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ENGINEER.CAD

Design skills are required of today's CAD professionals. Knowledge of FEA, material analysis, applied mechanics, design for manufacture and CAD/CAM provides a strong base of information needed in design development.

This program stresses the entire product development process, using the parametric approach and integrating the computer as a true instrument of design - not a drafting tool.

		CREDIT HOURS
SEMESTER I		
HYDR 1445	Hydraulics and Pneumatics	4
MCHN 1352	Intermediate Machining I	3
CETT 1403	DC Circuits	4
TECM 1341	Technical Algebra **OR**	3
MATH 1414	College Algebra	(4)
DFTG 1309	Basic Computer-Aided Drafting	3
		17-18
SEMESTER II		
DFTG 1405	Technical Drafting **OR**	4
ENGR 1304	Engineering Graphics I	(3)
INMT 1343	CAD-CAM	3
ENGL 1301	Composition I	3
CETT 1405	AC Circuits	4
TECM 1317	Technical Trigonometry **OR**	3
MATH 1316	Plane Trigonometry	(3)
		16-17
SEMESTER III		
DFTG 2312	Technical Illustration	3
QCTC 1343	Quality Assurance	3
PHYS 1401	Introductory General Physics	4
TECM 1349	Technical Math Applications **OR**	3
MATH 2513	Calculus I	(5)
+Elective	Humanities/Fine Arts	3
		16-18
SEMESTER IV		
++Elective	Technical Elective **OR**	3
ENTC 2380	Cooperative Education-Engineering Technology, General	(3)
DFTG 2340	Solid Modeling/Design	3
PHYS 1402	Introductory General Physics	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
+++Elective	Social/Behavioral Science	3
		16

Minimum Hours Required 65-69

+Must be selected from the DCCCD Humanities / Fine Arts CORE list.

++Choose one of the following technical electives:

DFTG	2344	Strength of Materials	3
DFTG	2350	Geometric Dimensioning and Tolerancing	3

+++Must be selected from the DCCCD Social/Behavioral Science CORE list.

NOTE: Students enrolling in this program who plan to transfer to a four year institution should consult an engineering technology faculty member regarding transfer requirements and the transferability of these courses to the four year institution of their choice.

ENGINEERING TECHNOLOGY -- COMPUTER AIDED DESIGN

Richland only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.ENGR.CAD

		CREDIT HOURS
SEMESTER I		
DFTG 1309	Basic Computer - Aided Drafting	3
		3
SEMESTER II		
DFTG 1405	Technical Drafting	4
DFTG 2312	Technical Illustration	3
		7

Minimum Hours Required 10

ENGINEERING TECHNOLOGY -- PARAMETRIC AUTOMATED DESIGN

Richland only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.ENGR.PARA.DESIGN

		CREDIT HOURS
SEMESTER I		
DFTG 2340	Solid Modeling/Design	3
DFTG 2350	Geometric Dimensioning and Tolerancing	3
		6
SEMESTER II		
ENTC 1391	Special Topics Engineering Technology/Technician,General	3
		3

Minimum Hours Required 9

ENGINEERING TECHNOLOGY-- INTEGRATED CIRCUIT LAYOUT

Richland and Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ENGR.INTR.CT.LAY

The Integrated Circuit Layout program trains the student to prepare layout drawings and designs of integrated circuits from schematics using computer-aided design equipment. The program aids the student in developing the skills necessary to convert logic diagrams to cell drawings in accordance with design rules. Students will perform design rule checks and prepare databases for pattern generation. Emphasis is placed on working closely with all members of the semiconductor manufacturing design team.

		CREDIT HOURS
SEMESTER I		
POFT 1127	Introduction to Keyboarding	1
CETT 1403	DC Circuits	4
SMFT 1343	Semiconductor Manufacturing Technology I	3
CETT 1425	Digital Fundamentals	4
DFTG 2374	Integrated Circuit Design	3
		15
SEMESTER II		
CETT 1405	AC Circuits	4
MATH 1414	College Algebra	4
DFTG 2375	Advanced Integrated Circuit Design	3
COSC 1401	Microcomputer Concepts and Applications **OR**	4
ITSC 1401	Introduction to Computers	(4)
		15
SEMESTER III		
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
CETT 1429	Solid State Devices	4
CETT 1331	Technical Programming	3
ITSC 2435	Application Problem Solving	4
		17
SEMESTER IV		
+Elective	Humanities/Fine Arts	3
++Elective	Social/Behavioral Science	3
DFTG 1394	Special Topics in Electrical/ Electronics Drafting and Electrical/ Electronics CAD/CADD	3
ITSE 1407	Introduction to C++ Programming **OR**	4
ITSE 1402	Computer Programming **OR**	(4)
COSC 1415	Introduction to Computer Science and Programming	(4)
EECT 2380	Cooperative Education–Electrical, Electronic, and Communications Engineering Technology/ Technician **OR**	3
ENTC 2380	Cooperative Education- Engineering, Technology, General **OR**	(3)
DFTG 2380	Cooperative Education-Drafting and Design Technology/Technician, General **OR**	(3)
+++Elective	Technical	(3-4)
		16-17

Minimum Hours Required 63-64

+Must be selected from the DCCCD Humanities / Fine Arts CORE list.

++Must be selected from the DCCCD Social / Behavioral Science CORE list.

+++Technical Elective must be selected from the following:

CETT	1441	Solid State Circuits	4
CETT	1445	Microprocessor	4
CETT	2337	Microcomputer Control	3
CETT	1457	Linear Integrated Circuits	4
ITSC	1407	UNIX Operating System I	4

NOTE: Students enrolling in this program who plan to transfer to a four year institution should consult an engineering technology faculty member regarding transfer requirements and the transferability of these courses to the four year institution of their choice.

ENGINEERING TECHNOLOGY -- INTEGRATED CIRCUIT LAYOUT

Richland and Eastfield only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.ENGR.INTR.CT.LAY

This certificate program provides courses work to assist the student to prepare for entry-level positions in Integrated Circuit Layout. Emphasis is placed on working closely with all members of the semiconductor design team.

		CREDIT HOURS
SEMESTER I		
POFT 1127	Introduction to Keyboarding	1
CETT 1403	DC Circuits	4
SMFT 1343	Semiconductor Manufacturing Technology I	3
CETT 1425	Digital Fundamentals	4
DFTG 2374	Integrated Circuit Design	3
		15
SEMESTER II		
CETT 1405	AC Circuits	4
MATH 1414	College Algebra	4
DFTG 2375	Advanced Integrated Circuit Design	3
COSC 1401	Microcomputer Concepts and Applications **OR**	4
ITSC 1401	Introduction to Computers	(4)
		15
SEMESTER III		
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
ENGL 1301	Composition I	(3)
CETT 1429	Solid State Devices	4
CETT 1331	Technical Programming	3
DFTG 1394	Special Topics in Electrical/ Electronics Drafting and Electrical / Electronics CAD/CADD	3
		13
Minimum Hours Required		43

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an engineering technology faculty member regarding transfer requirements and the transferability of these courses to the four-year institution.

FASHION DESIGN

El Centro only

(Associate in Applied Sciences Degree)

The Fashion design freshman student is provided a core curriculum of study related to the fashion industry. The basic fashion core, along with the general education courses, enables the student to enter a specialized track of either Apparel Design or Pattern Design in the second year of studies. Upon completion of the 36 semester hour core, students should select one of two specialties: Apparel Design or Pattern Design. See next page.

		CREDIT HOURS
CORE CURRICULUM		
SEMESTER I		
FSHD 1324	Ready-to-Wear Construction	3
FSHN 1313	Basic Color Theory and Application	3
FSHN 1309	History of Costumes Through the 18th Century	3
#FSHN 1417	Pattern Drafting I	4
ENGL 1301	Composition I	3
MATH 1332	College Mathematics I	3
		19
SEMESTER II		
FSHN 1325	Basic Women's Tailoring	3
FSHN 1123	Introduction to Mass Production	1
FSHD 1322	Fashion Sketching	3
FSHN 1310	History of Costume: 18th Century to Present	3
FSHN 1418	Pattern Drafting II	4
SPCH 1311	Introduction to Speech Communication	3
		17
Minimum Hours Required		36

Student must make a "C" or better to continue on to *FSHN 1418 Pattern Drafting II.*

FASHION DESIGN -- APPAREL DESIGN

El Centro only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.FASHION.APPAREL

The apparel designer converts the design idea into an industrial paper pattern used in the mass production of clothing. New style trends each season demand individual creative thinking to develop saleable designs. Upon successful completion of the program, the student enters a women's wear or children's wear manufacturing company as an assistant in the design department.

		CREDIT HOURS
SEMESTERS I and II		
Core Curriculum		36
		36
SEMESTER III		
FSHN 1301	Textiles	3
FSHD 1217	Apparel Computer Systems	2
*FSHN 1449	Intermediate Pattern Drafting	4
FSHD 1391	Special Topics in Fashion Design and Illustration	3
FSHD 2343	Fashion Collection Design	3
HUMA 1301	Introduction to the Humanities **OR**	3
PHIL 1301	Introduction to Philosophy	(3)
		18
SEMESTER IV		
FSHD 1218	Apparel Computer Systems	2
FSHN 2432	Advanced Pattern Drafting	4
FSHD 2344	Fashion Collection Production	3
FSHD 2205	Draping	2
PSYC 2302	Applied Psychology	3
+Elective		3
		17
Minimum Hours Required		71

+Elective-must be selected from the following:

Any ARTS course		(Student must complete three credit hours of ARTS electives to fulfill the degree plan.) 3
FSHN	2380	Cooperative Education-Apparel and Textile Manufacture 3

*Student must make a "C" or better to continue on to *FSHN 2432 Advanced Pattern Drafting.*

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

FASHION DESIGN -- PATTERN DESIGN

El Centro only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.FASHION.PATTERN

The pattern designer converts the fashion sketch or original garment into an industrial paper pattern used in the mass production of clothing. Drafting is the skill of developing a flat pattern with measurements. Draping is the skill of developing a pattern by placing cloth over a dress form. Upon completion of the program, the student enters a women's wear or children's wear manufacturing company as an assistant in the pattern department.

		CREDIT HOURS
SEMESTERS I and II		
Core Curriculum		36
		36
SEMESTER III		
FSHN 1301	Textiles	3
FSHD 1217	Apparel Computer Systems	2
*FSHN 1449	Intermediate Pattern Drafting	4
HUMA 1301	Introduction to the Humanities **OR**	3
PHIL 1301	Introduction to Philosophy	(3)
PSYC 2302	Applied Psychology	3
		15
SEMESTER IV		
FSHD 1218	Apparel Computer Systems	2
FSHN 2432	Advanced Pattern Drafting	4
FSHD 2205	Draping	2
FSHD 2241	Pattern Grading	2
+Elective		3-4
		13-14
Minimum Hours Required		64-65

+Elective-must be selected from the following:

Any ARTS course		(Student must complete three credit hours of ARTS electives to fulfill the degree plan.)	3
FSHN	2380	Cooperative Education-Apparel and Textile Manufacturer	3
ITSC	1401	Introduction to Computers	4

*Student must make a "C" or better to continue on to *FSHN 2432 Advanced Pattern Drafting.*

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

FASHION DESIGN -- THEATRICAL COSTUME DESIGN

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.FSHD.THEATRICAL

The Theatrical Costume Design Certificate Program prepares the student for an entry-level job in a theatrical costume workshop.

		CREDIT HOURS
SEMESTER I		
FSHD 1324	Ready-to-Wear Construction	3
FSHN 1309	History of Costume Through the 18th Century **OR**	3
FSHN 1310	History of Costume: 18th Century to Present	(3)
*FSHN 1417	Pattern Drafting I	4
DRAM 1310	Introduction to the Theatre	3
ENGL 1301	Composition I	3
		16
SEMESTER II		
FSHN 1325	Basic Women's Tailoring	3
FSHN 1418	Pattern Drafting II	4
FSHD 2205	Draping	2
DRAM 1341	Make-up for the Stage	3
MATH 1332	College Mathematics I **OR**	3
SPCH 1311	Introduction to Speech Communication	(3)
		15
SEMESTER III		
FSHN 1301	Textiles	3
FSHN 1449	Intermediate Pattern Drafting	4
		7
SEMESTER IV		
FSHD 2241	Pattern Grading	2
DRAM 1120	Theater Practicum I	1
		3
Minimum Hours Required		41

*Students must make a grade of C or better in FSHN 1417 Pattern Drafting I to continue on to FSHN 1418 Pattern Drafting II.

FOOD AND HOSPITALITY INSTITUTE -- BAKERY/PASTRY

El Centro only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.BAKERY/PASTRY.04

The Bakery/Pasty degree encompasses all aspects of bakery and pastry shop operations with an emphasis on preparation skills and business management.

The Bakery/Pastry degree is accredited by the Accrediting Commission of the American Culinary Federation.

		CREDIT HOURS
SEMESTER I		
CHEF 1305	Sanitation and Safety	3
PSTR 1301	Fundamentals of Baking	3
PSTR 1206	Cake Decorating I	2
PSTR 1207	Cake Decorating II	2
TECM 1391	Special Topics in Applied Mathematics, General **AND**	3
+++Elective	Natural Science **OR**	4
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
		13-17
SEMESTER II		
RSTO 1313	Hospitality Supervision	3
PSTR 1305	Breads and Rolls	3
PSTR 1343	Bakery Operations and Management	3
RSTO 1306	Facilities, Layout and Design	3
PSTR 2331	Advanced Pastry Shop	3
		15
SEMESTER III		
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking **OR**	(3)
SPCH 1321	Business and Professional Communication	(3)
		6
SEMESTER IV		
PSTR 1342	Quantity Bakeshop Production	3
RSTO 1380	Cooperative Education-Restaurant, Culinary, and Catering Management/Manager	3
PSTR 1310	Pies, Tarts, Teacakes, and Cookies	3
+Elective		3
++Elective	Humanities/Fine Arts	3
		15
SEMESTER V		
PSTR 1312	Laminated Dough, Pate a Choux, and Donuts	3
PSTR 2330	Advanced Pastry Competition	3
RSTO 2380	Cooperative Education-Restaurant, Culinary, and Catering Management/Manager	3
PSYC 2301	Introduction to Psychology	3
+Elective		3
		15

Minimum Hours Required 64-68

+Elective - must be selected from the following:

PSTR	1191	Special Topics in Baker/Pastry Chef **AND** 1
PSTR	1291	Special Topics in Baker/Pastry Chef 2
PSTR	1391	Special Topics in Baker/Pastry Chef 3
CHEF	1301	Basic Food Preparation 3
HAMG	1321	Introduction to Hospitality Industry 3
HAMG	2307	Hospitality Marketing and Sales 3
IFWA	1318	Nutrition for the Food Service Professional 3
RSTO	1325	Purchasing for Hospitality Operations 3
RSTO	2301	Principles of Food and Beverage Controls 3
RSTO	2307	Catering 3

++Humanities/Fine Arts elective -must be selected from the DCCCD Humanities/Fine Arts Core list.

+++Natural Science elective - Students selecting TECM 1391 must also select any course from the DCCCD Natural Science Core list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

FOOD AND HOSPITALITY INSTITUTE -- BAKERY/PASTRY

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.BAKERY/PASTRY.04

This certificate prepares the student to function as a bakery/pastry shop employee. All credits earned in this program may be applied toward the Associate in Applied Sciences Degree in Bakery/Pastry.

		CREDIT HOURS
SEMESTER I		
CHEF 1305	Sanitation and Safety	3
PSTR 1301	Fundamentals of Baking	3
PSTR 1206	Cake Decorating I	2
ENGL 1301	Composition I	3
		11
SEMESTER II		
RSTO 1313	Hospitality Supervision	3
PSTR 1305	Breads and Rolls	3
PSTR 1343	Bakery Operations and Management	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking **OR**	(3)
SPCH 1321	Business and Professional Communication	(3)
		12
SEMESTER III		
PSTR 2331	Advanced Pastry Shop	3
RSTO 1380	Cooperative Education – Restaurant, Culinary, and Catering Management/ Manager	3
PSTR 1310	Pies, Tarts, Teacakes, and Cookies	3
		9
SEMESTER IV		
PSTR 1312	Laminated Dough, Pate a Choux and Donuts	3
RSTO 2380	Cooperative Education-Restaurant, Culinary, and Catering Management/Manager	3
+Elective		1-3
		7-9
Minimum Hours Required		39-41

+Elective - must be selected from the following:

CHEF	1301	Basic Food Preparation	3
HAMG	1321	Introducttion to Hospitality Industry	3
PSTR	1191	Special Topics in Baker/Pastry Chef	1
PSTR	1291	Special Topics in Baker/Pastry Chef	2
PSTR	1391	Special Topics in Baker/Pastry Chef	3
PSTR	1207	Cake Decorating II	2
PSTR	1342	Quantity Bakeshop Production	3
PSTR	2330	Advanced Pastry Competition	3
HAMG	2307	Hospitality Marketing and Sales	3
IFWA	1318	Nutrition for the Food Service Professional	3
RSTO	1325	Purchasing for Hospitality Operations	3
RSTO	2301	Principles of Food and Beverage Controls	3
RSTO	2307	Catering	3

FOOD AND HOSPITALITY INSTITUTE -- CULINARY ARTS

El Centro only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.CULINARY.ARTS.04

The Culinary Arts degree provides a learning environment for the skills necessary to perform in various culinary related positions.

The Culinary Arts degree is accredited by the Accrediting Commission of the American Culinary Federation.

		CREDIT HOURS
SEMESTER I		
HAMG 1321	Introduction to Hospitality Industry	3
CHEF 1301	Basic Food Preparation	3
CHEF 1305	Sanitation and Safety	3
CHEF 1364	Practicum (or Field Experience) - Culinary Arts/Chef Training	3
TECM 1391	Special Topics in Applied Mathematics, General **AND**	3
+++Elective	Natural Sciences **OR**	4
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
		15-19
SEMESTER II		
PSTR 1301	Fundamentals of Baking	3
CHEF 2331	Advanced Food Preparation	3
RSTO 1304	Dining Room Service	3
CHEF 2364	Practicum (or Field Experience)- Culinary Arts/Chef Training	3
		12
SEMESTER III		
ENGL 1301	Composition I	3
++Elective	Humanities/Fine Arts	3
		6
SEMESTER IV		
RSTO 1313	Hospitality Supervision	3
CHEF 1441	American Regional Cuisine	4
CHEF 1310	Garde Manger	3
RSTO 1325	Purchasing for Hospitality Operations	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking **OR**	(3)
SPCH 1321	Business and Professional Communication	(3)
		16
SEMESTER V		
IFWA 1318	Nutrition for the Food Service Professional	3
RSTO 2301	Principles of Food and Beverage Controls	3
RSTO 1380	Cooperative Education-Restaurant, Culinary, and Catering Management/ Manager	3
PSYC 2301	Introduction to Psychology	3
+Elective		2-4
		14-16
Minimum Hours Required		63-69

+Elective - 2 or more SCH must be completed in one or courses for the following:

CHEF	1302	Principles of Healthy Cuisine	3
CHEF	1445	International Cuisine	4
CHEF	2302	Saucier	3
CHEF	2341	Advanced Culinary Competition	3
FDNS	1391	Special Topics in Foods and Nutrition Studies, General	3
HAMG	1340	Hospitality Legal Issues	3
HAMG	2307	Hospitality Marketing and Sales	3
PSTR	2331	Advanced Pastry Shop	3
RSTO	1306	Facilities, Layout and Design	3
PSTR	1319	Viticulture and Enology	3
RSTO	2307	Catering	3
RSTO	1191	Special Topics in Food and Beverage/ Restaurant Operations Manager	1
RSTO	1291	Special Topics in Food and Beverage/ Restaurant Operations Manager	2
RSTO	1391	Special Topics in Food and Beverage/ Restaurant Operations Manager	3

++Humanities/Fine Arts Elective -must be selected from the DCCCD Humanities/Fine Arts Core list.

+++Natural Science elective - Students selecting TECM 1391 must also select any course from the DCCCD Natural Science Core list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

FOOD AND HOSPITALITY INSTITUTE -- BASIC CULINARY SKILLS

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.CULINARY.ARTS.04

This certificate prepares the student to function in a variety of food preparation positions in commercial and non-commercial kitchens. Credits earned may be applied toward an Associate of Applied Science in Culinary Arts.

		CREDIT HOURS
SEMESTER I		
CHEF 1305	Sanitation and Safety	3
CHEF 1301	Basic Food Preparation	3
		6
SEMESTER II		
CHEF 2331	Advanced Food Preparation	3
PSTR 1301	Fundamentals of Baking	3
RSTO 1380	Cooperative Education – Restaurant, Culinary, and Catering Management/ Manager	3
		9
SEMESTER III		
CHEF 1310	Garde Manger	3
RSTO 1313	Hospitality Supervision	3
		6
Minimum Hours Required		21

FOOD AND HOSPITALITY INSTITUTE -- FOOD AND HOSPITALITY SERVICE

El Centro only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.FHSV.SERVICE.04

The Food and Hospitality degree program prepares students to assume a variety of responsible positions in the food and hospitality industry.

The Food and Hospitality Service degree is accredited by the Accrediting Commission of the American Culinary Federation.

		CREDIT HOURS
SEMESTER I		
HAMG 1321	Introduction to Hospitality Industry ***OR**	3
IFWA 1371	Organization and Management*	(3)
CHEF 1301	Basic Food Preparation	3
CHEF 1305	Sanitation and Safety	3
RSTO 1304	Dining Room Service	3
TECM 1391	Special Topics in Applied Mathematics, General **AND**	(3)
+++Elective	Natural Science **OR**	(4)
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
		15-19
SEMESTER II		
RSTO 1306	Facilities Layout and Design	3
RSTO 1313	Hospitality Supervision	3
CHEF 2331	Advanced Food Preparation	3
RSTO 1325	Purchasing for Hospitality Operations	3
IFWA 1318	Nutrition for the Food Service Professional	3
		15
SEMESTER III		
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking **OR**	(3)
SPCH 1321	Business and Professional Communication	(3)
		6
SEMESTER IV		
CHEF 1441	American Regional Cuisine	4
HAMG 2307	Hospitality Marketing and Sales** **OR**	3
FDNS 1391	Special Topics in Foods and Nutrition Studies, General** **OR**	(3)
FDNS 1309	Nutrition in the Community	(3)
RSTO 1380	Cooperative Education- Restaurant, Culinary, and Catering Management/ Manager	3
++Elective	Humanities/Fine Arts	3
		13
SEMESTER V		
RSTO 2301	Principles of Food and Beverage Controls	3
CHEF 1445	International Cuisine	4
RSTO 2380	Cooperative Education-Restaurant, Culinary, and Catering Management/ Manager	3
PSYC 2301	Introduction to Psychology	3
+Elective		1-3
		14-16
Minimum Hours Required		63-69

+Elective - must be selected from the following:

CHEF	1302	Principles of Healthy Cuisine	3
CHEF	1310	Garde Manger	3
CHEF	2302	Saucier	3
FDNS	1309	Nutrition in the Community**	3
FDNS	1391	Special Topics in Foods and Nutrition Studies, General**	3
HAMG	1340	Hospitality Legal Issues	3
PSTR	1301	Fundamentals of Baking	3
PSTR	2331	Advanced Pastry Shop	3
RSTO	1301	Beverage Management	3
RSTO	1319	Viticulture and Enology	3
RSTO	2307	Catering	3
RSTO	1191	Special Topics in Food and Beverage/Restaurant Operations Manager	1
RSTO	1291	Special Topics in Food and Beverage/Restaurant Operations Manager	2
RSTO	1391	Special Topics in Food and Beverage/Restaurant Operations Manager	3

++Humanities/Fine Arts Elective -must be selected from the DCCCD Humanities/Fine Arts Core list.

+++Natural Science elective - Students selecting TECM 1391 must also select any course from the Natural Science Core list.

*HAMG 1321 is recommended for those interested in Commercial Food Service such as restaurants.
*IFWA 1371 is recommended for those interested in Institutional Food Service such as schools and hospitals.

**FDNS 1391 or FDNS 1309 is suggested for those interested in the areas of hospital dietetics or child nutrition.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

FOOD AND HOSPITALITY INSTITUTE -- FOOD AND HOSPITALITY SERVICE

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.FHSV.SERVICE.04

This certificate prepares the student to function as a food service industry employee. All credits earned in this program may be applied toward the Associate in Applied Sciences Degree in Food and Hospitality Service.

		CREDIT HOURS
SEMESTER I		
HAMG 1321	Introduction to Hospitality Industry **OR**	3
IFWA 1371	Organization and Management	(3)
RSTO 1304	Dining Room Service	3
CHEF 1301	Basic Food Preparation	3
CHEF 1305	Sanitation and Safety	3
ENGL 1301	Composition I	3
		15
SEMESTER II		
RSTO 1313	Hospitality Supervision	3
CHEF 2331	Advanced Food Preparation	3
IFWA 1318	Nutrition for the Food Service Professional	3
RSTO 1306	Facilities, Layout and Design	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking **OR**	(3)
SPCH 1321	Business and Professional Communication	(3)
		15
SEMESTER III		
HAMG 2307	Hospitality Marketing and Sales **OR**	3
FDNS 1309	Nutrition in the Community	(3)
RSTO 2301	Principles of Food and Beverage Controls	3
+Elective		1-3
+Elective		1-3
		8-12
Minimum Hours Required		38-42

+Elective - must be selected from any of the following. Students may take only one Special Topics course to satisfy elective credit.

CHEF	1302	Principles of Healthy Cuisine	3
CHEF	1310	Garde Manger	3
CHEF	2302	Saucier	3
FDNS	1391	Special Topics in Foods and Nutrition Studies, General	3
HAMG	1340	Hospitality Legal Issues	3
PSTR	2331	Advanced Pastry Shop	3
RSTO	1301	Beverage Management	3
RSTO	1319	Viticulture and Enology	3
RSTO	1191	Special Topics in Food and Beverage/Restaurant Operations Manager	1
RSTO	1291	Special Topics in Food and Beverage/Restaurant Operations Manager	2
RSTO	1391	Special Topics in Food and Beverage/Restaurant Operations Manager	3
RSTO	2307	Catering	3

FOOD AND HOSPITALITY INSTITUTE -- CERTIFIED FOOD AND HOSPITALITY MANAGER

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.FHSV.MANAGER.04

This certification program prepares the student to assume entry-level management positions in the dining rooms of hotels, restaurants, clubs, coffee shops and other types of food service operations. Credits earned may be applied toward an Associated of Applied Science in Food and Hospitality Services or Associate of Applied Science in Culinary Arts.

		CREDIT HOURS
SEMESTER I		
HAMG 1321	Introduction to Hospitality Industry	3
RSTO 1304	Dining Room Service	3
CHEF 1305	Sanitation and Safety	3
		9
SEMESTER II		
RSTO 1313	Hospitality Supervision	3
RSTO 1380	Cooperative Education – Restaurant, Culinary, and Catering Management/Manager	3
+Elective		3
+Elective		3
		12
SEMESTER III		
RSTO 2380	Cooperative Education – Restaurant, Culinary, and Catering Management/Manager	3
+Elective		3
		6

Minimum Hours Required 27

+Elective - must be selected from any of the following:

HAMG	2307	Hospitality Marketing and Sales	3
IFWA	1318	Nutrition for the Food Service Professional	3
RSTO	1301	Beverage Management	3
RSTO	1306	Facilities, Layout and Design	3
RSTO	1319	Viticulture and Enology	3
RSTO	1325	Purchasing for Hospitality Operations	3
RSTO	1391	Special Topics in Food and Beverage/Restaurant Operations Manager	3
RSTO	2301	Principles of Food and Beverage Controls	3
RSTO	2307	Catering	3

Additional requirements include the following:
A. TABC Certification offered through RSTO 1304.
B. Registered Food Service Manager offered through CHEF 1305.
C. Total of 1000 hours of work experience including 640 hours through Cooperative Education.

GEOGRAPHIC INFORMATION SYSTEMS TECHNOLOGY

Eastfield and Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.SRVY.GEOGRAPHIC

		CREDIT HOURS
SEMESTER I		
DFTG 1405	Technical Drafting	4
SRVY 1419	Introduction to Geographic Information Systems	4
ITSC 1401	Introduction to Computers	4
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
		15-16
SEMESTER II		
DFTG 1309	Basic Computer-Aided Drafting	3
DFTG 1348	Topographical Drafting	3
SRVY 1315	Surveying Calculations I	3
SRVY 2305	Geographic Information Systems Applications	3
		12
SEMESTER III		
DFTG 1491	Special Topics in Drafting	4
SRVY 1491	Special Topics in Surveying	4
SPCH 1311	Introduction to Speech Communication	3
		11

Minimum Hours Required 38-39

HEALTH INFORMATION MANAGEMENT

Effective January 1, 2003, this award has been deactivated for Mountain View College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Mountain View (see above) only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.HEALTH.MANAGE

Medical Records Technicians are responsible for maintaining components of health information systems consistent with the medical, administrative, ethical, legal, accreditation, and regulatory requirements of the health care delivery system. Medical Records Technicians possess the technical knowledge and skills necessary to process, maintain, compile and report health information data for reimbursement, facility planning, marketing, risk management, utilization management, quality assessment and research; abstract and code clinical data using appropriate classification systems; and analyze health records according to standards. The medical record technician may be responsible for functional supervision of the various components of the health information system.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
SCIT 1407	Human Anatomy and Physiology I	
	OR	4
BIOL 2401	Anatomy and Physiology I #	(4)
HITT 1205	Medical Terminology	2
ITSC 1401	Introduction to Computers	4
		16
SEMESTER II		
SCIT 1408	Human Anatomy and Physiology II	
	OR	4
BIOL 2402	Anatomy and Physiology II #	(4)
BMGT 1303	Principles of Management	3
HITT 1401	Health Data Content and Structure	4
HITT 2231	Medical Terminology-Advanced	2
POFI 1345	Integrated Software Applications II	3
		16
SEMESTER III		
HITT 1345	Health Care Delivery Systems	3
HITT 1160	Clinical - Health Information Technology/Technician	1
HITT 1249	Pharmacology	2
MDCA 1302	Human Disease/Pathophysiology	3
+Elective	Humanities/Fine Arts	3
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER IV		
PSYC 2302	Applied Psychology	3
HITT 2239	Health Information Organization and Supervision	2
HITT 1441	Coding and Classification Systems	4
HITT 2343	Quality Assessment and Performance Improvement	3
HITT 1255	Health Care Statistics	2
HITT 1253	Legal and Ethical Aspects of Health Information	2
		16
SEMESTER V		
HITT 2160	Clinical - Health Information Technology/Technician	1
		1
SEMESTER VI		
HITT 2335	Coding and Reimbursement Methodologies	3
		3
SEMESTER VII		
HITT 1161	Clinical - Health Information Technology/Technician	1
		1
Minimum Hours Required		68

+Elective may be selected from the following:

ARTS	1301	Art Appreciation	3
DRAM	1310	Introduction to the Theatre	3
HUMA	1301	Introduction to Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3
Foreign Language			4

#BIOL 1406 General Biology and BIOL 1407 General Biology are prerequisites to BIOL 2401.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

HEALTH INFORMATION MANAGEMENT -- MEDICAL RECORD CODER

Effective January 1, 2003, this award has been deactivated for Mountain View College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Mountain View (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.HIMT.CODING

A Medical Records Coding Specialist assigns and sequences diseases and procedures with set classification standards and codes (ICD-9-CM, CPT, and HCFA). Responsibilities include the abstracting of medical information from outpatient and inpatient commercial, day surgery, emergency room, clinic and gastroenterology, medical records for statistical research and study purposes, and audits of unbilled accounts reports. The skills required for successful performance of this job include a working knowledge of human anatomy and physiology, medical terminology, the disease process, organization and communication skills.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
ITSC 1401	Introduction to Computers	4
SCIT 1407	Human Anatomy and Physiology I **OR**	4
BIOL 2401	Anatomy and Physiology I #	(4)
HITT 1205	Medical Terminology	2
		16
SEMESTER II		
SCIT 1408	Human Anatomy and Physiology II **OR**	4
BIOL 2402	Anatomy and Physiology II	(4)
MDCA 1302	Human Disease/Pathophysiology	3
HITT 1401	Health Data Content and Structure	4
HITT 1441	Coding and Classification Systems	4
HITT 2231	Medical Terminology-Advanced	2
		17
SEMESTER III		
HITT 1160	Clinical - Health Information Technology/Technician	1
		1
SEMESTER IV		
HITT 2335	Coding and Reimbursement Methodologies	3
		3
SEMESTER V		
HITT 1161	Clinical - Health Information Technology/Technician	1
		1
Minimum Hours Required		38

#BIOL 1406 General Biology and BIOL 1407 General Biology are prerequisites to BIOL 2401.

HOSPITALITY MANAGEMENT

North Lake only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.HOTEL.MOTEL

The Hospitality Management Program is designed to train individuals for an entry-level management position within the Hotel/Motel industry related to the operations and management of hotels and motels. This two-year program emphasizes front office management, housekeeping management, and the operation, marketing, and sales of hotel/motel services and facilities.

		CREDIT HOURS
SEMESTER I		
HAMG 1321	Introduction to Hospitality Industry	3
BMGT 1303	Principles of Management	3
ENGL 1301	Composition I	3
ITSC 1401	Introduction to Computers	4
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra **OR**	(4)
TECM 1341	Technical Algebra **AND**	(3)
+Elective	Natural Science	4
		16-20
SEMESTER II		
HAMG 1313	Front Office Procedures	3
HAMG 2307	Hospitality Marketing and Sales	3
BMGT 1301	Supervision	3
SPCH 1311	Introduction to Speech Communication	3
++Elective	Social/Behavioral Science	3
		15
SEMESTER III		
ACCT 2301	Principles of Accounting I **OR**	3
ACCT 2401	Principles of Accounting I	(4)
HAMG 2301	Principles of Food and Beverage Operations	3
HAMG 2337	Hospitality Facilities Management	3
++++Elective	Hospitality Management	3
+++Elective	Humanities/Fine Arts	3-4
		15-17
SEMESTER IV		
HAMG 1324	Hospitality Human Resources Management	3
HAMG 1340	Hospitality Legal Issues	3
HAMG 1381	Cooperative Education–Hospitality Administration and Management	3
++++Elective	Hospitality Management	6
		15
Minimum Hours Required		61-67

+Elective- Natural Science elective must be selected from the DCCCD approved list of courses.

++Elective--Social/Behavioral Science elective must be selected from any Social/Behavioral Science course approved for offering by the DCCCD.

+++Elective--Humanities/Fine Arts elective must be selected from any Humanities/Fine Arts course approved for offering by the DCCCD.

++++Elective--Hospitality Management electives must be selected from the following:

HRMO	1301	Hospitality Advertising	3
HRMO	1303	Hospitality Industry Sales Promotion	3
HAMG	1305	Principles of Tourism Management	3
HAMG	1311	Sanitation and Safety	3
HAMG	1317	Recreational Services	3
HAMG	1319	Computers in Hospitality	3
HAMG	1342	Guest Room Maintenance	3
HAMG	2381	Cooperative Education – Hospitality Administration and Management	3
HAMG	1391	Special Topics in Hospitality Administration and Management	3
HAMG	1191	Special Topics in Hospitality Administration and Management	1
HAMG	2305	Hospitality Management and Leadership	3
HAMG	2330	Convention and Group Management and Services	3
HAMG	2332	Hospitality Financial Management	3

HOSPITALITY MANAGEMENT

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.HOSPITALITY.MGMT

The Hospitality Management Certificate option is designed to train individuals for an entry-level management position within the Hotel/Motel industry related to the operations and management of hotels and motels. This Certificate allows the student to focus their studies on either front office management or housekeeping management.

		CREDIT HOURS
SEMESTER I		
HAMG 1321	Introduction to Hospitality Industry	3
BMGT 1303	Principles of Management	3
ENGL 1301	Composition I	3
ITSC 1401	Introduction to Computers	4
		13
SEMESTER II		
HAMG 1313	Front Office Procedures	3
HAMG 2301	Principles of Food and Beverage Operations	3
HAMG 2337	Hospitality Facilities Management	3
SPCH 1311	Introduction to Speech Communications	3
		12
SEMESTER III		
HAMG 1381	Cooperative Education-Hospitality Administration and Management	3
ACCT 2301	Principles of Accounting I **OR**	3
ACCT 2401	Principles of Accounting I	(4)
+Elective	Hospitality Management	6
		12-13
Minimum Hours Required		37-38

+Elective—Hospitality Management electives must be selected from the following:

HAMG	1191	Special Topics in Hospitality Administration and Management 1
HAMG	1305	Principles of Tourism Management 3
HAMG	1311	Sanitation and Safety 3
HAMG	1317	Recreational Services 3
HAMG	1319	Computers in Hospitality 3
HAMG	1324	Hospitality Human Resource Management 3
HAMG	1340	Hospitality Legal Issues 3
HAMG	1342	Guest Room Maintenance 3
HAMG	1391	Special Topics in Hospitality Administration and Management 3
HAMG	2305	Hospitality Management and Leadership 3
HAMG	2307	Hospitality Marketing and Sales 3
HAMG	2330	Convention and Group Management and Services 3
HAMG	2332	Hospitality Financial Management 3
HAMG	2381	Cooperative Education- Hospitality Administration and Management 3
HRMO	1301	Hospitality Advertising 3
HRMO	1303	Hospitality Industry Sales Promotion 3

INTERIOR DESIGN

El Centro only

(Associate in Applied Science Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.INTERIOR.DES.03

The Interior Design Department offers a 2-year Associate in Applied Sciences Degree in Interior Design. In addition, a 27-hour Advanced Technical Certificate in the third year provides the student with a professional certificate in Interior Design. This complete 3-year program was accredited for six years in May 2002 by The Foundation for Interior Design Education Research (FIDER). The El Centro Interior Design program has been accredited consecutively by FIDER since March 1970.

An Interior Designer is an individual who identifies, researches, and creatively solves problems relating to the functions and aesthetics of the interior environment, including issues pertaining to life safety. The Interior Designer must possess specialized knowledge in interior construction, equipment, materials, furniture, and building codes.

Formal training in Interior Design prepares the individual to begin work as a design assistant and to possibly progress to full professional status and independent practice. In order to be fully licensed as an Interior Designer the Texas Board of Architectural Examiners, one must have an approximate combination of formal education and practical experience, and must also pass a formal examination administered by the NCIDQ.

		CREDIT HOURS
SEMESTER I		
INDS 1341	Color Theory and Application	3
INDS 1301	Basic Elements of Design	3
DFTG 1305	Technical Drafting	3
ENGL 1301	Composition I	3
ARTS 1303	Survey of Art History	3
MATH 2342	Introductory Statistics **OR**	3
MATH 1332	College Mathematics I	(3)
		18
SEMESTER II		
INDS 2313	Residential Design I	3
INDS 2321	Presentation Drawing	3
INDS 1319	Technical Drawing for Interior Designers	3
INDS 1315	Materials, Methods and Estimating	3
ARTS 1304	Survey of Art History	3
ENGL 1302	Composition II	3
		18
SEMESTER III		
INDS 2335	Residential Design II	3
INDS 2317	Rendering Techniques	3
INDS 2307	Textiles for Interior Design	3
INDS 1370	Basic Computer-Aided Drafting for Interior Designers	3
INDS 1351	History of Interiors I	3
+Elective	Humanities /Fine Arts	3
		18
SEMESTER IV		
INDS 1345	Commercial Design I	3
INDS 1352	History of Interiors II	3
INDS 2315	Lighting for Interior Designers	3
INDS 2305	Interior Design Graphics	3
PSYC 2302	Applied Psychology	3
SPCH 1311	Introduction to Speech Communication	3
		18
Minimum Hours Required		72

+ Elective in Semester III must be any three-credit hour course selected from the DCCCD approved Humanities/Fine Arts Elective list.

Students must earn a grade of "C" or better in all INDS courses in order to advance through the program. Students must have basic computer skills in Windows in order to enroll in the Interior Design program. Students must meet the Math requirement within the first two semesters.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

INTERIOR DESIGN

El Centro only

(Advanced Technical Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ATC.INTERIOR.DES.03

Admission to the Advanced Technical Certificate Program is by completion of Associate of Applied Science Degree in Interior Design and by portfolio examination. The full time faculty will review all portfolios. Students whose portfolio does not meet the standard for advancement to the FIDER accredited ATC program has the option of retaking the appropriate courses at El Centro College.

FIDER has accredited this 27-hour Advanced Technical Certificate that completes a 3-year program continuously since 1970.

		CREDIT HOURS
SEMESTER I		
INDS 2325	Professional Practices for Interior Designers	3
INDS 2331	Commercial Design II	3
INDS 2330	Interior Design Building Systems	3
INDS 1391	Special Topics In Interior Design	3
+Elective		3
		15
SEMESTER II		
DFTG 2328	Architectural Drafting - Commercial	3
INDS 1491	Special Topics in Interior Design	4
INDS 2280	Cooperative Education-Interior Design	2
+Elective		3
		12
Minimum Hours Required		27

+Electives must be selected from the following in order to meet the requirements for the Advanced Technical Certificate:

ANTH	2351	Cultural Anthropology	3
ECON	2301	Principles of Economics I	3
ENGL	2307	Creative Writing	3
ENGL	2308	Creative Writing	3
FREN	1311	Beginning French	3
GOVT	2301	American Government	3
GOVT	2302	American Government	3
HIST	1301	History of the United States	3
HIST	1302	History of the United States	3
PHIL	1301	Introduction to Philosophy	3
PHIL	2306	Ethics	3
PSYC	2301	Introduction to Psychology	3
SOCI	1301	Introduction to Sociology	3
SOCI	1306	Social Problems	3
SPAN	1311	Beginning Spanish	3

Students must earn a grade of "C" or better in all INDS courses in the ATC Program in order to receive the Advanced Technical Certificate.

INTERNATIONAL BUSINESS AND TRADE

Richland only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.IBUS.TRAD.03

The International Business and Trade Program prepares students for entry-level employment in such positions as specialists in exporting and importing for the critically important and growing international trade community. Most students focus on careers in international marketing, export or import management including supply chain management, international transportation and logistics, import-export trading, or various international business support services. Skills developed for the export and import of goods and services are presented in the context of the global economy and cross-cultural awareness and communications. Emphasis is placed on the contribution of exports to the local, state, and national economies. Students will have the opportunity to participate in activites related to the Export Assistance Center of the U. S. Department of Commerce, the Export-Import Bank through the Greater Dallas Chamber, the International Trade Center, SBDC, The Dallas Council on World Affairs, the North Texas Customs Brokers and Foreign Freight Forwarders Association, and Women in International Trade of Texas and other international organizations.

Entrepreneurs, managers of firms with export potential, international agents, traders, or brokers, customer sales and service representatives, transportation managers, product managers, documentation clerks, letters of credit specialists, and global e-commerce entrepreneurs or aspirants to these fields may all benefit from the International and Trade Program. An International Business and Trade Certificate and an Import-Export Certificate will expedite your entrance to the international arena. The Import-Export Certificate is offered concurrently through the Continuing Education Division. The International Business and Trade Program is a World Trade Week educational award winner of the International Trade Association of Dallas/Fort Worth.

		CREDIT HOURS
SEMESTER I		
IBUS 1305	Introduction to International Business and Trade	3
COSC 1401	Microcomputer Concepts and Applications **OR**	4
ITSC 1401	Introduction to Computers **OR**	(4)
POFI 1341	Computer Applications II	(3)
BMGT 1303	Principles of Management	3
MRKG 1311	Principles of Marketing	3
ENGL 1301	Composition I	3
		15-16
SEMESTER II		
IBUS 1301	Principles of Imports-Exports I	3
IBUS 1349	International Information Systems	3
IBUS 1354	International Marketing Management.	3
IBUS 1373	Global Logistics Management	3
MATH 1324	Mathematics for Business and Economics **OR**	3
MATH 2342	Introductory Statistics	(3)
		15
SEMESTER III		
BUSI 2301	Business Law	3
SPCH 1311	Introduction to Speech Communication	3
		6
SEMESTER IV		
IBUS 1302	Principles of Imports-Exports II	3
IBUS 2339	International Banking and Finance	3
ITSC 1413	Internet/Web Page Development	4
ACCT 2301	Principles of Accounting I **OR**	3
ACCT 2401	Principles of Accounting I	(4)
+Elective	Social/Behavior Science	3
		16-17
SEMESTER V		
IBUS 2335	International Business Law	3
IBUS 2341	International Comparative Management	3
ACCT 2302	Principles of Accounting II **OR**	3
ACCT 2402	Principles of Accounting II	(4)
++Elective	**OR**	3
IBUS 2366	Practicum-International Business	(3)
+++Elective	Humanities/Fine Arts	3
		15-16
Minimum Hours Required		67-70

+Elective - must be selected from the following Social/Behavioral Science courses:

ANTH	2351	Cultural Anthropology	3
ECON	2301	Principles of Economics I	3
ECON	2302	Principles of Economics II	3
ECON	2311	Economics of Global Issues	3
GEOG	1303	World Regional Geography	3
GOVT	2371	Introduction to Comparative Politics	3
PSYC	2301	Introduction to Psychology	3
PSYC	2302	Applied Psychology	3
SOCI	1301	Introduction to Sociology	3

(continued on next page)

++Recommended Electives:

IBUS	1341	International Purchasing	3
IBUS	2345	Import Customs Regulations	3
IBUS	2331	International Human Resource Management	3
IBUS	1351	Coordination in Multinational Industries	3
IBUS	1191	Special Topics in International Business **AND**	1
IBUS	1291	Special Topics in International Business	2
IBUS	1391	Special Topics in International Business	3
BUSI	1307	Personal Finance	3
BUSG	2309	Small Business Management	3
BMGT	1301	Supervision	3
BMGT	2303	Problem Solving and Decision-Making	3
HRPO	2301	Human Resources Management	3
BMGT	1302	Principles of Retailing	3
BMGT	1333	Principles of Selling	3
BMGT	1349	Advertising and Sales Promotion	3

NOTE: A student cannot take more than three (3) Special Topics courses toward the degree.

+++Elective—must be selected from the following Humanities/Fine Arts courses:

CUST	2370	Cultural Studies	3
HUMA	1301	Introduction to the Humanities	3
HIST	2322	World Civilizations	3
HIST	2380	The Heritage of Mexico	3
HIST	2381	African-American History	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

INTERNATIONAL BUSINESS AND TRADE

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.IBUS/TRADE.03

The International Business and Trade Program prepares students for entry-level employment in such positions as specialists in exporting and importing for the critically important and growing international trade community. Most students focus on careers in international marketing, export or import management including supply chain management, international transportation and logistics, import-export trading, or various international business support services. Skills developed for the export and import of goods and services are presented in the context of the global economy and cross-cultural awareness and communications. Emphasis is placed on the contribution of exports to the local, state, and national economies. Students will have the opportunity to participate in activites related to the Export Assistance Center of the U. S. Department of Commerce, the Export-Import Bank through the Greater Dallas Chamber, the International Trade Center, SBDC, The Dallas Council on World Affairs, the North Texas Customs Brokers and Foreign Freight Forwarders Association, and Women in International Trade of Texas and other international organizations.

Entrepreneurs, managers of firms with export potential, international agents, traders, or brokers, customer sales and service representatives, transportation managers, product managers, documentation clerks, letters of credit specialists, and global e-commerce entrepreneurs or aspirants to these fields may all benefit from the International and Trade Program. An International Business and Trade Certificate and an Import-Export Certificate will expedite your entrance to the international arena. The Import-Export Certificate is offered concurrently through the Continuing Education Division. The International Business and Trade Program is a World Trade Week educational award winner of the International Trade Association of Dallas/Fort Worth.

		CREDIT HOURS
SEMESTER I		
IBUS 1301	Principles of Imports-Exports I	3
IBUS 1305	Introduction to International Business and Trade	3
IBUS 1349	International Information Systems	3
IBUS 1373	Global Logistics Management	3
COSC 1401	Microcomputer Concepts and Application **OR**	4
ITSC 1401	Introduction to Computers **OR**	(4)
ITSC 1413	Internet/Web Page Development **OR**	(4)
POFI 1341	Computer Application II	(3)
ENGL 1301	Composition I	3
		18-19
SEMESTER II		
IBUS 1302	Principles of Imports-Exports II	3
IBUS 1354	International Marketing Management	3
IBUS 2335	International Business Law	3
IBUS 2339	International Banking and Finance	3
IBUS 2341	International Comparative Management	3
		15
SEMESTER III		
SPCH 1311	Introduction to Speech Communication	3
+Elective	**OR**	3
IBUS 2366	Practicum-International Business	(3)
		6
Minimum Hours Required		39-40

+Recommended Electives:

IBUS	1341	International Purchasing	3
IBUS	1351	Coordination in Multinational Industries	3
IBUS	2331	International Human Resource Management	3
IBUS	2345	Import Customs Regulations	3
IBUS	1191	Special Topics in International Business **AND**	1
IBUS	1291	Special Topics in International Business	2
IBUS	1391	Special Topics in International Business	3
BUSI	2301	Business Law	3
ECON	2301	Principles of Economics I	3
ECON	2302	Principles of Economics II	3
ECON	2311	Economics of Global Issues	3

A student cannot take more than a total of three (3) credit hours of Special Topics toward the Certificate.

INTERNATIONAL BUSINESS AND TRADE -- IMPORT-EXPORT

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.IBUS.IMP/EXP.03

The International Business and Trade Program prepares students for entry-level employment in such positions as specialists in exporting and importing for the critically important and growing international trade community. Most students focus on careers in international marketing, export or import management including supply chain management, international transportation and logistics, import-export trading, or various international business support services. Skills developed for the export and import of goods and services are presented in the context of the global economy and cross-cultural awareness and communications. Emphasis is placed on the contribution of exports to the local, state, and national economies. Students will have the opportunity to participate in activities related to the Export Assistance Center of the U. S. Department of Commerce, the Export-Import Bank through the Greater Dallas Chamber, the International Trade Center, SBDC, The Dallas Council on World Affairs, the North Texas Customs Brokers and Foreign Freight Forwarders Association, and Women in International Trade of Texas and other international organizations.

Entrepreneurs, managers of firms with export potential, international agents, traders, or brokers, customer sales and service representatives, transportation managers, product managers, documentation clerks, letters of credit specialists, and global e-commerce entrepreneurs or aspirants to these fields may all benefit from the International and Trade Program. An International Business and Trade Certificate and an Import-Export Certificate will expedite your entrance to the international arena. The Import-Export Certificate is offered concurrently through the Continuing Education Division. The International Business and Trade Program is a World Trade Week educational award winner of the International Trade Association of Dallas/Fort Worth.

		CREDIT HOURS
SEMESTER I		
IBUS 1301	Principles of Imports-Exports I	3
IBUS 1373	Global Logistics Management	3
IBUS 1349	International Information Systems	3
IBUS 1305	Introduction to International Business and Trade	3
+Elective		3
		15
SEMESTER II		
IBUS 1302	Principles of Imports-Exports II	3
IBUS 2341	International Comparative Management	3
+Elective		3
+Elective		3
		12

Minimum Hours Required 27

+Electives—must be selected from the following:

IBUS	1341	International Purchasing	3
IBUS	1351	Coordination in Multinational Industries	3
IBUS	1354	International Marketing Management	3
IBUS	2331	International Human Resource Management	3
IBUS	2335	International Business Law	3
IBUS	2339	International Banking and Finance	3
IBUS	2345	Import Customs Regulations	3
IBUS	1191	Special Topics in International Business AND	1
IBUS	1291	Special Topics in International Business	2
IBUS	1391	Special Topics in International Business	3
IBUS	2366	Practicum—International Business	3

A student cannot take more than three (3) credit hours of special topics courses.

NOTE: The International Business and Trade Import-Export Certificate is offered concurrently through the Continuing Education Division.

INTERNATIONAL BUSINESS AND TRADE

Richland only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.IBUS/TRADE.03

The following Skill Achievement Awards for the International Business and Trade Associate of Applied Science Degree, International Business and Trade Certificate, or the Import-Export Certificate provide specific skills in language training recommended by business and industry. Certificates in Chinese, French, German, Japanese, Portuguese, Russian, and Spanish are available.

	CREDIT HOURS
SEMESTER I	
Beginning language course I	4
Beginning language course II	4
Intermediate language I	3
Intermediate language II	3
	14

Minimum Hours Required 14

NOTE: SPAN 2316, Spanish for Business I (3), or SPAN 2317, Spanish for Business II (3), may be substituted for SPAN 2312 in the Skills Achievement Award for Spanish.

INTERNET DEVELOPMENT TECHNOLOGIES

El Centro only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.INTER.DEVEL.04

This associate degree is designed to provide specialized training enabling program graduates to work on corporate, website development teams. The program includes one semester of Internet Development Technologies Core Curriculum followed by three semesters of study in one of four specialization tracks. (Website System Administration, Web Application Development, Interactive Media Development, or E-Commerce-Strategic Planning).

Website System Administration provides training in the configuration, maintenance, and management of server technologies utilized in the delivery of complex web services. Areas of study include installing and configuring Windows 2000 Linux/UNIX, Macintosh OS X, monitoring and securing Web site servers.

Web Application Development provides training in the use of object-oriented programming tools to construct interactive, database driven publishing and E-Commerce systems. Areas of study include Object-Oriented programming, Visual Basic, JavaScript, HTML & DHTML, creating and maintaining Microsoft SQL Server, Active Server Pages, and databases.

Interactive Media Development provides training in the integration of text, digital graphics, audio and video materials into a media-rich, Web information space. Areas of study include interactive animations in Flash, PhotoShop, Dreamweaver, Ultra Dev, streaming audio and video.

E-Commerce-Strategic Planning provides training in on-line marketing solutions that are prevalent in today's dot.com business environment. *Areas of study include web-marketing solutions for developing E-commerce and the foundation of solid business practices.*

Prerequisites: A working knowledge and understanding of personal computers and operating systems obtained in ITSC 1401 or BCIS 1405 or COSC 1300 or equivalent experience approved by Information Technology personnel.

		CREDIT HOURS
CORE CURRICULUM		
SEMESTER I		
ITSE 2413	Web Authoring	4
ARTC 1317	Design Communication I	3
INEW 2371	Web Analytics	3
ITSC 1405	Introduction to PC Operating Systems	4
ENGL 1301	Composition I	3
		17

NOTE: After completing Semester I, the student will select a specialization track and complete all courses in Semesters II, III, and IV.

WEB SITE SYSTEM ADMINISTRATION SPECIALIZATION[1]

SEMESTER II		
ITMC 1401	Microsoft Windows Network and Operating System Essentials	4
ITSC 1407	UNIX Operating System I	4
ITSY 1442	Information Technology Security	4
ITSC 1425	Personal Computer Hardware	4
+Elective	Humanities/Fine Arts	3-4
		19-20
SEMESTER III		
ITMC 1441	Implementing Microsoft Windows Professional and Server	4
ITSC 2437	UNIX Operating Systems II	4
ITNW 2454	Internet/Intranet Server **OR**	4
ITMC 2455	Deploying and Managing Microsoft Internet Security and Acceleration Server	(4)
MATH 2342	Introductory Statistics **OR**	3
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
		15-16
SEMESTER IV		
ITMC 1442	Implementing a Microsoft Windows Network Infrastructure	4
ITMC 2403	Administering a Microsoft SQL Server Database	4
ITSC 1458	UNIX System Administration I **OR**	4
ITNW 1492	Special Topics in Computer Systems Networking and Telecommunications **OR**	(4)
Elective	Any ARTC, ARTV, IMED, CPMT, ITCC, ITMC, INEW, ITSC, ITSE, ITNW, ITSW, ITSY, BCIS, **OR** COSC Course	(3-4)
++Elective	Behavioral/Social Science	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		17-18
Web Site System Administration Specialization AAS Minimum Hours Required		68-71

WEB APPLICATION DEVELOPMENT SPECIALIZATION[1]

SEMESTER II

ITSE 2421	Object-Oriented Programming **OR**	4
ITSE 1431	Introduction to Visual BASIC Programming **OR**	(4)
ITSE 2417	JAVA Programming	(4)
ITSC 1407	UNIX Operating System I	4
ITSC 2435	Application Problem Solving	4
ITSE 2409	Database Programming	4
+Elective	Humanities/Fine Arts	3-4
		19-20

SEMESTER III

ITSE 2402	Intermediate Web Programming	4
ITSE 2457	Advanced Object-Oriented Programming **OR**	4
ITSE 2449	Advanced Visual BASIC Programming **OR**	(4)
INEW 2438	Advanced JAVA Programming	(4)
ITNW 2454	Internet/Intranet Server	4
MATH 2342	Introductory Statistics **OR**	3
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
		15-16

SEMESTER IV

ITSE 1356	Introduction to XML **OR**	3
Elective	Any ARTC, ARTV, IMED, CPMT, ITCC, ITMC, INEW, ITSC, ITSE, ITNW, ITSW, ITSY, BCIS, **OR** COSC Course	(3-4)
ITSE 2447	Advanced Database Programming	4
INEW 2434	Advanced Web Page Programming	4
++Elective	Behavioral/Social Science	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		17-18

Web Application Development Specialization AAS Minimum Hours Required 68-71

INTERACTIVE MEDIA DEVELOPMENT SPECIALIZATION[1]

SEMESTER II

ITSC 1413	Internet/Web Page Development	4
ARTS 1311	2D Design	3
ARTC 1305	Basic Graphic Design	3
ITSE 2402	Intermediate Web Programming	4
ARTV 1401	Animation 2-D	4
		18

SEMESTER III

IMED 1345	Interactive Multimedia I	3
IMED 1343	Digital Sound	3
IMED 2313	Project Analysis and Design **OR**	3
Elective	Any ARTC, ARTV, IMED, CPMT, ITCC, ITMC, INEW, ITSC, ITSE, ITNW, ITSW, ITSY, BCIS, **OR** COSC Course	(3-4)
MRKG 2348	Marketing Research and Strategies **OR**	3
BMGT 2347	Critical Thinking and Problem Solving **OR**	(3)
BMGT 2341	Strategic Management	(3)
MATH 2342	Introductory Statistics **OR**	3
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
		15-17

SEMESTER IV

ITNW 1274	Managing Web Site Development Projects	2
IMED 1351	Digital Video	3
ARTC 1341	3-D Animation I	3
IMED 2311	Portfolio Development	3
++Elective	Behavioral/Social Science	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		17

Interactive Media Development Specialization AAS Minimum Hours Required 67-69

E-COMMERCE - STRATEGIC PLANNING SPECIALIZATION[1]

SEMESTER II

ITSY 1442	Information Technology Security	4
ITSC 2435	Application Problem Solving	4
MRKG 1311	Principles of Marketing	3
MRKG 2312	e-Commerce	3
+Elective	Humanities/Fine Arts	3-4
		17-18

SEMESTER III

ITSE 2409	Database Programming	4
IMED 2313	Project Analysis and Design	3
BMGT 2347	Critical Thinking and Problem Solving **OR**	3
MRKG 2348	Marketing Research and Strategies **OR**	(3)
BMGT 2341	Strategic Management	(3)
ITSE 1380	Cooperative Education – Computer and Information Sciences, General **OR**	3
Elective	Any ARTC, ARTV, IMED, CPMT, ITCC, ITMC, INEW, ITSC, ITSE, ITNW, ITSW, ITSY, BCIS, **OR** COSC Course	(3-4)
MATH 2342	Introductory Statistics **OR**	3
MATH 1314	College Algebra **OR**	(3)
MATH 1414	College Algebra	(4)
		16-18

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SEMESTER IV

ITSE 1350	System Analysis and Design	3
ITSE 2447	Advanced Database Programming	4
ITNW 1274	Managing Web Site Development Projects	2
++Elective	Behavioral/Social Science	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		15

E-Commerce – Strategic Planning Specialization AAS
Minimum Hours Required 65-68

+Elective - must be selected from the DCCCD Core Curriculum for Humanities/Fine Arts.

++Elective - must be selected from the DCCCD Core Curriculum for Social/Behavioral Science.

[1]All students must complete Semester I Core Curriculum, select a specialization track (Web Site System Administration, Web Application Development, Interactive Media Development, or E-Commerce - Strategic Planning) and complete all courses in Semesters II, III, and IV within that specialization.

INTERNET DEVELOPMENT TECHNOLOGIES—WEB APPLICATION DEVELOPMENT SPECIALIZATION

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

Effective June 1, 2004, this award has been deactivated for El Centro College. For current students, the award will be closed on or before June 1, 2007. New students should not attempt to pursue this award.

El Centro (see above) only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.INTERNET.WEB.03

Web Application Development Certificate combines course work from the Internet Development Technologies Core curricula with courses from the Web Application Development Specialization track to provide a three-semester Web Programming track.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
ITSE 2413	Web Authoring	4
ITSE 2421	Object-Oriented Programming **OR**	4
ITSE 1431	Introduction to Visual BASIC Programming	(4)
ITSC 1427	Multi-User Operating Systems	4
ITSE 2409	Database Programming	4
		19
SEMESTER II		
SPCH 1311	Introduction to Speech Communication	3
ITMC 1401	Microsoft Windows Network and Operating System Essentials	4
ITSE 2402	Intermediate Web Programming	4
ITSE 2457	Advanced Object-Oriented Programming **OR**	4
ITSE 2449	Advanced Visual BASIC Programming	(4)
ITSC 1407	UNIX Operating Systems I	4
		19
SEMESTER III		
ITSC 1413	Internet/Web Page Development	4
INEW 2434	Advanced Web Page Programming	4
ITNW 2454	Internet/Intranet Server	4
ITSE 2447	Advanced Database Programming **OR**	4
ITSE 1380	Cooperative Education – Computer Programming	(3)
		15-16
Minimum Hours Required		53-54

INTERNET DEVELOPMENT TECHNOLOGIES—INTERACTIVE MEDIA DEVELOPMENT

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.INTER.MEDIA.DEV.04

This certificate provides training in the integration of text, digital graphics, audio and video materials into a media-rich, Web information space. Areas of study include interactive animations in Flash, PhotoShop, Dreamweaver, Ultra Dev, streaming audio and video.

Prerequisites: A working knowledge and understanding of personal computers and operating systems obtained in ITSC 1401 or BCIS 1405 or COSC 1300 or equivalent experience approved by Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ARTC 1317	Design Communication I	3
IMED 1343	Digital Sound	3
ITSE 2413	Web Authoring	4
ARTV 1401	Animation 2-D	4
		14
SEMESTER II		
IMED 1345	Interactive Multimedia I	3
IMED 1351	Digital Video	3
ARTC 1341	3-D Animation I	3
ITSC 1413	Internet/Web Page Development	4
ARTC 1305	Basic Graphic Design	3
		16
Minimum Hours Required		30

INTERNET DEVELOPMENT TECHNOLOGIES—WEB APPLICATION DEVELOPMENT

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.INTER.WEB.APPL.04

This certificate provides training in the use of object-oriented programming tools to construct interactive, database driven publishing and E-Commerce systems. Areas of study include Object-Oriented programming, Visual Basic, JavaScript, HTML & DHTML, creating and maintaining Microsoft SQL Server, Active Server Pages, and databases.

Prerequisites: A working knowledge and understanding of personal computers and operating systems obtained in ITSC 1401 or BCIS 1405 or COSC 1300 or equivalent experience approved by Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITSC 2435	Application Problems Solving	4
ITSC 1407	UNIX Operating System I	4
ITSE 2421	Object-Oriented Programming **OR**	4
ITSE 1431	Introduction to Visual Basic Programming **OR**	(4)
ITSE 2417	JAVA Programming	(4)
ITSE 2413	Web Authoring	4
		16
SEMESTER II		
ITSE 2409	Database Programming	4
ITSE 2402	Intermediate Web Programming	4
ITSE 2457	Advanced Object-Oriented Programming **OR**	4
ITSE 2449	Advanced Visual BASIC Programming **OR**	(4)
INEW 2438	Advanced JAVA Programming	(4)
		12
Minimum Hours Required		28

INTERNET DEVELOPMENT TECHNOLOGIES—WEB SITE SYSTEM ADMINISTRATION

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.INTER.WEBSITE.04

This certificate provides training in the configuration, maintenance, and management of server technologies utilized in the delivery of complex web services. Areas of study include installing and configuring Windows 2000, Linux/UNIX, Macintosh OS X, monitoring and securing Web site servers.

Prerequisites: A working knowledge and understanding of personal computers and operating systems obtained in ITSC 1401 or BCIS 1405 or COSC 1300 or equivalent experience approved by Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITMC 1401	Microsoft Windows Network and Operating System Essentials	4
ITMC 1441	Implementing Microsoft Windows Professional and Server	4
ITSC 1407	UNIX Operating System I	4
ITSY 1342	Information Technology Security	3
		15
SEMESTER II		
ITMC 2403	Administering a Microsoft SQL Server Database	4
ITSC 2437	UNIX Operating System II	4
ITMC 1442	Implementing a Microsoft Windows Network Infrastructure	4
ITNW 2354	Internet/Intranet Server **OR**	3
ITMC 2355	Deploying and Managing Microsoft Internet Security and Acceleration Server	(3)
		15
Minimum Hours Required		30

INTERNET DEVELOPMENT TECHNOLOGIES— ADVANCED WEB APPLICATION DEVELOPMENT

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

El Centro only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.INTER.ADV.WEB

This certificate provides a focused approach to Internet Development Technologies with an emphasis on programming. It combines course work from the Internet Development Technologies Core curricula with courses from the Web Application Development Specialization track to provide a three-semester Web Programming track.

Prerequisites: A working knowledge and understanding of personal computers and operating systems obtained in ITSC 1401 or BCIS 1405 or COSC 1300 or equivalent experience approved by Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITSC 2435	Application Problem Solving	4
ITSE 2413	Web Authoring	4
ITSE 2421	Object-Oriented Programming **OR**	4
ITSE 1431	Introduction to Visual BASIC Programming **OR**	(4)
ITSE 2417	JAVA Programming	(4)
ITSC 1405	Introduction to PC Operating Systems	4
ITSC 1413	Internet/Web Page Development	4
		20
SEMESTER II		
ITSE 2409	Database Programming	4
ITSE 2402	Intermediate Web Programming	4
ITSE 2457	Advanced Object-Oriented Programming **OR**	4
ITSE 2449	Advanced Visual BASIC Programming **OR**	(4)
INEW 2438	Advanced JAVA Programming	(4)
ITSC 1407	UNIX Operating System I	4
		16
SEMESTER III		
INEW 2434	Advanced Web Page Programming	4
ITNW 2454	Internet/Intranet Server	4
ITSE 2447	Advanced Database Programming **OR**	4
Elective	Any ARTC, ARTV, IMED, CPMT, ITCC, ITMC, INEW ITSC, ITSE, ITNW, ITSW, ITSY, BCIS, **OR** COSC Course	(3-4)
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		17-18
Minimum Hours Required		53-54

INTERNET DEVELOPMENT TECHNOLOGIES—E-COMMERCE STRATEGIC PLANNING

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.INTER.ECOMM

This certificate provides training in on-line marketing solutions that are prevalent in today's dot.com business environment. Areas of study include web-marketing solutions for developing E-commerce and the foundation of solid business practices.

Prerequisites: A working knowledge and understanding of personal computers and operating systems obtained in ITSC 1401 or BCIS 1405 or COSC 1300 or equivalent experience approved by Information Technology personnel.

		CREDIT HOURS
SEMESTER I		
ITSE 2413	Web Authoring	4
INEW 2371	Web Analytics	3
ITSC 2435	Application Problem Solving	4
MRKG 2312	e-Commerce	3
		14
SEMESTER II		
ITSE 2409	Database Programming	4
IMED 2313	Project Analysis and Design	3
ITNW 1274	Managing Web Site Development Projects	2
BMGT 2347	Critical Thinking and Problem Solving **OR**	3
MRKG 2348	Marketing Research and Strategies **OR**	(3)
BMGT 2341	Strategic Management	(3)
Elective	Any ARTC, ARTV, IMED, CPMT, ITCC, ITMC, INEW ITSC, ITSE, ITNW, ITSW, ITSY, BCIS, **OR** COSC Course	3-4
		15-16

Minimum Hours Required 29-30

INTERNET DEVELOPMENT TECHNOLOGIES—UNIX OS ADMINISTRATION

This award is pending Texas Higher Education Coordinating Board approval effective Summer 2004.

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.INTER.UNIX.OS

This certificate provides training in the fundamental topics required for UNIX Operating System (OS) deployment, administration, and maintenance. Extensive use of Open Source Technologies for the OS, networking, and programming topics. Graduates will be prepared for challenging positions in systems administration, systems engineering, network administration, and/or field service.

		CREDIT HOURS
PREREQUISITES		
INTW 1421	Introduction to Networking	4
ITSC 1407	UNIX Operating System I	4
		8
SEMESTER I		
ITSE 1359	Introduction to Scripting Languages	3
ITSC 2437	UNIX Operating System II	4
		7
SEMESTER II		
ITSC 1358	UNIX System Administration I	3
ITNW 1492	Special Topics in Computer Systems Networking and Telecommunications[1]	4
		7
SEMESTER III		
ITSC 1347	UNIX System Administration II	3
ITNW 2401	Administering Servers	4
		7

Minimum Hours Required 29

[1]Disaster recovery, advanced security, clustering, database, grids, intrusion detection, and scanning.

INTERPRETER TRAINING PROGRAM

Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.INTERPRETER.TR

The major in Interpreter Training is designed to prepare hearing students to work as professional interpreters with deaf and hearing consumers. During the two-year curriculum, students gain knowledge about the field of American Sign Language interpreting, deafness and American Deaf Culture, the skill to produce American Sign Language and then the skill to interpret between American Sign Language and English.

Entry into this program requires the following:

1. Meeting the entry requirements as established by Eastfield College.

2. Completion of the following courses with a grade of "B" or better.

ENGL	1301	Composition I
SLNG	1111	Fingerspelling
SLNG	1404	American Sign Language (ASL): Beginning I
SLNG	1405	American Sign Language (ASL): Beginning II

3. Advisement with the Coordinator of the Interpreter Training Program recommended.

Students are being prepared for Certification testing either at the National or State level so that they can seek gainful employment as Certified American Sign Language interpreters. To assist in meeting this goal, students must maintain a "C" or better in each course.

		CREDIT HOURS
SEMESTER I		
SLNG 1315	Visual/Gestural Communication	3
SLNG 1317	Introduction to the Deaf Community	3
SLNG 1444	American Sign Language (ASL): Intermediate I	4
ENGL 1302	Composition II	3
SPCH 1311	Introduction to Speech Communication	3
		16
SEMESTER II		
SLNG 1321	Introduction to the Interpreting Profession	3
SLNG 1347	Deaf Culture	3
SLNG 1445	American Sign Language (ASL): Intermediate II	4
PSYC 2301	Introduction to Psychology	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra **OR**	(4)
MATH 1332	College Mathematics I	(3)
		16-17
SEMESTER III		
SLNG 2301	Interpreting I	3
SLNG 2302	Interpreting II	3
SLNG 2411	Specialized Interpreting/ Transliterating	4
SPCH 1342	Voice and Articulation	3
+Elective	Humanities/Fine Arts	3-4
		16-17
SEMESTER IV		
SLNG 2371	Transliterating I	3
SLNG 2372	Transliterating II	3
SLNG 2388	Internship – Sign Language Interpreter	3
BIOL 1406	General Biology **OR**	4
BIOL 1408	Biological Science	(4)
		13
Minimum Hours Required		61-63

+Elective – must be selected from the following:

ARTS	1301	Art Appreciation 3
DRAM	1310	Introduction to Theater 3
HUMA	1301	Introduction to the Humanities 3
MUSI	1306	Music Appreciation 3
PHIL	1301	Introduction to Philosophy 3

SPOKEN LANGUAGE [i.e. Chinese (CHIN), French (FREN), German (GERM), Italian (ITAL), Japanese (JAPN), Portuguese (PORT), Russian (RUSS), Spanish (SPAN)] 4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

INTERPRETER TRAINING PROGRAM -- DEAF STUDIES

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.INTERPRETER.DEAF

The Deaf Studies certificate is a one year course of study. It is designed to provide the student with basic sign language skills for the purpose of communication and information about deafness and Deaf culture. Individuals who work in positions which brings them in contact with deaf individuals would find these courses very beneficial.

		CREDIT HOURS
SEMESTER I		
SLNG 1211	Fingerspelling	2
SLNG 1317	Introduction to the Deaf Community	3
SLNG 1404	American Sign Language (ASL): Beginning I	4
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER II		
SLNG 1315	Visual/Gestural Communication	3
SLNG 1347	Deaf Culture	3
SLNG 1405	American Sign Language (ASL): Beginning II	4
ENGL 1302	Composition II	3
PSYC 2301	Introduction to Psychology	3
		16
Minimum Hours Required		31

INVASIVE CARDIOVASCULAR TECHNOLOGY

El Centro only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.INV.CARD.TECH.04

The Invasive Cardiovascular Technology program is a two-year AAS degree program. The intensive didactic and clinical training program includes study of the theory of techniques used in diagnosis, treatment, and follow-up of cardiovascular disease in humans. The program prepares the graduate for employment in the medical specialty of an invasive cardiovascular technologist.

Invasive Cardiovascular Technologists work in cardiac catheterization laboratories. They assist the cardiologist in performing intracardiac pressure and electrical measurements, oximetry determination, angiocardiography, and measurement/calculation of cardiac function indices. The Invasive Cardiovascular Technologist assists in all phases of cardiac catheterization procedures, including catheter insertion, operation of the electronic instruments, and calculation of the cardiac data used by the physician in confirming diagnosis and designing treatment for the cardiac patient, as well as care of the patient during procedures.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point average of 3.0 or higher, and completion of all requirements for admission as a full-time student to the college. Applicants are rank-ordered for admission based on grade point earned on prerequisite courses, interviews, and recommendation letters. Contact the Assessment Center at El Centro College to sign up for the assessment tests, and Health Occupations Admissions to receive an information packet.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208, Telephone 312-553-9355) in cooperation with the Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT, 9111 Old Georgetown Road, Bethesda, Maryland 20814-1699, Telephone 301-493-2334).

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

		CREDIT HOURS
SEMESTER I		
HPRS 1204	Basic Health Professions Skills	2
HPRS 1202	Wellness and Health Promotion	2
HPRS 2231	General Health Professions Management	2
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
SCIT 1407	Human Anatomy and Physiology I **OR**	4
BIOL 2401	Anatomy and Physiology I	(4)
+ Elective	Humanities/Fine Arts	3
		19-20
SEMESTER II		
HPRS 2300	Pharmacology for Health Professions	3
HPRS 1291	Special Topics in Health Professions and Related Sciences, Other	2
HPRS 2201	Pathophysiology	2
SCIT 1408	Human Anatomy and Physiology II **OR**	4
BIOL 2402	Anatomy and Physiology II	(4)
PSYC 2301	Introduction to Psychology	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		17
SEMESTER III (SUMMER)		
CVTT 1313	Catheterization Lab Fundamentals I	3
CVTT 1304	Cardiovascular Physiology	3
CVTT 1360	Clinical – Cardiovascular Technology/ Technologist	3
		9
SEMESTER IV (FALL)		
CVTT 1324	Cardiovascular Physiology II	3
CVTT 1110	Cardiac Catheterization I	1
CVTT 1350	Cardiac Catheterization II	3
CVTT 1153	Catheterization Lab Fundamentals II	1
CVTT 2560	Clinical – Cardiovascular Technology/ Technologist	5
		13
SEMESTER V (SPRING)		
CVTT 2350	Cardiac Catheterization III	3
CVTT 1471	Peripheral Vascular Studies, Radiologic Principles, and RCIS Board Review	4
CVTT 2563	Clinical – Cardiovascular Technology/ Technologist	5
		12
Minimum Hours Required		70-71

+Humanities/Fine Arts Elective must be selected from the DCCCD Humanities/Fine Arts CORE list.

INVASIVE CARDIOVASCULAR TECHNOLOGY

El Centro only

(Advanced Technical Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ATC.INVASIVE.CARD.04

The Invasive Cardiovascular Technology Advanced Technical Certificate is for a student having at least a previous Associate Degree in a designated allied health field or associate degree nursing, or a B.S. degree with a major in a science discipline. Potential students will be considered on an individual basis to determine if they have an adequate background in anatomy, physiology, and math. A background in basic ECGs and pharmacology is also required, which may be verified by either college-level coursework or job skills tested by examination. Basic ECG and pharmacology assessment examinations will be available by special request. A minimum passing grade of 70% is required on the appropriate test(s) and test results must be included with program application material submitted to the Health Occupations Admissions Office prior to the application deadline. If minimum score(s) are not achieved, the applicant can enroll in and complete the appropriate course(s) to qualify for application consideration. Upon successful completion of the Invasive Cardiovascular Technology Advanced Technical Certificate program, an Advanced Technical Certificate (ATC) will be awarded.

Invasive Cardiovascular Technology students study the theory of techniques used in diagnosis, treatment, and follow-up of cardiovascular disease in humans. Invasive Cardiovascular Technologists work in cardiac catheterization laboratories. They assist the cardiologist in performing intracardiac pressure and electrical measurements, oximetry determination, angiocardiography, and measurement/calculation of cardiac function indices. The Invasive Cardiovascular Technologist assists in all phases of cardiac catheterization procedures, including catheter insertion, operation of the electronic instruments, and calculation of the cardiac data used by the physician in confirming diagnosis and designing treatment for the cardiac patient, as well as care of the patient during procedures.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point average of 3.0 or higher, and completion of all requirements for admission as a full-time student to the college. Applicants are rank-ordered for admission based on grade point earned on prerequisite courses, interviews, and recommendation letters. Contact the Assessment Center at El Centro College to sign up for the assessment tests, and Health Occupations Admissions to receive an information packet.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208, Telephone 312-553-9355) in cooperation with the Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT, 9111 Old Georgetown Road, Bethesda, Maryland 20814-1699, Telephone 301-493-2334).

		CREDIT HOURS
PREREQUISITIES		
Student must have completed an AAS in a Health Profession.		
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra	(4)
		9-10
SEMESTER I (SUMMER)		
CVTT 1313	Catheterization Lab Fundamentals I	3
CVTT 1304	Cardiovascular Physiology	3
CVTT 1360	Clinical – Cardiovascular Technology/ Technologist	3
		9
SEMESTER II (FALL)		
CVTT 1324	Cardiovascular Physiology II	3
CVTT 1110	Cardiac Catheterization I	1
CVTT 1350	Cardiac Catheterization II	3
CVTT 1153	Catheterization Lab Fundamentals II	1
CVTT 2560	Clinical – Cardiovascular Technology/ Technologist	5
		13
SEMESTER III (SPRING)		
CVTT 2350	Cardiac Catheterization III	3
CVTT 1471	Peripheral Vascular Studies, Radiologic, Principles, and RCIS Board Review	4
CVTT 2563	Clinical- Cardiovascular Technology/ Technologist	5
		12
Minimum Hours Required		43-44

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

LOGISTICS TECHNOLOGY

Brookhaven and North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.LOGISTICS.TECH

The Logistics Technology Associate of Applied Science degree is designed to prepare students for entry-level employment in logistics technology. This program will provide graduates with the skills required of the industry, enable graduates to seek immediate employment in the workplace, meet labor market demands, and permit greater economic competitiveness. Program specialties include warehouse, traffic, and transportation management, storage and distribution, and inventory control.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
LMGT 1319	Introduction to Business Logistics	3
ECON 1303	Economics of Contemporary Social Issues	3
BUSI 1301	Introduction to Business	3
MATH 1314	College Algebra **OR**	3
MATH 1324	Mathematics for Business and Economics	(3)
		15
SEMESTER II		
ENGL 1302	Composition II	3
LMGT 1321	Introduction to Materials Handling	3
BMGT 1303	Principles of Management	3
LMGT 2330	International Logistic Management	3
ITSC 1401	Introduction to Computers	4
		16
SEMESTER III		
+Elective	Social/Behavioral Science Elective	3
ACCT 2301	Principles of Accounting I*	3
		6
SEMESTER IV		
BUSI 2301	Business Law	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
LMGT 1425	Warehouse and Distribution Center Management	4
LMGT 2334	Principles of Traffic Management	3
++Elective	Humanities/Fine Arts Elective	3
		16
SEMESTER V		
LMGT 1349	Materials Requirement Planning	3
BMGT 2384	Cooperative Education - Operations Management and Supervision	3
LMGT 1345	Economics of Transportation and Distribution	3
LMGT 1341	Freight Loss and Damage Claims	3
LMGT 1323	Domestic and International Transportation Management	3
		15
Minimum Hours Required		68

+Elective - must be selected from the DCCCD Social/Behavioral Science Core list.

++Elective - must be selected from the DCCCD Humanities/Fine Arts Core list.

*ACCT 2401, Principles of Accounting I may be substituted for ACCT 2301, Principles of Accounting I.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

LOGISTICS TECHNOLOGY

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.LOGISTICS

This certificate is designed to prepare students for entry-level employment in logistics technology and provide students with the skills required of the industry. Program specialties include warehouse, traffic, and transportation management, storage and distribution, and inventory control.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
LMGT 1319	Introduction to Business Logistics	3
LMGT 1321	Introduction to Materials Handling	3
LMGT 1345	Economics of Transportation and Distribution	3
		12
SEMESTER II		
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
LMGT 1323	Domestic and International Transportation Management	3
LMGT 1349	Materials Requirement Planning	3
LMGT 1341	Freight Loss and Damage Claims	3
		12
SEMESTER III		
LMGT 1425	Warehouse and Distribution Center Management	4
LMGT 2330	International Logistics Management	3
LMGT 2334	Principles of Traffic Management	3
BMGT 2384	Cooperative Education - Operations Management and Supervision	3
		13
Minimum Hours Required		37

MANAGEMENT

Offered at all seven campuses

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MANAGEMENT

The Management Program provides an opportunity for students to acquire knowledge in the management field and at the same time update and sharpen personal management skills. In addition to learning about supervision, personnel management, human relations psychology, problem-solving, decision-making, and other related business topics, students also participate in on-the-job management-training courses with their present employers. These management training courses at work allow students to apply what is learned in the classroom environment and obtain the valuable practical experience necessary to become competent business managers. The Management Program allows students the opportunity to bridge the gap between theory and practice as professional managers. This degree program provides an external learning experience and/or capstone experience.

		CREDIT HOURS
SEMESTER I		
BMGT 1301	Supervision	3
BMGT 1382	Cooperative Education-Business Administration and Management, General	3
BMGT 1303	Principles of Management	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
		15
SEMESTER II		
HRPO 2301	Human Resources Management	3
BMGT 1383	Cooperative Education-Business Administration and Management, General	3
ITSC 1401	Introduction to Computers	4
ENGL 1302	Composition II	3
+MATH	**OR**	3-5
POFT 1321	Business Math **AND**	(3)
++Elective	Natural Science	(4)
		16-20
SEMESTER III		
HRPO 2307	Organizational Behavior	3
BMGT 2382	Cooperative Education-Business Administration and Management, General	3
ACCT 2301	Principles of Accounting I * **OR**	3
ACCT 2401	Principles of Accounting I *	(4)
ECON 2301	Principles of Economics I **OR**	3
ECON 1303	Economics of Contemporary Social Issues	(3)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		15-16
SEMESTER IV		
BMGT 2303	Problem Solving and Decision Making	3
BMGT 2383	Cooperative Education-Business Administration and Management, General	3
+++Elective	Humanities/Fine Arts	3
++++Elective		3
++++Elective		3
		15
Minimum Hours Required		61-66

+MATH – Students must select a Mathematics course from the DCCCD Mathematics/Sciences CORE list.

++Elective – Students must select a course in Biology (BIOL), Chemistry (CHEM), Ecology (ECOL), or Physics (PHYS) from the DCCCD Lab Science CORE list.

+++Elective – Students must select a course from the DCCCD Humanities/Fine Arts CORE list.

++++ Elective – Students must take 6 hours of any college level courses to satisfy these electives.

*Students may substitute *ACNT 1303 Introduction to Accounting I* and *ACNT 1304 Introduction to Accounting II.* Only three hours may be applied to the required number of hours for granting the degree.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MANAGEMENT

Offered at all seven campuses

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.MGMT.MANAGEMENT

The Management program is designed to develop the fundamental skills, knowledge, attitudes and experiences which enable men and women to function in leadership and decision-making positions as managers. Students combine management classes and on-the-job management training with their present employers. All of the courses for this certificate are applicable to the Management associate degree option. This certificate program provides an external learning experience and/or capstone experience.

		CREDIT HOURS
SEMESTER I		
BMGT 1301	Supervision	3
BMGT 1382	Cooperative Education-Business Administration and Management, General	3
ENGL 1301	Composition I	3
		9
SEMESTER II		
HRPO 2301	Human Resources Management	3
BMGT 1383	Cooperative Education-Business Administration and Management, General	3
		6
SEMESTER III		
HRPO 2307	Organizational Behavior	3
BMGT 2382	Cooperative Education-Business Administration and Management, General	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		9
SEMESTER IV		
BMGT 2303	Problem Solving and Decision Making	3
BMGT 2383	Cooperative Education-Business Administration and Management, General	3
		6
Minimum Hours Required		30

MANAGEMENT -- LEADERSHIP

Cedar Valley only

(Marketable Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: MSA.MGMT.LDRSHIP

This award is designed to prepare students for positions of leadership within a business environment. Emphasis will be placed on entry-level supervisory skills and on-the-job training.

		CREDIT HOURS
SEMESTER I		
BUSI 1301	Introduction to Business	3
BMGT 1382	Cooperative Education-Business Administration and Management, General	3
		6
SEMESTER II		
BMGT 1301	Supervision	3
BMGT 1383	Cooperative Education-Business Administration and Management, General	3
		6
Minimum Hours Required		12

MANAGEMENT -- SUPERVISOR

Cedar Valley, Eastfield, Mountain View, North Lake and Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MGMT.SUPVSR.04

This certificate program prepares students for entry-level supervisory positions in business.

		CREDIT HOURS
SEMESTER I		
BUSI 1301	Introduction to Business	3
BMGT 1303	Principles of Management	3
ITSC 1401	Introduction to Computers **OR**	4
ITSC 1413	Internet/Web Page Development	(4)
		10
SEMESTER II		
BMGT 1301	Supervision	3
BMGT 1382	Cooperative Education-Business Administration and Management, General	3
		6
Minimum Hours Required		16

MARKETING CAREERS -- BUSINESS MARKETING

Brookhaven and Cedar Valley only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MRKT.BUSINESS

The Business Marketing program provides an opportunity for students to acquire knowledge and training for careers in sales and marketing. In addition to a broad program of study encompassing all phases of marketing, students apply what is learned in the classroom to real-life situations in the business sector. Cooperative work experience provides students with the necessary skills to become competent in the industry.

		CREDIT HOURS
SEMESTER I		
MRKG 1302	Principles of Retailing	3
BMGT 1303	Principles of Management	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
+Elective	Humanities/Fine Arts	3
+++Elective		3
		18
SEMESTER II		
MRKG 2333	Principles of Selling	3
ECON 2301	Principles of Economics I	3
ENGL 1302	Composition II	3
MATH	Any three-credit course with MATH rubric **OR**	3
POFT 1321	Business Math **AND**	(3)
++Elective	Natural Science	(4)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		15-19
SEMESTER III		
MRKG 1311	Principles of Marketing	3
ITSC 1401	Introduction to Computers **OR**	4
COSC 1300	Computer Literacy **OR**	(3)
COSC XXXX	Higher level COSC course	(3-4)
MRKG 1381	Cooperative Education Marketing/ Marketing Management, General	3
ACCT 2301	Principles of Accounting I **OR**	3
ACCT 2401	Principles of Accounting I **OR**	(4)
ACNT 1303	Introduction to Accounting I	(3)
PSYC 2302	Applied Psychology **OR**	3
PSYC 2301	Introduction to Psychology	(3)
		15-17
SEMESTER IV		
MRKG 2349	Advertising and Sales Promotion	3
MRKG 1301	Customer Relations	3
MRKG 1381	Cooperative Education Marketing/ Marketing Management, General	3
ECON 2302	Principles of Economics II	3
HRPO 2307	Organizational Behavior	3
HRPO 2301	Human Resource Management	3
		18

Minimum Hours Required 66-72

+Elective - Must be selected from the DCCCD Humanities/Fine Arts CORE list.

++Elective - Must be selected from the DCCCD Natural Sciences CORE list.

+++Elective – Students may take any three-credit college level course not used to satisfy any other requirement of this award.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

TECH PREP ENHANCED SKILLS CERTIFICATES

This Enhanced Skills Certificate is attached to the Marketing Careers--Business Marketing Associate in Applied Science Degree and provides the student advanced skills required by the industry to specialize in Department Management.

DEPARTMENT MANAGER

Brookhaven and Cedar Valley only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.MRKT.B/M. DEPT.MGR

		CREDIT HOURS
SEMESTER I		
BMGT 1301	Supervision	3
POFT 2312	Business Correspondence and Communication	3
		6

Minimum Hours Required 6

This is a Tech Prep Program. Students interested in pursuing a Tech Prep enhanced skills certificate need to consult with their advisor.

MARKETING CAREERS -- BUSINESS MARKETING - RETAIL/WHOLESALE BUSINESS SPECIALIST

Effective September 1, 2004, this award has been deactivated for Brookhaven and Cedar Valley College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Brookhaven (see above) and Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MRKT.RTL/WHOLESAL

This certificate program will prepare students for entry level retail or wholesale employment with a focus on communications, selling techniques, and customer service.

		CREDIT HOURS
SEMESTER I		
MRKG 1302	Principles of Retailing	3
MRKG 1301	Customer Relations	3
SPCH 1311	Introduction to Speech Communication	3
POFT 1321	Business Math	3
		12
SEMESTER II		
MRKG 1381	Cooperative Education – Business Marketing and Marketing Management **OR**	3
MRKG 1366	Practicum (or Field Experience) – Business Marketing and Marketing Management **OR**	(3)
BMGT 1391	Special Topics in Business Administration and Management, General	(3)
MRKG 2333	Principles of Selling	3
		6
Minimum Hours Required		18

MARKETING CAREERS -- BUSINESS MARKETING - CUSTOMER SERVICE REPRESENTATIVE

Brookhaven and Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.MRKT.CUSTOMER

This certificate program is designed to prepare students for marketing career opportunities in all areas of customer service.

		CREDIT HOURS
SEMESTER I		
MRKG 1311	Principles of Marketing	3
BMGT 1303	Principles of Management	3
BUSI 1301	Introduction to Business	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
PSYC 2302	Applied Psychology **OR**	3
PSYC 2301	Introduction to Psychology	(3)
		15
SEMESTER II		
MRKG 2333	Principles of Selling	3
MRKG 1301	Customer Relations	3
ITSC 1401	Introduction to Computers **OR**	4
ITSC 1413	Internet/Web Page Development	(4)
HRPO 2307	Organizational Behavior	3
ENGL 1301	Composition I	3
		16
SEMESTER III		
MRKG 1381	Cooperative Education – Marketing/ Marketing Management, General **OR**	3
MRKG 1366	Practicum (or Field Experience)- Marketing/ Marketing Management, General **OR**	(3)
BMGT 1391	Special Topics in Business Administration and Management, General	(3)
		3
Minimum Hours Required		34

MARKETING CAREERS -- BUSINESS MARKETING – SALES MARKETING ASSOCIATE

Brookhaven and Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MRKT.SALES

This certificate program will prepare students for entry-level employment in sales and marketing. Emphasis will be on the foundations of marketing and effective communication.

		CREDIT HOURS
SEMESTER I		
MRKG 1302	Principles of Retailing	3
MRKG 1301	Customer Relations	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		9
SEMESTER II		
MRKG 1311	Principles of Marketing	3
MRKG 2333	Principles of Selling	3
MRKG 2349	Advertising and Sales Promotions	3
		9

Minimum Hours Required 18

MARKETING CAREERS -- BUSINESS MARKETING - CALL CENTER SPECIALIST

Brookhaven only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.MRKT.CALL.CENTER

This sequence of courses will prepare students for entry-level employment in a call center environment by developing core proficiency in communications, computer literacy and customer service.

		CREDIT HOURS
SEMESTER I		
POFI 1301	Computer Applications I	3
SPCH 1311	Introduction to Speech Communication	3
MRKG 1301	Customer Relations	3
		9
SEMESTER II		
MRKG 1381	Cooperative Education – Marketing/ Marketing Management, General	3

Minimum Hours Required 12

MARKETING CAREERS -- FASHION MARKETING

Brookhaven only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MRKT.FSHN.04

This two-year program is designed for those interested in careers related to fashion wholesaling and retailing. Students explore merchandising, buying, textiles, display, advertising and computer applications in the fashion industry. Emphasis is placed on cooperative work experience which gives the student necessary preparation and experience needed for an entry-level position.

		CREDIT HOURS
SEMESTER I		
MRKG 1311	Principles of Marketing	3
FSHD 1302	Introduction to Fashion	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
MATH 1324	Mathematics for Business and Economics **OR**	3
POFT 1321	Business Math **AND**	(3)
++Elective	Natural Science	(4)
		15-19
SEMESTER II		
MRKG 1302	Principles of Retailing	3
FSHN 1342	Visual Merchandising	3
FSHN 1301	Textiles	3
PSYC 2302	Applied Psychology **OR**	3
PSYC 2301	Introduction to Psychology	(3)
ENGL 1302	Composition II	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		18
SEMESTER III		
MRKG 2333	Principles of Selling	3
ITSC 1401	Introduction to Computers **OR**	4
COSC 1300	Computer Literacy **OR**	(3)
	Higher level COSC course	(3-4)
FSHD 1308	Fashion Trends	3
FSHN 1212	Apparel and Accessories Marketing Operations	2
FSHN 1382	Cooperative Education – Fashion Merchandising **OR**	3
FSHN 1366	Practicum (or Field Experience) – Fashion Merchandising	(3)
		14-15
SEMESTER IV		
FSHN 2303	Fashion Buying	3
MRKG 1301	Customer Relations	3
FSHN 2382	Cooperative Education –Fashion Merchandising **OR**	3
FSHN 2366	Practicum (or Field Experience) Fashion Merchandising	(3)
ARTS 1301	Art Appreciation **OR**	3
HUMA 1301	Introduction to the Humanities	(3)
ACCT 2401	Principles of Accounting I **OR**	4
ACNT 1303	Introduction to Accounting I	(3)
+Elective		1-3
		16-19
Minimum Hours Required		63-71

+Electives - May be selected from the following:

BUSI	2301	Business Law	3
BMGT	1303	Principles of Management	3
ECON	2301	Principles of Economics I	3
FSHD	1233	Fashion Study Tour	2
FSHD	1318	Apparel Computer Systems	3
FSHN	1191	Special Topics in Fashion Merchandising	1
FSHN	2301	Fashion Promotion	3
MRKG	2349	Advertising and Sales Promotion	3
SPNL	1391	Special Topics in Spanish Language and Literature	3

++Electives – Must be selected from DCCCD CORE Curriculum for Lab Sciences.

TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Marketing Careers--Fashion Marketing and provides the student advanced skills required by the industry to specialize in Department Management.

DEPARTMENT MANAGER

Brookhaven only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.MRKT.F/M.DEPT.MGR

		CREDIT HOURS
SEMESTER I		
BMGT 1301	Supervision	3
POFT 2312	Business Correspondence and Communication	3
		6
Minimum Hours Required		6

MARKETING CAREERS FASHION MARKETING -- VISUAL MERCHANDISING ASSISTANT

Brookhaven only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.MRKT.VISUAL

This certificate program is designed to prepare students for career opportunities as retail merchandise coordinators and visual display associates in a variety of fashion settings.

		CREDIT HOURS
SEMESTER I		
FSHD 1302	Introduction to Fashion	3
FSHD 1308	Fashion Trends	3
MRKG 1302	Principles of Retailing	3
		9
SEMESTER II		
FSHN 2301	Fashion Promotion **OR**	3
FSHN 1212	Apparel and Accessories Marketing Operations	(2)
FSHN 1342	Visual Merchandising	3
MRKG 2349	Advertising and Sales Promotion	3
		8-9
Minimum Hours Required		17-18

MEDICAL ASSISTING

Effective January 1, 2003, this award has been deactivated for Mountain View College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

El Centro and Mountain View (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MEDA.ASST.03

This 12-month program is designed to prepare individuals to perform the duties of a medical assistant who can function in an acute care clinical setting or physician's office in the areas of: medical office administration, clinical lab procedures, and examining room assisting. The student may elect to complete the program either as a block CEU program or as a credit certificate program. The medical assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) on recommendation of the Committee on Accreditation for Medical Assistant Education.*
*aka Curriculum Review Board of the American Association of Medical Assistant's Endowment (AAMAE).

		CREDIT HOURS
SEMESTER I		
MDCA 1313	Medical Terminology	3
MDCA 1201	Human Disease/Pathophysiology	2
MDCA 1205	Medical Law and Ethics	2
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		13
SEMESTER II		
MDCA 1443	Medical Insurance	4
MDCA 1421	Administrative Procedures	4
MRMT 1211	Computers in Health Care	2
MRMT 1192	Special Topics in Medical Transcription	1
MDCA 1247	Pharmacology and Administration of Medications	2
		13
SEMESTER III		
MDCA 1216	Procedures in a Clinical Setting	2
MDCA 1217	Procedures in a Clinical Setting	2
MDCA 1251	Medical Assistant Laboratory Procedures	2
MDCA 2361	Clinical – Medical/Clinical Assistant	3
		9
Minimum Hours Required		35

MEDICAL LABORATORY TECHNOLOGY

El Centro only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MED.LAB.TECH.03

The Medical Laboratory Technology program prepares the student to perform tests and related duties in a medical laboratory. The program is a balanced curriculum of science, liberal arts, and technical courses including didactic and clinical education. The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS, 8410 West Bryn Mawr, Suite 670, Chicago, Illinois, 60631-3415: Telephone 773-714-8880).

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, rank ordering by grade point average earned on the two pre-requisite courses, and completion of all requirements for admission as a full-time student to the college. Contact the Assessment Center at El Centro College to sign up for the assessment tests and, Health Occupations Admissions, to receive an information packet.

Upon completion of the program, the student is awarded an Associate in Applied Sciences Degree and is qualified to take the Board of Registry for the American Society of Clinical Pathologists (ASCP).

		CREDIT HOURS
PROGRAM PREREQUISITES		
#BIOL 2401	Anatomy and Physiology I **OR**	4
SCIT 1407	Human Anatomy and Physiology I	(4)
ENGL 1301	Composition I	3
		7
SEMESTER I		
BIOL 2402	Anatomy and Physiology II **OR**	4
SCIT 1408	Human Anatomy and Physiology II	(4)
CHEM 1411	General Chemistry	4
HPRS 1204	Basic Health Profession Skills	2
HPRS 2231	General Health Professions Management	2
HPRS 2201	Pathophysiology	2
HPRS 1202	Wellness and Health Promotion	2
		16
SEMESTER II		
MATH 1314	College Algebra	3
CHEM 1412	General Chemistry	4
HPRS 1291	Special Topics in Health Professions and Related Sciences, Other	2
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
BIOL 2420	Microbiology Non-Science Majors	4
		16
SEMESTER III		
MLAB 1415	Hematology	4
MLAB 1167	Practicum (or Field Experience) – Clinical/Medical Laboratory Technician	1
PSYC 2301	Introduction to Psychology	3
+Elective	Humanities/Fine Arts	3
		11
SEMESTER IV		
MLAB 2266	Practicum (or Field Experience) – Clinical/Medical Laboratory Technician	2
MLAB 1335	Immunology/Serology	3
MLAB 2501	(Clinical) Chemistry	5
		10
SEMESTER V		
HPRS 2300	Pharmacology for Health Professions	3
MLAB 2434	(Clinical) Microbiology	4
MLAB 2331	Immunohematology	3
		10
SEMESTER VI		
MLAB 2267	Practicum (or Field Experience) – Clinical/Medical Laboratory Technician	2
		2
Minimum Hours Required		72

+Humanities/Fine Arts Elective must be selected from the DCCCD Humanities/Fine Arts CORE list.

BIOL 1406 Biology for Science Majors I or SCIT 1407 Human Anatomy and Physiology I is prerequisite to BIOL 2401.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MEDICAL STAFF SERVICES

El Centro only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MEDSTAFF.SVCS.04

The Medical Staff Services program includes a two-year, 64 credit hour curriculum. The program is designed to prepare individuals to perform duties of a Medical Staff Service Coordinator in health care settings, including hospitals, managed care organizations, and credentialing organizations.

A Medical Staff Services Coordinator provides credentialing and monitoring services for physicians and allied health professionals. Confidentiality and legal issues associated with accredited services of health care organizations, peer review and impaired physicians issues are included in the responsibilities of a Medical Staff Services Coordinator.

Upon completion of the program, graduates are eligible to sit for the National Association of Medical Staff Services (NAMSS) Certification Examination.

Admission requirements include attending an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point average of 2.5 or better, and completion of all requirements for admission as a student to the college. Applicants are ranked according to grade point average earned on two prerequisite courses. Contact the Assessment Center at El Centro College to sign up for the pre-entrance assessment tests and Health Occupations Admissions to receive an information packet.

		CREDIT HOURS
PREREQUISITES:		
ITSC 1401	Introduction to Computers	4
MATH 2342	Introductory Statistics **OR**	3
MATH 1414	College Algebra **OR**	(4)
MATH 1314	College Algebra	(3)
HPRS 2231	General Health Professions Management	2
		9-10
SEMESTER I		
SCIT 1407	Human Anatomy and Physiology I **OR**	4
BIOL 2401	Anatomy and Physiology I	(4)
ENGL 1301	Composition I	3
MDCA 1313	Medical Terminology	3
MSST 1301	Medical Staff Services I	3
		13
SEMESTER II		
SCIT 1408	Human Anatomy and Physiology II **OR**	4
BIOL 2402	Anatomy and Physiology II	(4)
SPCH 1311	Introduction to Speech Communication	3
MSST 1340	Medical Staff Services II	3
HPRS 2201	Pathophysiology	2
MSST 1302	Medical Staff Law	3
		15
SEMESTER III		
POFI 1345	Integrated Software Applications II	3
BMGT 1303	Principles of Management	3
BMGT 1301	Supervision	3
PSYC 2301	Introduction to Psychology	3
MSST 1341	Performance Improvement	3
		15
SEMESTER IV		
MSST 2331	Medical Staff Services III	3
HRPO 2307	Organizational Behavior	3
MSST 1380	Cooperative Education-Medical Staff Services Directed Study	3
+Elective	Humanities/Fine Arts	3
		12
Minimum Hours Required		64-65

+Humanities/Fine Arts Elective - must be selected from any three-credit course from the Humanities/Fine Arts DCCCD CORE.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MEDICAL TRANSCRIPTION

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.MEDT.TRANSCRIPT

The nine-month certificate program in Medical Transcription prepares the student to function as a medical typist or medical transcriptionist with a thorough knowledge of medical terminology, advanced typing, word processing skills, and work experience. Proper form, editing abilities, and legal implications are stressed. Entry requirement to this program is a typing skill of 50 words per minute. Job opportunities are available in medical records, pathology and radiology departments of hospitals and clinics; physician's offices; the health insurance industry; public and private health foundations and institutions; medical schools; and research centers. Cooperative work experience is a part of this program.

Admission requirements include an information session, satisfactory scores on assessment tests and a typing test, rank ordering by grade point average, and meeting all requirements for admission as a full-time student. Call Health Occupations Admissions to receive an information packet.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
SCIT 1407	Human Anatomy and Physiology I	4
MDCA 1313	Medical Terminology	3
HPRS 2201	Pathophysiology	2
MDCA 1205	Medical Law and Ethics	2
MRMT 1307	Medical Transcription Fundamentals	3
POFM 2313	Medical Transcription II	3
		20
SEMESTER II		
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
SCIT 1408	Human Anatomy and Physiology II	4
HITT 2331	Medical Terminology - Advanced	3
HPRS 2300	Pharmacology for Health Professions	3
MRMT 2433	Advanced Medical Transcription	4
MRMT 1382	Cooperative Education - Medical Transcription/Transcriptionist	3
		20
Minimum Hours Required		40

MORTGAGE BANKING

North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MORTGAGE.BANK.01

This program is designed to develop the skills and knowledge necessary so that a graduate may advance in career paths appropriate to that person's own particular interests and abilities in the field of mortgage banking. In addition to the specific technical skills and knowledge required to originate, process and manage mortgage loans, the graduate will have covered skills in other areas such as real estate, planning and organization, problem solving and decision making, communication, accounting and business.

		CREDIT HOURS
SEMESTER I		
RELE 1301	Principles of Real Estate **AND**	3
RELE 2309	Principles of Real Estate II **OR**	3
RELE 1406	Real Estate Principles	(4)
BNKG 1370	Loan Closing: Shipping and Warehousing	3
ENGL 1301	Composition I	3
RELE 1325	Real Estate Mathematics **AND**	3
ECOL 1305	People and Their Environment **OR**	3
MATH 1324	Mathematics for Business and Economics	(3)
		13-18
SEMESTER II		
ITSC 1401	Introduction to Computers	4
RELE 1324	Loan Origination and Quality Control	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
ACCT 2301	Principles of Accounting I **OR**	3
ACCT 2401	Principles of Accounting I	(4)
+Elective	Humanities/Fine Arts	3
		16-17
SEMESTER III		
BNKG 1353	Mortgage Lending	3
BUSI 1301	Introduction to Business	3
BNKG 1380	Cooperative Education – Banking and Financial Support Services	3
BNKG 2372	Loan Underwriting	3
++Elective		6-7
		18-19
SEMESER IV		
BNKG 1359	Loan Servicing	3
ECON 2301	Principles of Economics I	3
BMGT 1303	Principles of Management **OR**	3
HRPO 2307	Organizational Behavior	(3)
GOVT 2301	American Government	3
+++Elective		1-3
		13-15

Minimum Hours Required 60-69

+Elective -- must be selected from the following:

ARTS	1301	Art Appreciation	3
DRAM	1310	Introduction to the Theater	3
ENGL	2322	British Literature	3
ENGL	2323	British Literature	3
ENGL	2332	World Literature	3
ENGL	2333	World Literature	3
ENGL	2327	American Literature	3
ENGL	2328	American Literature	3
ENGL	2311	Technical Writing	3
HIST	1301	History of the United States	3
HIST	1302	History of the United States	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3

++Electives - must select **TWO** of the following courses:

ACCT	2302	Principles of Accounting II	3
ACCT	2402	Principles of Accounting II	4
ECON	2302	Principles of Economics II	3
RELE	1319	Real Estate Finance	3
RELE	1323	Real Estate Computer Applications	3
BKNG	1301	Money and Banking	3
BKNG	1358	Secondary Market	3

+++Electives - must be selected from the following:

BKNG	1191	Special Topics in Banking and Financial Support Services	1
BKNG	1391	Special Topics in Banking and Financial Support Services	3
BKNG	1381	Cooperative Education – Banking and Financial Support Services	3
BKNG	2281	Cooperative Education – Banking and Financial Support Services	2

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MORTGAGE BANKING --DESIGNATE

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MORTBNK.DESIGNATE

		CREDIT HOURS
SEMESTER I		
RELE 1301	Principles of Real Estate **AND**	3
RELE 2309	Principles of Real Estate II **OR**	3
RELE 1406	Real Estate Principles	(4)
ENGL 1301	Composition I	3
RELE 1325	Real Estate Mathematics **AND**	3
ECOL 1305	People and Their Environment **OR**	3
MATH 1324	Mathematics for Business and Economics	(3)
		10-15
SEMESTER II		
RELE 1324	Loan Origination and Quality Control	3
BNKG 2372	Loan Underwriting	3
BNKG 1359	Loan Servicing	3
BNKG 1370	Loan Closing: Shipping and Warehousing	3
		12
SEMESTER III		
+Elective		3
BMGT 1303	Principles of Management **OR**	3
HRPO 2307	Organizational Behavior	(3)
BNKG 1380	Cooperative Education–Banking and Financial Support Services	3
BNKG 1353	Mortgage Lending	3
		12

Minimum Hours Required 34-39

+Electives - must be selected from the following:

BKNG	1301	Money and Banking	3
BKNG	1358	Secondary Market	3
RELE	1319	Real Estate Finance	3

MORTGAGE BANKING -- INTERN

North Lake only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.MORTGAGE.BANK.01

		CREDIT HOURS
SEMESTER I		
RELE 1324	Loan Origination and Quality Control	3
BNKG 2372	Loan Underwriting	3
BNKG 1359	Loan Servicing	3
BNKG 1370	Loan Closing: Shipping and Warehousing	3
BNKG 1353	Mortgage Lending	3
		15

Minimum Hours Required 15

MULTIMEDIA TECHNOLOGY -- MULTIMEDIA WEB DESIGN

Richland only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.MULT.WEB.DES.03

The Associates in Applied Sciences in Multimedia Web Design is designed to enable students to participate as creative and resourceful members of a web development team. Upon successful completion of this program, the student will be experienced in cross-platform development and editing of graphics, audio files, and animations for use on the Internet. This degree provides an external learning experience.

		CREDIT HOURS
SEMESTER I		
IMED 1301	Introduction to Multimedia	3
IMED 1316	Web Page Design I	3
ENGL 1301	Composition I	3
ARTC 1302	Digital Imaging I **OR**	3
ARTS 2348	Digital Art I	(3)
ARTS 1311	2D Design	3
		15
SEMESTER II		
IMED 1351	Digital Video	3
ARTC 1301	Basic Animation	3
IMED 2315	Web Page Design II	3
+++Technical Elective		3-4
MATH 1332	College Mathematics I **OR**	3
POFT 1321	Business Math **AND**	(3)
**ECOL 1305	People and Their Environment	(3)
		15-19
SEMESTER III		
BUSI 1301	Introduction to Business	3
ARTC 1317	Design Communication I	3
ARTC 2305	Digital Imaging II **OR**	3
ARTS 2349	Digital Arts II	(3)
IMED 2313	Project Analysis and Design	3
+Elective	Humanities/Fine Arts	3
		15
SEMESTER IV		
IMED 2311	Portfolio Development	3
IMED 2388	Internship-Educational/Instructional Media Technology/Technician **OR**	3
+++Technical Elective		(3-4)
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
++General Elective		3-5
		15-18
Minimum Hours Required		60-67

+Humanities/Fine Arts Elective: Any course from the Humanities/Fine Arts DCCCD CORE.

++General Elective course: Must be selected from the DCCCD Core Curriculum (Course taken to meet the +Humanities/Fine Arts Elective can not be used to meet this requirement).

+++Technical elective course: Must be selected from the following:

ARTC	1353	Computer Illustration	3
ARTC	1345	3-D Modeling and Rendering	3
ARTV	1301	Animation 2-D	3
IMED	1391	Special Topics in Educational/Instructional Media Technology/Technician	3
IMED	1345	Interactive Multimedia I	3
IMED	2305	Multimedia Courseware Development II	3
IMED	2341	Advanced Digital Video	3
IMED	2345	Interactive Multimedia II	3
IMED	2351	Multimedia Programming	3
INEW	2334	Advanced Web Page Programming	3
ITSE	2313	Web Authoring	3
ITSE	2413	Web Authoring	4
ITSE	1311	Web Page Programming	3
ITSE	1391	Special Topics in Computer Programming	3
ITSE	1402	Computer Programming	4
ITSE	1407	Introduction to C++ Programming	4
ITSE	2302	Intermediate Web Programming	3
ITSE	2402	Intermediate Web Programming	4
ITSW	1307	Introduction to Database	3

** Other science classes may be substituted for ECOL 1305.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MULTIMEDIA TECHNOLOGY -- INTERNET COMMUNICATIONS

Richland only

(Level I Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MULT.INTER.I.03

The Internet Communications Certificate programs teach the design and development of web sites for corporate, commercial and educational uses. Special emphasis is placed on incorporating multimedia elements to develop dynamic web sites. In addition to learning advanced HTML and page layout techniques, students learn basic client-side scripting. Classes also address networks, security, and legal issues as they relate to the Internet

		CREDIT HOURS
SEMESTER I		
IMED 1301	Introduction to Multimedia	3
IMED 1316	Web Page Design I	3
ARTC 1302	Digital Imaging I	3
+General Education Requirement		3-4
		12-13
SEMESTER II		
ITSW 1307	Introduction to Database	3
BUSI 1301	Introduction to Business	3
ARTC 1301	Basic Animation **OR**	3
IMED 1305	Multimedia Courseware Development I	(3)
IMED 2315	Web Page Design II	3
		12
SEMESTER III		
IMED 1351	Digital Video	3
IMED 2313	Project Analysis and Design	3
ITSE 1311	Web Page Programming	3
+General Education Requirement		3-4
		12-13
Minimum Hours Required		36-38

+General Education Requirement - Students must take two of the following courses, but no more than one MATH course:

ENGL	1301	Composition I	3
SPCH	1311	Introduction to Speech Communication **OR**	3
SPCH	1315	Fundamentals of Public Speaking	(3)
MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3
MATH	1332	College Mathematics I	3
MATH	1333	College Mathematics II	3
MATH	2342	Introductory Statistics	3
MATH	1414	College Algebra	4
MATH	2412	Precalculus Mathematics **OR** higher level	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MULTIMEDIA TECHNOLOGY -- INTERNET COMMUNICATIONS

Richland only

(Level II Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.MULT.INTER.II.03

The Internet Communications Certificate programs teach the design and development of web sites for corporate, commercial and educational uses. Special emphasis is placed on incorporating multimedia elements to develop dynamic web sites. In addition to learning advanced HTML and page layout techniques, students learn basic client-side scripting. Classes also address networks, security, and legal issues as they relate to the Internet

		CREDIT HOURS
SEMESTER I		
IMED 1301	Introduction to Multimedia	3
IMED 1316	Web Page Design I	3
ARTC 1302	Digital Imaging I	3
+General Education Requirement		3-4
		12-13
SEMESTER II		
ITSW 1307	Introduction to Database	3
BUSI 1301	Introduction to Business	3
ARTC 1301	Basic Animation **OR**	3
IMED 1305	Multimedia Courseware Development I	(3)
IMED 2315	Web Page Design II	3
		12
SEMESTER III		
IMED 1351	Digital Video	3
IMED 2313	Project Analysis and Design	3
ITSE 1311	Web Page Programming	3
+General Education Requirement		3-4
		12-13
SEMESTER IV		
ITSE 2313	Web Authoring	3
IMED 2311	Portfolio Development	3
IMED 2334	Advanced Web Page Programming	3
IMED 2388	Internship - Educational/Instructional Media Technology/Technician **OR**	3
++Technical Elective		(3-4)
		12-13
Minimum Hours Required		48-51

+General Education Requirement - Students must take two of the following courses, but no more than one MATH course:

ENGL	1301	Composition I	3
SPCH	1311	Introduction to Speech Communication **OR**	3
SPCH	1315	Fundamentals of Public Speaking	(3)
MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3
MATH	1332	College Mathematics I	3
MATH	1333	College Mathematics II	3
MATH	2342	Introductory Statistics	3
MATH	1414	College Algebra	4
MATH	2412	Precalculus Mathematics **OR** higher level	4

++Technical elective course: Must be selected from the following:

ARTC	1353	Computer Illustration	3
ARTC	1345	3-D Modeling and Rendering	3
ARTV	1317	Design Communication I	3
ARTV	1305	Digital Imaging II	3
ARTV	1301	Animation 2-D	3
IMED	1345	Interactive Multimedia I	3
IMED	1391	Special Topics in Educational/Instructional Media Technology/Technician	3
IMED	2341	Advanced Digital Video	3
IMED	2345	Interactive Multimedia II	3
IMED	2351	Multimedia Programming	3
ITSE	1391	Special Topics in Computer Programming	3
ITSE	1402	Computer Programming	4
ITSE	1407	Introduction to C++ Programming	4
ITSE	2302	Intermediate Web Programming	3
ITSE	2402	Intermediate Web Programming	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MULTIMEDIA TECHNOLOGY -- MULTIMEDIA DEVELOPER

Richland only

(Level I Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MULT.DEVELOP.I.03

The Multimedia Developer Certificate programs train students in the development of interactive animation and training applications for corporations, educational institutions, government organizations and publishers. Students develop multimedia pieces for both CD-ROM and Internet/Intranet delivery using the leading tools for web-based multimedia and learning.

		CREDIT HOURS
SEMESTER I		
IMED 1301	Introduction to Multimedia	3
IMED 1305	Multimedia Courseware Development I	3
ARTC 1302	Digital Imaging I	3
+General Education Requirement		3-4
		12-13
SEMESTER II		
IMED 1316	Web Page Design I	3
IMED 1345	Interactive Multimedia I	3
IMED 2305	Multimedia Courseware Development II	3
+General Education Requirement		3-4
		12-13
SEMESTER III		
BUSI 1301	Introduction to Business	3
IMED 2313	Project Analysis and Design	3
IMED 2345	Interactive Multimedia II	3
IMED 1351	Digital Video **OR**	3
++Technical Elective		(3-4)
		12-13
Minimum Hours Required		36-39

+General Education Requirement - Students must take two of the following courses, but no more than one MATH course:

ENGL	1301	Composition I	3
SPCH	1311	Introduction to Speech Communication **OR**	3
SPCH	1315	Fundamentals of Public Speaking	(3)
MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics I	3
MATH	1332	College Mathematics I	3
MATH	1333	College Mathematics II	3
MATH	2342	Introductory Statistics	3
MATH	1414	College Algebra	4
MATH	2412	Precalculus Mathematics **OR** higher level	4

++Technical elective course: Must be selected from the following:

ARTC	1301	Basic Animation	3
ARTC	1353	Computer Illustration	3
ARTC	1345	3-D Modeling and Rendering	3
ARTC	1317	Design Communication I	3
ARTC	2305	Digital Imaging II	3
ARTV	1301	Animation 2-D	3
IMED	1391	Special Topics in Educational/Instructional Media Technology/Technician	3
IMED	2315	Web Page Design II	3
IMED	2415	Web Page Design II	4
IMED	2341	Advanced Digital Video	3
INEW	2334	Advanced Web Page Programming	3
ITSE	2313	Web Authoring	3
ITSE	1311	Web Page Programming	3
ITSE	1391	Special Topics in Computer Programming	3
ITSE	1402	Computer Programming	4
ITSE	1407	Introduction to C++ Programming	4
ITSE	2302	Intermediate Web Programming	3
ITSE	2402	Intermediate Web Programming	4
ITSW	1307	Introduction to Database	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MULTIMEDIA TECHNOLOGY -- MULTIMEDIA DEVELOPER

Richland only

(Level II Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.MULTI.DEVELOP.II.03

The Multimedia Developer Certificate programs train students in the development of interactive animation and training applications for corporations, educational institutions, government organizations and publishers. Students develop multimedia pieces for both CD-ROM and Internet/Intranet delivery using the leading tools for web-based multimedia and learning. This certificate provides an external learning experience.

		CREDIT HOURS
SEMESTER I		
IMED 1301	Introduction to Multimedia	3
IMED 1305	Multimedia Courseware Development I	3
ARTC 1302	Digital Imaging I	3
+General Education Requirement		3-4
		12-13
SEMESTER II		
IMED 1316	Web Page Design I	3
IMED 1345	Interactive Multimedia I	3
IMED 2305	Multimedia Courseware Development II	3
+General Education Requirement		3-4
		12-13
SEMESTER III		
BUSI 1301	Introduction to Business	3
IMED 2313	Project Analysis and Design	3
IMED 2345	Interactive Multimedia II	3
IMED 1351	Digital Video **OR**	3
+++Technical Elective		(3-4)
		12-13
SEMESTER IV		
IMED 2351	Multimedia Programming	3
IMED 2311	Portfolio Development	3
++General Elective		3-5
IMED 2388	Internship – Educational/ Instructional Media Technology/Technician **OR**	3
+++Technical Elective		(3-4)
		12-15
Minimum Hours Required		48-54

+General Education Requirement - Students must take two of the following courses, but no more than one MATH course:

ENGL	1301	Composition I	3
SPCH	1311	Introduction to Speech Communication **OR**	3
SPCH	1315	Fundamentals of Public Speaking	(3)
MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3
MATH	1332	College Mathematics I	3
MATH	1333	College Mathematics II	3
MATH	2342	Introductory Statistics	3
MATH	1414	College Algebra	4
MATH	2412	Precalculus Mathematics **OR** higher level	4

++General Elective course: Must be selected from the DCCCD Core Curriculum (Courses taken to meet the +General Education Requirement can not be used to meet this requirement).

+++Technical elective course: Must be selected from the following:

ARTC	1301	Basic Animation	3
ARTC	1353	Computer Illustration	3
ARTC	1345	3-D Modeling and Rendering	3
ARTC	1317	Design Communication I	3
ARTC	2305	Digital Imaging II	3
ARTV	1301	Animation 2-D	3
IMED	1391	Special Topics in Educational/Instructional Media Technology/Technician	3
IMED	2315	Web Page Design II	3
IMED	2415	Web Page Design II	4
IMED	2341	Advanced Digital Video	3
INEW	2334	Advanced Web Page Programming	3
ITSE	2313	Web Authoring	3
ITSE	1311	Web Page Programming	3
ITSE	1391	Special Topics in Computer Programming	3
ITSE	1402	Computer Programming	4
ITSE	1407	Introduction to C++ Programming	4
ITSE	2302	Intermediate Web Programming	3
ITSE	2402	Intermediate Web Programming	4
ITSW	1307	Introduction to Database	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MULTIMEDIA TECHNOLOGY -- VISUAL DESIGN

Richland only

(Level I Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.MULT.VISUAL.I

The Visual Design Certificate programs prepare students for image creation and manipulation on the computer. Courses focus on digital imaging techniques, animation and 3D graphics manipulation. Students also learn to incorporate graphics in pages for Internet delivery as well as on CD-ROM.

		CREDIT HOURS
SEMESTER I		
IMED 1301	Introduction to Multimedia	3
IMED 1316	Web Page Design I	3
ARTC 1302	Digital Imaging I **OR**	3
ARTS 2348	Digital Art I	(3)
ARTS 1311	2D Design	3
		12
SEMESTER II		
IMED 1351	Digital Video	3
ARTC 1301	Basic Animation	3
ARTC 1353	Computer Illustration	3
+General Education Requirement		3-4
		12-13
SEMESTER III		
BUSI 1301	Introduction to Business	3
ARTC 1345	3-D Modeling and Rendering **OR**	3
ARTC 1317	Design Communication I	(3)
IMED 2313	Project Analysis and Design	3
+General Education Requirement		3-4
		12-13
Minimum Hours Required		36-38

+General Education Requirement - Students must take two of the following courses, but no more than one MATH course:

ENGL	1301	Composition I	3
SPCH	1311	Introduction to Speech Communication **OR**	3
SPCH	1315	Fundamental of Public Speaking	3
MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3
MATH	1332	College Mathematics I	3
MATH	1333	College Mathematics II	3
MATH	2342	Introductory Statistics	3
MATH	1414	College Algebra	4
MATH	2412	Precalculus Mathematics **or** higher level	4

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

MULTIMEDIA TECHNOLOGY -- VISUAL DESIGN

Richland only

(Level II Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.MULT.VISUAL.II

The Visual Design Certificate programs prepare students for image creation and manipulation on the computer. Courses focus on digital imaging techniques, animation and 3D graphics manipulation. Students also learn to incorporate graphics in pages for Internet delivery as well as on CD-ROM. This certificate provides an external learning experience.

		CREDIT HOURS
SEMESTER I		
IMED 1301	Introduction to Multimedia	3
IMED 1316	Web Page Design I	3
ARTC 1302	Digital Imaging I **OR**	3
ARTS 2348	Digital Art I	(3)
ARTS 1311	2D Design	3
		12
SEMESTER II		
IMED 1351	Digital Video	3
ARTC 1301	Basic Animation	3
ARTC 1353	Computer Illustration	3
+General Education Requirement		3-4
		12-13
SEMESTER III		
BUSI 1301	Introduction to Business	3
ARTC 1345	3-D Modeling and Rendering **OR**	3
ARTC 1317	Design Communication I	(3)
IMED 2313	Project Analysis and Design	3
+General Education Requirement		3-4
		12-13
SEMESTER IV		
ARTC 2305	Digital Imaging II **OR**	3
ARTC 2349	Digital Art II	(3)
IMED 2311	Portfolio Development	3
IMED 2388	Internship – Educational/ Instructional Media Technology/Technician **OR**	3
+++Technical Elective		(3-4)
++General Elective		3-5
		12-15
Minimum Hours Required		48-53

+General Education Requirement - Students must take two of the following courses, but no more than one MATH course:

ENGL	1301	Composition I	3
SPCH	1311	Introduction to Speech Communication **OR**	3
SPCH	1315	Fundamental of Public Speaking	(3)
MATH	1314	College Algebra	3
MATH	1324	Mathematics for Business and Economics	3
MATH	1332	College Mathematics I	3
MATH	1333	College Mathematics II	3
MATH	2342	Introductory Statistics	3
MATH	1414	College Algebra	4
MATH	2412	Precalculus Mathematics **OR** higher level	4

++General Elective course: Must be selected from the DCCCD Core Curriculum (Courses taken to meet the +General Elective Requirement can not be used to meet this requirement).

+++Technical elective course: Must be selected from the following:

ARTV	1301	Animation 2-D	3
IMED	1345	Interactive Multimedia I	3
IMED	1391	Special Topics in Educational/Instructional Media Technology/Technician	3
IMED	2305	Multimedia Courseware Development II	3
IMED	2315	Web Page Design II	3
IMED	2415	Web Page Design II	4
IMED	2341	Advanced Digital Video	3
IMED	2345	Interactive Multimedia II	3
IMED	2351	Multimedia Programming	3
INEW	2334	Advanced Web Page Programming	3
ITSE	2313	Web Authoring	3
ITSE	2413	Web Authoring	4
ITSE	1311	Web Page Programming	3
ITSE	1391	Special Topics in Computer Programming	3
ITSE	1402	Computer Programming	4
ITSE	1407	Introduction to C++ Programming	4
ITSE	2302	Intermediate Web Programming	3
ITSE	2402	Intermediate Web Programming	4
ITSW	1307	Introduction to Database	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

OFFICE TECHNOLOGY -- ADMINISTRATIVE SUPPORT

Effective January 1, 2003, this award has been deactivated for Mountain View College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View (see above), North Lake and Richland

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.OFCT.ADM.SUPPT.04

The Administrative Support Certificate prepares students for a successful career as an office professional. The Certificate is developed to the specifications of the local job market.

		CREDIT HOURS
SEMESTER I		
POFI 1301	Computer Applications I	3
POFT 1301	Business English	3
POFT 1329	Keyboarding and Document Formatting **OR**	3
POFT 2301	Document Formatting and Skillbuilding	(3)
POFI 2301	Word Processing	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		15
SEMESTER II		
POFT 1309	Administrative Office Procedures I **OR**	3
POFT 1313	Professional Development for Office Personnel	(3)
POFI 1349	Spreadsheets	3
POFI 1341	Computer Applications II **OR**	3
POFI 2340	Advanced Word Processing	(3)
ENGL 1301	Composition I	3
POFT 1325	Business Math and Machine Applications **OR**	3
POFT 1321	Business Math	(3)
		15
SEMESTER III		
POFT 2312	Business Correspondence and Communication	3
POFT 1313	Professional Development for Office Personnel **OR**	3
POFT 1380	Cooperative Education–Administrative Assistant/Secretarial Science, General	(3)
POFI 1441	Computer Applications II **OR**	4
ITSW 1407	Introduction to Database **OR**	(4)
POFT 1319	Records and Information Management I	(3)
POFI 2331	Desktop Publishing for the Office **OR**	3
POFI 2340	Advanced Word Processing	(3)
+Electives		1-4
		13-17
Minimum Hours Required		43-47

+Electives: Any 1-4 credit hour POFI, POFT, ITSC, ITSW, ITSE, ITNW, ITMC, ITCC, INEW or ITSY course.

OFFICE TECHNOLOGY -- EXECUTIVE ASSISTANT

Effective January 1, 2003, this award has been deactivated for Mountain View College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View (see above), North Lake and Richland

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.OFCT.EXEC.AST.04

The Associate in Applied Sciences Degree comprehensive curriculum is designed as an advanced level program to prepare students for executive assistant and computer support positions in an office environment. Students will use state-of-the-art technology to develop skills necessary to become a productive member of the business community. Topics include office management, human relations, records management, oral and written business communications, plus word processing, spreadsheets, database, presentation, and telecommunication applications.

		CREDIT HOURS
SEMESTER I		
POFI 1301	Computer Applications I	3
POFT 1301	Business English	3
POFT 1329	Keyboarding and Document Formatting **OR**	3
POFT 2301	Document Formatting and Skillbuilding	(3)
POFT 1328	Business and Professional Presentations	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		15
SEMESTER II		
POFT 1309	Administrative Office Procedures I **OR**	3
POFT 1313	Professional Development for Office Personnel	(3)
POFI 2301	Word Processing	3
ENGL1301	Composition I	3
POFT 1321	Business Math **AND**	3
+Elective	Natural Science	3-4
		15-16
SEMESTER III		
POFT 2312	Business Correspondence and Communication	3
POFI 1349	Spreadsheets	3
POFT 1319	Records and Information Management I	3
POFI 1341	Computer Applications II **OR**	3
POFI 2340	Advanced Word Processing	(3)
++Elective		3-4
+++Elective	Humanities/Fine Arts	3
		18-19
SEMESTER IV		
POFI 2331	Desktop Publishing for the Office **OR**	3
POFI 2340	Advanced Word Processing #	(3)
POFI 1441	Computer Applications II # # **OR**	4
ITSW 1407	Introduction to Database	(4)
POFT 1380	Cooperative Education-Administrative Assistant/Secretarial Science, General	3
++++Elective	Social/Behavioral Science	3
		13
Minimum Hours Required		61-63

+Elective - One of the following Natural Science courses must be taken:

ECOL	1305	People and Their Environment	3
BIOL	1406	Biology for Science Majors I	4
BIOL	1408	Biology for Non-Science Majors I	4
BIOL	1409	Biology for Non-Science Majors II	4
GEOL	1403	Physical Geology	4
PHYS	1311	Descriptive Astronomy	3
PHYS	1401	Introductory General Physics	4
PHYS	1415	Physical Science	4

++Elective - Any 3 or 4 credit hour POFI, POFT, ACCT, ACNT, ITSC, ITSW, ITSE, ITNW, ITMC, ITCC, INEW, or ITSY course.

+++ Humanities/Fine Arts elective – must be selected from the DCCCD Humanities/Fine Arts Core list.

++++Social/Behavioral Science elective – must be selected from the DCCCD Social/Behavioral Science Core list.

Any student selecting *POFI 2340 Advanced Word Processing* in both Semester III and Semester IV must select two separate applications to have each course count as meeting the requirement.

 # # Any student selecting POFI 1341 Computer Applications II *and* POFI 1441 Computer Applications II *must select two separate applications to have each course count as meeting the requirement.*

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

OFFICE TECHNOLOGY -- EXECUTIVE ASSISTANT - TECH PREP NAVY YEOMAN

Effective January 1, 2003, this award has been deactivated for Mountain View College. For current students, the award will be closed on or before January 1, 2006. Effective January 1, 2004, this award has been deactivated for North Lake College. For current students, the award will be closed on or before January 1, 2007. Effective June 1, 2004, this award has been deactivated for Eastfield College. For current students, the award will be closed on or before June 1, 2007. New students should not attempt to pursue this award.

Brookhaven, Eastfield (see above), El Centro, Mountain View (see above), North Lake (see above) and Richland

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.OFCT.NAVY.6/04

The DCCCD Navy Yeoman Option is developed in agreement with the United States Navy. This program is designed for Navy recruits only and incorporates the certificate programs leading to the Associate in Applied Sciences Degree in the Tech Prep Office Technology program. Each certificate serves as an exit point or as an incentive to continue to build promotion points and credentials while pursuing the Associate in Applied Sciences Degree during Navy training.

Exit Points:

Following the exit points within the curriculum pattern the student may:

1. Choose to enlist in the Navy September 1 after high school graduation. By completing all the tech prep high school courses and the courses listed in Summer I and II, the student will also graduate from one of the DCCCD Colleges with an Office Assistant Certificate.
2. Choose to continue during the Fall semester at the DCCCD college and defer enlistment in the Navy until January 1. This recruit will earn both the Office Assistant Certificate and the Software Application Specialist Certificate.
3. Choose to continue in the Spring semester at the DCCCD college and enlist in the Navy June 1, one year after high school graduation. This recruit will earn the Office Assistant Certificate, the Software Application Specialist Certificate and the Administrative Support Certificate. After the specialized Navy training, the yeoman will qualify for the AAS degree.

		CREDIT HOURS
SEMESTER I		
POFT 1301	Business English	3
POFT 1328	Business and Professional Presentations	3
SPCH 1311	Introduction to Speech Communication	3
ENGL1301	Composition I	3
POFI 2301	Word Processing	3
POFI 1301	Computer Applications I	3
POFT 1309	Administrative Office Procedures	3
ACNT 1303	Introduction to Accounting I	3
		24
SEMESTER II		
POFT 2301	Document Formatting and Skillbuilding	3
POFI 1349	Spreadsheets	3
ITSW 1407	Introduction to Database	4
POFI 1341	Computer Applications II	3
POFI 2331	Desktop Publishing for the Office	3
		16
SEMESTER III		
POFT 2312	Business Correspondence and Communication	3
POFT 1313	Professional Development for Office Personnel	3
+++Elective	Social/Behavioral Science	3
++Elective	Humanities/Fine Arts	3
		12
SEMESTER IV - Navy Recruit Training		
POFT 1319	Records and Information Management I	3
POFT 1349	Administrative Office Procedures II	3
+Elective	Natural Science	3-4
POFT 1380	Cooperative Education–Administrative Assistant/Secretarial Science, General	3
POFT 2380	Cooperative Education–Administrative Assistant/Secretarial Science, General	3
		15-16
Minimum Hours Required		67-68

(continued on next page)

+Elective: One of the following Natural Science courses may be taken:

ECOL	1305	People and Their Environment	3
BIOL	1406	Biology for Science Majors I	4
BIOL	1408	Biology for Non-Science Majors I	4
BIOL	1409	Biology for Non-Science Majors II	4
GEOL	1403	Physical Geology	4
PHYS	1311	Descriptive Astronomy	3
PHYS	1401	Introductory General Physics	4
PHYS	1415	Physical Science	4

++Humanities/Fine Arts elective – must be selected from the DCCCD Humanities/Fine Arts Core list.

+++Social/Behavioral Science elective – must be selected from the DCCCD Social/Behavioral Core list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

OFFICE TECHNOLOGY -- OFFICE ASSISTANT

Effective January 1, 2003, this award has been deactivated for Mountain View College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View (see above), North Lake and Richland

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.OFCT.OFF.ASST.04

Upon satisfactory completion of the Office Assistant Certificate, students are prepared for entry-level positions requiring basic office skills. This certificate may be completed in one semester.

		CREDIT HOURS
SEMESTER I		
POFI 1301	Computer Applications I **OR**	3
POFT 1319	Records and Information Management I	(3)
POFT 1301	Business English	3
POFT 1309	Administrative Office Procedures I **OR**	3
POFT 1313	Professional Development for Office Personnel	(3)
POFI 1341	Computer Applications II **OR**	3
POFI 2301	Word Processing	(3)
+Elective		3-4
		15-16

Minimum Hours Required 15-16

+Electives – Any 3 or 4 credit hour POFI, POFT, ITSC, ITSW, ITSE, ITNW, ITMC, ITCC, INEW or ITSY course including but not limited to:

POFT	1325	Business Math and Machine Applications	3
POFT	1380	Cooperative Education – Administrative Assistant/Secretarial Science, General	3
POFT	2380	Cooperative Education – Administrative Assistant/Secretarial Science, General	3
POFT	1329	Keyboarding and Document Formatting	3

OFFICE TECHNOLOGY -- SOFTWARE APPLICATION SPECIALIST

Effective January 1, 2003, this award has been deactivated for Mountain View College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View (see above), North Lake and Richland

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.OFCT.SOFT.APPL.04

The Software Application Specialist Certificate provides a benchmark for students to measure their computer skills using Microsoft Office software. Microsoft Office Specialist Certification, which provides students valuable credentials and a competitive edge, is available for those who master required competencies.

		CREDIT HOURS
SEMESTER I		
POFI 2301	Word Processing	3
POFI 1349	Spreadsheets	3
POFI 1441	Computer Applications II **OR**	4
ITSW 1407	Introduction to Database	(4)
POFT 1328	Business and Professional Presentations	3
POFI 2331	Desktop Publishing for the Office **OR**	3
POFI 2340	Advanced Word Processing	(3)
		16

Minimum Hours Required 16

The Software Application Specialist Certificate will help to prepare students for individual Microsoft Office Specialist exams at the proficient level.

Students who previously passed specific Microsoft Office Specialist certification exams will be eligible to receive credit for equivalent POFI courses. Consult the Office Technology advisor for details.

ORNAMENTAL HORTICULTURE TECHNOLOGY

Richland only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ORNAMENTAL

The Associate in Applied Science degree is a comprehensive curriculum designed as an advanced level program to prepare students to enter the horticulture industries. Students select the emphasis of study in one of the following: Nursery/Greenhouse; Landscape/Turf Management; Landscape Design; or Floral/Interiorscape. The program emphasis chosen by the student will determine the skills and the employment options available.

		CREDIT HOURS
Core Curriculum (1st Semester)		
SEMESTER I		
HALT 1401	Principles of Horticulture	4
HALT 1305	Horticulture Soils	3
HALT 1320	Horticultural Calculations **OR**	3
POFT 1321	Business Math	(3)
HALT 1331	Woody Plant Materials	3
HALT 2314	Plant Propagation	3
		16
SEMESTER II		
HALT 1303	Herbaceous Plants	3
HALT 2323	Horticultural Pest Control	3
ITSC 1401	Introduction to Computers **OR**	4
POFI 1301	Computer Applications I	(3)
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication	3
		15-16
SEMESTER III		
BIOL 1411	Introductory Botany **OR**	4
BIOL 1408	Biology for Non-Science Majors I **OR**	(4)
CHEM 1405	Introductory Chemistry I	(4)
+Elective	Humanities/Fine Arts	3
HALT 1351	Landscape Business Operations	3
++HALT X4XX	Specialty Track Option	4
++HALT XXXX	Specialty Track Option **OR**	3-4
++FMKT X4XX	Specialty Track Option	(4)
		17-18
SEMESTER IV		
ECON 2301	Principles of Economics I **OR**	3
PSYC 2301	Introduction to Psychology **OR**	(3)
SOCI 1301	Introduction to Sociology	(3)
HALT 2380	Cooperative Education – Applied Horticulture/Horticultural, General	3
++HALT X3XX	Specialty Track Option **OR**	3
++FMKT X3XX	Specialty Track Option	(3)
++HALT X2XX	Specialty Track Option **OR**	2
++HALT X3XX	Specialty Track Option	(3)
++HALT X3XX	Specialty Track Option	3
		14-15
Minimum Hours Required		62-65

NOTE: Semester I courses must be completed before taking other HALT/FMKT courses.

+Humanities/Fine Arts Elective - must be selected from the DCCCD Humanities/Fine Arts Core list.

++HALT/FMKT Specialty Track Options: Students must complete all courses in ONE specialty track option as cited below:

FLORAL/INTERIORSCAPE SPECIALIST

HALT	1422	Landscape Design	4
HALT	1209	Interior Plants	2
FMKT	1401	Floral Design	4
FMKT	2331	Advanced Floral Design	3
HALT	2341	Interiorscaping	3

LANDSCAPE/TURF MANAGEMENT SPECALIST

HALT	1422	Landscape Design	4
HALT	1324	Turfgrass Science and Management	3
HALT	1319	Landscape Construction	3
HALT	1333	Landscape Irrigation	3
HALT	2301	Arboriculture	3

LANDSCAPE DESIGN SPECIALIST

HALT	1422	Landscape Design	4
HALT	1319	Landscape Construction	3
HALT	1353	Landscape Computer Design	3
HALT	1333	Landscape Irrigation	3
HALT	2331	Advanced Landscape Design	3

NURSERY/GREENHOUSE MANAGEMENT SPECALIST

HALT	1422	Landscape Design	4
HALT	2402	Greenhouse Crop Production	4
HALT	2320	Nursery Production and Management	3
HALT	1319	Landscape Construction	3
HALT	1209	Interior Plants **OR**	2
HALT	1296	Special Topics in Nursery Operation and Management	(2)

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ORNAMENTAL HORTICULTURE TECHNOLOGY – FLORAL/INTERIORSCAPE SPECIALIST

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ORNAM.FLORAL

This 32 credit hour certificate prepares the student to enter the horticulture industries. The program places emphasis on those skills required for success in the retail/wholesale greenhouse flower production and sales, retail floral design and sales, and designing and maintenance of tropical plants in commercial buildings/offices, and shopping malls.

		CREDIT HOURS
SEMESTER I		
HALT 1401	Principles of Horticulture	4
HALT 1305	Horticultural Soils	3
HALT 1320	Horticultural Calculations **OR**	3
POFT 1321	Business Math	(3)
HALT 1331	Woody Plant Materials	3
HALT 2314	Plant Propagation	3
		16
SEMESTER II		
HALT 1422	Landscape Design	4
HALT 1209	Interior Plants	2
FMKT 1401	Floral Design	4
FMKT 2331	Advanced Floral Design	3
HALT 2341	Interiorscaping	3
		16
Minimum Hours Required		32

ORNAMENTAL HORTICULTURE TECHNOLOGY – LANDSCAPE DESIGN SPECIALIST

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ORNAM.DESIGN

This 32 credit hour certificate prepares the student to enter the horticulture industries. The program places emphasis on those skills required for success in the landscape design/contracting business with residential landscape and irrigation design specialties.

		CREDIT HOURS
SEMESTER I		
HALT 1401	Principles of Horticulture	4
HALT 1305	Horticultural Soils	3
HALT 1320	Horticultural Calculations **OR**	3
POFT 1321	Business Math	(3)
HALT 1331	Woody Plant Materials	3
HALT 2314	Plant Propagation	3
		16
SEMESTER II		
HALT 1422	Landscape Design	4
HALT 1319	Landscape Construction	3
HALT 1353	Landscape Computer Design	3
HALT 1333	Landscape Irrigation	3
HALT 2331	Advanced Landscape Design	3
		16
Minimum Hours Required		32

ORNAMENTAL HORTICULTURE TECHNOLOGY – LANDSCAPE/TURF MANAGEMENT SPECIALIST

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ORNAM.TURF.MGT

This 32 credit hour certificate prepares the student to enter the horticulture industries. The program places emphasis on those skills required for success to enter the landscape contracting or landscape maintenance business.

		CREDIT HOURS
SEMESTER I		
HALT 1401	Principles of Horticulture	4
HALT 1305	Horticultural Soils	3
HALT 1320	Horticultural Calculations **OR**	3
POFI 1321	Business Math	(3)
HALT 1331	Woody Plant Materials	3
HALT 2314	Plant Propagation	3
		16
SEMESTER II		
HALT 1422	Landscape Design	4
HALT 1324	Turfgrass Science and Management	3
HALT 1319	Landscape Construction	3
HALT 1333	Landscape Irrigation	3
HALT 2301	Arboriculture	3
		16
Minimum Hours Required		32

ORNAMENTAL HORTICULTURE TECHNOLOGY – NURSERY/GREENHOUSE MANAGEMENT SPECAILIST

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ORNAM.NURSERY

This 32 credit hour certificate prepares the student to enter the horticulture industries. The program places emphasis on those skills required for success to enter nursery and greenhouse operations such as retail/wholesale nurseries and greenhouse growing facilities.

		CREDIT HOURS
SEMESTER I		
HALT 1401	Principles of Horticulture	4
HALT 1305	Horticultural Soils	3
HALT 1320	Horticultural Calculations **OR**	3
POFT 1321	Business Math	(3)
HALT 1331	Woody Plant Materials	3
HALT 2314	Plant Propagation	3
		16
SEMESTER II		
HALT 1422	Landscape Design	4
HALT 2420	Greenhouse Crop Production	4
HALT 2320	Nursery Production and Management	3
HALT 1319	Landscape Construction	3
HALT 1209	Interior Plants **OR**	2
HALT 1296	Special Topics in Nursery Operation and Management	(2)
		16
Minimum Hours Required		32

ORNAMENTAL HORTICULTURE TECHNOLOGY -- ORNAMENTAL HORTICULTURE TECHNICIAN

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.ORNAM.TECH

This 16 credit hour beginning certificate is designed to give a basic understanding of common concepts used in the various horticulture industries for employment in entry level positions.

		CREDIT HOURS
SEMESTER I		
HALT 1401	Principles of Horticulture	4
HALT 1305	Horticultural Soils	3
HALT 1320	Horticultural Calculations **OR**	3
POFI 1321	Business Math	(3)
HALT 1331	Woody Plant Materials	3
HALT 2314	Plant Propagation	3
		16

Minimum Hours Required 16

Ornamental Horticulture Technician courses must be taken before entry into any other certificate or degree plan.

ORNAMENTAL HORTICULTURE TECHNOLOGY -- GREENHOUSE FLORIST

Effective September 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Richland (see above) only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ORNAM.GREENHOUSE

This option prepares a student to enter the florist industry. The program places emphasis on those skills required for success in wholesale greenhouse flower production, retail floral design and sales, and retail greenhouse florist production and sales. Upon graduation, a student is qualified to enter a wide number of positions in crop production, sales and distribution, floral design and flower shop management.

		CREDIT HOURS
SEMESTER I		
HALT 1401	Principles of Horticulture	4
HALT 1217	Trees	2
FMKT 1401	Floral Design	4
BIOL 1411	Introductory Botany **OR**	4
BIOL 1408	Biology Science **OR**	(4)
CHEM 1405	Introductory Chemistry I	(4)
ENGL 1301	Composition I	3
		17
SEMESTER II		
HALT 1211	Shrubs, Vines, and Groundcovers	2
HALT 1303	Herbaceous Plants	3
ITSC 1401	Introduction to Computers	4
MATH 1324	Mathematics for Business and Economics I **OR**	3
POFT 1321	Business Math **OR**	(3)
HALT 1320	Horticultural Calculations	(3)
HALT 1315	Fundamentals of Landscape Planning	3
		15
SEMESTER III		
HALT 1209	Interior Plants	2
HALT 2402	Greenhouse Crop Production	4
FMKT 2335	Flower Shop Management	3
MRKG 1311	Principles of Marketing **OR**	3
BMGT 1302	Principles of Retailing	(3)
SPCH 1311	Introduction to Speech Communication	3
ARTS 1311	Design I **OR**	3
ARTS 1316	Drawing I	(3)
		18
SEMESTER IV		
HALT 2341	Interiorscaping	3
FMKT 2331	Advanced Floral Design	3
HALT 2380	Cooperative Education – Horticulture Services Operations and Management, General **OR**	3
HALT 1391	Special Topics in Horticulture Services Operations and Management, General	(3)
ACCT 2301	Principles of Accounting I **OR**	3
ACNT 1303	Introduction to Accounting	(3)
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
		15

Minimum Hours Required 65

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ORNAMENTAL HORTICULTURE TECHNOLOGY -- INTERIORSCAPE DESIGN

Effective September 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Richland (see above) only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Plan Code:. AAS.ORNAM.INTERIORSC

This option prepares an individual to enter the interiorscape industry which includes designing and maintaining tropical plants in commercial buildings, offices, and malls. The students will study design principles, management methods, tropical plant identification and maintenance, greenhouse production, and plant propagation techniques. Hands-on experience is emphasized in the coursework in addition to cooperative work experience.

		CREDIT HOURS
SEMESTER I		
HALT 1401	Principles of Horticulture	4
HALT 1217	Trees	2
HALT 1213	Economics Entomology	2
FMKT 1401	Floral Design	4
HALT 1315	Fundamentals of Landscape Planning	3
BIOL 1411	Introductory Botany **OR**	4
BIOL 1408	Biology Science **OR**	(4)
CHEM 1405	Introductory Chemistry I	(4)
		19
SEMESTER II		
HALT 1211	Shrubs, Vines, and Groundcovers	2
HALT 1303	Herbaceous Plants	3
HALT 2201	Arboriculture	2
ENGL 1301	Composition I	3
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
HALT 1253	Landscape Computer Design	2
		15
SEMESTER III		
HALT 1209	Interior Plants	2
HALT 2402	Greenhouse Crop Production	4
HALT 1422	Landscape Design	4
MATH 1324	Mathematics for Business and Economics I **OR**	3
POFT 1321	Business Math **OR**	(3)
HALT 1320	Horticultural Calculations	(3)
HALT 1319	Landscape Construction	3
ARTS 1311	Design I **OR**	3
ARTS 1316	Drawing I	(3)
		19
SEMESTER IV		
HALT 1351	Landscape Business Operations	3
HALT 2380	Cooperative Education – Horticulture Services Operations and Management, General **OR**	3
HALT 1391	Special Topics in Horticulture Services Operations and Management, General	(3)
HALT 2341	Interiorscaping	3
HALT 1205	Horticulture Soils	2
ITSC 1401	Introduction to Computers	4
SPCH 1311	Introduction to Speech Communication	3
		18
Minimum Hours Required		71

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ORNAMENTAL HORTICULTURE TECHNOLOGY -- INTERIORSCAPE

Effective September 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Richland (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.HORT.INTERIOR

This program prepares the student to enter positions in the interiorscape industry which includes designing and maintaining tropical plants in commercial buildings.

		CREDIT HOURS
SEMESTER I		
HALT 1209	Interior Plants	2
HALT 1205	Horticulture Soils	2
HALT 1319	Landscape Construction	3
HALT 1315	Fundamentals of Landscape Planning	3
HALT 1401	Principles of Horticulture	4
FMKT 1401	Floral Design	4
		18
SEMESTER II		
HALT 1303	Herbaceous Plants	3
HALT 1213	Economic Entomology	2
HALT 2201	Arboriculture	2
HALT 2341	Interiorscaping	3
HALT 2380	Cooperative Education–Horticulture Services Operations and Management, General **OR**	3
HALT 1391	Special Topics in Horticulture Services Operations and Management, General	(3)
SPCH 1311	Introduction to Speech Communication	3
MATH 1324	Mathematics for Business and Economics I **OR**	3
POFT 1321	Business Math **OR**	(3)
HALT 1320	Horticultural Calculations	(3)
		19
Minimum Hours Required		37

ORNAMENTAL HORTICULTURE TECHNOLOGY -- LANDSCAPE MANAGEMENT

Effective September 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Richland (see above) only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ORNAM.LAND.MANAG

This option prepares the student to enter the landscape contracting and the landscape installation and maintenance businesses. The student expands his preparation to meet his own specific goals through directing two semesters of cooperative work experience toward areas in which he desires greater preparation. Landscape management is the fastest growing field in ornamental horticulture and provides excellent employment opportunities. A student completing this option is also well prepared for work in city park departments.

		CREDIT HOURS
SEMESTER I		
HALT 1217	Trees	2
+HALT X2XX	Horticulture Elective	2
HALT 1315	Fundamentals of Landscape Planning	3
HALT 1401	Principles of Horticulture	4
BIOL 1411	Introductory Botany **OR**	4
BIOL 1408	Biological Science **OR**	(4)
CHEM 1405	Introductory Chemistry I	(4)
ENGL 1301	Composition I	3
		18
SEMESTER II		
HALT 1211	Shrubs, Vines, and Groundcovers	2
HALT 1303	Herbaceous Plants	3
+HALT X2XX	Horticulture Elective	2
+HALT X2XX	Horticulture Elective	2
ITSC 1401	Introduction to Computers	4
MATH 1324	Mathematics for Business and Economics **OR**	3
POFT 1321	Business Math **OR**	(3)
HALT 1320	Horticultural Calculations	(3)
HALT 1253	Landscape Computer Design	2
		18
SEMESTER III		
+HALT XXXX	Horticulture Elective	2-3
HALT 1209	Interior Plants	2
HALT 2380	Cooperative Education - Horticulture Services Operations and Management, General **OR**	3
HALT 1391	Special Topics in Horticulture Services Operations and Management, General	(3)
HALT 1422	Landscape Design	4
ACCT 2301	Principles of Accounting I **OR**	3
ACNT 1303	Introduction to Accounting	(3)
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
SPCH 1311	Introduction to Speech Communication	3
		20-21
SEMESTER IV		
HALT 1351	Landscape Business Operations	3
HALT 2341	Interiorscaping	3
HALT 2331	Advanced Landscape Design	3
+HALT 13XX	Horticulture Elective	3
ARTS 1311	Design I **OR**	3
ARTS 1316	Drawing I	(3)
		15

Minimum Hours Required 71-72

+Horticulture Elective list:

HALT	1205	Soils	2
HALT	1213	Economics Entomology	2
HALT	1224	Turfgrass Science and Management	2
HALT	1319	Landscape Construction	3
HALT	1333	Landscape Irrigation	3
HALT	2201	Arboriculture	2

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ORNAMENTAL HORTICULTURE TECHNOLOGY -- FLORIST

Effective September 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Richland (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.HORT.FLORIST

This program prepares the student to enter positions in floral design, retail flower shop operations, and sales and distribution of flowers and florist supplies.

		CREDIT HOURS
SEMESTER I		
FMKT 1401	Floral Design	4
ACCT 2301	Principles of Accounting I **OR**	3
ACNT 1303	Introduction to Accounting	(3)
MATH 1324	Mathematics for Business and Economics I **OR**	3
POFT 1321	Business Math **OR**	(3)
HALT 1320	Horticultural Calculations	(3)
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
HALT 1401	Principles of Horticulture	4
		17
SEMESTER II		
HALT 1211	Shrubs, Vines, and Groundcovers	2
HALT 1209	Interior Plants	2
HALT 1303	Herbaceous Plants	3
FMKT 2331	Advanced Floral Design	3
FMKT 2335	Flower Shop Management	3
HALT 2380	Cooperative Education – Horticulture Services Operations and Management, General **OR**	3
HALT 1391	Special Topics in Horticulture Services Operations and Management, General	(3)
SPCH 1311	Introduction to Speech Communication	3
		19
Minimum Hours Required		36

ORNAMENTAL HORTICULTURE TECHNOLOGY -- LANDSCAPE GARDENER

Effective September 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Richland (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.HORT.LANDSCAPE

This program prepares the student to enter positions in landscape construction, park maintenance, home landscape and garden services, and garden center and nursery sales. Through the selection of electives and occupational experiences the student can guide his training toward specific jobs.

		CREDIT HOURS
SEMESTER I		
HALT 1217	Trees	2
HALT 1315	Fundamentals of Landscape Planning	3
HALT 1401	Principles of Horticulture	4
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
MATH 1324	Mathematics for Business and Economics I **OR**	3
POFT 1321	Business Math **OR**	(3)
HALT 1320	Horticultural Calculations	(3)
SPCH 1311	Introduction to Speech Communication	3
		18
SEMESTER II		
HALT 1211	Shrubs, Vines, and Groundcovers	2
HALT 1209	Interior Plants	2
HALT 1303	Herbaceous Plants	3
HALT 2380	Cooperative Education – Horticulture Services Operations and Management, General **OR**	3
HALT 1391	Special Topics in Horticulture Services Operations and Management, General	(3)
HALT 1205	Horticulture Soils	2
HALT 2201	Arboriculture	2
HALT 1224	Turfgrass Science and Management	2
		16
Minimum Hours Required		34

ORNAMENTAL HORTICULTURE TECHNOLOGY -- LANDSCAPE NURSERY

Effective September 1, 2004, this award has been deactivated for Richland College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

Richland (see above) only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.ORNAM.LAND.NURS

This option prepares a student to enter both the landscaping industry and the nursery industry at a technician level. The program places emphasis on those skills required for success in landscape service, nursery production and landscape planning businesses. A student who completes this training is prepared for work in park and recreation departments, production nurseries, industrial parks and gardens.

		CREDIT HOURS
SEMESTER I		
HALT 1401	Principles of Horticulture	4
HALT 1217	Trees	2
HALT 1315	Fundamentals of Landscape Planning	3
HALT 1213	Economic Entomology	2
BIOL 1411	Introductory Botany **OR**	4
BIOL 1408	Biology Science **OR**	(4)
CHEM 1405	Introductory Chemistry I	(4)
ENGL 1301	Composition I	3
		18
SEMESTER II		
HALT 1211	Shrubs, Vines, and Groundcovers	2
HALT 1303	Herbaceous Plants	3
HALT 1253	Landscape Computer Design	2
HALT 1205	Horticulture Soils	2
ITSC 1401	Introduction to Computers	4
MATH 1324	Mathematics for Business and Economics I **OR**	3
POFT 1321	Business Math **OR**	(3)
HALT 1320	Horticultural Calculations	(3)
		16
SEMESTER III		
HALT 1244	Propagation of Woody Ornamentals	2
HALT 2320	Nursery Production and Management	3
HALT 2402	Greenhouse Crop Production	4
HALT 1422	Landscape Design	4
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
ARTS 1311	Design I **OR**	3
ARTS 1316	Drawing I	(3)
		19
SEMESTER IV		
HALT 1319	Landscape Construction	3
HALT 1351	Landscape Business Operations	3
HALT 2380	Cooperative Education – Horticulture Services Operations and Management, General **OR**	3
HALT 1391	Special Topics in Horticulture Services Operations and Management, General	(3)
HALT 2341	Interiorscaping	3
HALT 2331	Advanced Landscape Design	3
SPCH 1311	Introduction to Speech Communication	3
		18

Minimum Hours Required 71

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

PARALEGAL

El Centro only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.PARALEGAL

The Paralegal Program is an Associate in Applied Sciences Degree program designed to prepare the student to function as a technically qualified assistant to a lawyer. Paralegals (also called legal assistants) typically work in law firms, governmental agencies, and corporations. The program does not qualify a graduate to take a Bar exam, represent clients in court, or give legal advice.

		CREDIT HOURS
FIRST YEAR		
SEMESTER I		
LGLA 1301	Legal Research and Writing	3
LGLA 1311	Introduction to Law	3
LGLA 1313	Introduction to Paralegal Studies	3
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
		15
SEMESTER II		
LGLA 1355	Family Law	3
LGLA 2309	Real Property	3
LGLA 2311	Business Organizations	3
SPCH 1311	Introduction to Speech Communication	3
COSC 1300	Computer Literacy	3
		15
SECOND YEAR		
SEMESTER III		
LGLA 1345	Civil Litigation	3
LGLA 1351	Contracts	3
LGLA 1353	Wills, Trusts and Probate Administration	3
GOVT 2301	American Government	3
+Elective	Paralegal Elective	3
++Elective	Humanities/Fine Arts	3
		18
SEMESTER IV		
LGLA 2303	Torts and Personal Injury Law	3
LGLA 2307	Law Office Management	3
LGLA 2331	Advanced Legal Research and Writing	3
+Elective	Paralegal Elective	3
+++Elective	Social/Behavioral Science	3
		15
Minimum Hours Required		63

+Paralegal Electives - **SIX** credit hours must be selected from the following:

LGLA	1343	Bankruptcy	3
LGLA	1380	Cooperative Education-Paralegal/Legal Assistant	3
LGLA	2313	Criminal Law and Procedure	3
LGLA	2335	Advanced Civil Litigation	3
LGLA	2380	Cooperative Education-Paralegal/Legal Assistant	3

++Humanities/Fine Arts Electives—**THREE** credit hours must be selected from the following:

ARTS	1301	Art Appreciation	3
DRAM	1310	Introduction to Theatre	3
ENGL		(2000 Level Literature Course)	3
Foreign Language or American Sign Language			3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1301	Introduction to Philosophy	3

+++Social/Behavioral Science Electives—**THREE** credit hours must be selected from the following:

HIST	1301	History of the United States	3
PSYC	2301	Introduction to Psychology	3
SOCI	1301	Introduction to Sociology	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

PARAMEDIC

El Centro only

(Certificate – Level I)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.EMT.PARAMEDIC

The Paramedic Certificate Option is for students already certified as Emergency Medical Technicians. Potential students will be considered on an individual basis to determine if they have an adequate background in anatomy and physiology, math and reading. Admission priority is given to local EMS providers and their employees.

		CREDIT HOURS
PREREQUISITE REQUIREMENT*		
Completion of EMT training and transcripted Anatomy/ Physiology coursework or passing the Anatomy/ Physiology competency exam		8
		8
SEMESTER I		
EMSP 1338	Introduction to Advanced Practice	3
EMSP 1355	Trauma Management	3
EMSP 2544	Cardiology	5
EMSP 1160	Clinical – Emergency Medical Services	1
		12
SEMESTER II		
EMSP 2534	Medical Emergencies	5
EMSP 2430	Special Populations	4
EMSP 1161	Clinical–Emergency Medical Services	1
		10
SEMESTER III		
EMSP 2338	EMS Operations	3
EMSP 2143	Assessment Based Management	1
EMSP 2362	Clinical–Emergency Medical Services	3
EMSP 2563	Clinical-Emergency Medical Services	5
		12
Minimum Hours Required		42

*Students who have previous EMT, Anatomy and Physiology coursework/experience will receive 8 hours credit for the following two classes:

SCIT	1307	Human Anatomy and Physiology I	3
EMSP	1501	Emergency Medical Technician-Basic	5

PATIENT CARE TECHNICIAN

Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.PATIENT.CARE.02

The one-semester Patient Care Technician program is designed to prepare students for entry-level positions in the health care industry. Students learn to apply basic nursing assisting skills in a variety of settings, including long-tern care facilities (nursing homes), hospitals, clinics, home health care, and assisted living facilities. Skills developed will include patient hygiene and comfort, patient safety, obtaining lab samples, phlebotomy (drawing blood), and electrocardiography (running EKGs). Upon successful completion of classroom, lab and the practicum (clinical), students will be awarded the Patient Care Technician Certificate.

		CREDIT HOURS
SEMESTER I		
MDCA 1313	Medical Terminology	3
NUPC 1320	Patient Care Technician	3
NURA 1260	Clinical – Nursing/Nursing Assistant/ Aide and Patient Care Assistant	2
NURA 1291	Special Topics in Nursing Assistant/ Aide	2
NURA 1301	Nurse Aide for Health Care Organizations I	3
SPCH 1311	Introduction to Speech Communication **OR**	3
NUTR 1322	Principles of Nutrition **OR**	(3)
PHED 1304	Health For Today	(3)
		16

Minimum Hours Required 16

PATIENT CARE TECHNICIAN -- CERTIFIED NURSING ASSISTANT

Cedar Valley only

(Skills Achievement Award)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: SA.CERT.NURS.ASST

This certificate program teaches basic nursing skills needed for entry-level positions in a variety of health care organizations. Students completing this program will be able to provide care to patients under the direction and supervision of a licensed nurse. Successful completion of the classroom portion is mandatory to progress to the clinical practicum. Upon successful completion of classroom study and clinical practicum, students will receive the Certified Nursing Assistant Skills Achievement Award.

		CREDIT HOURS
SEMESTER I		
NURA 1160	Clinical – Nursing Assistant/Aide	1
NURA 1291	Special Topics in Nursing Assistant/ Aide	2
NURA 1301	Nurse Aide for HealthCare Organizations I	3
		6

Minimum Hours Required 6

PLUMBING/PIPEFITTING AND HVAC CONSTRUCTION

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.PLMB/PIPEFITTING

In partnership with the Dallas Joint Apprenticeship Committee for the Plumbing and Pipefitting Industry, this program will prepare students for employment as a Plumbing or Pipefitting journeyman. Successful completion of all phases of the curriculum and the coordinated on-the-job training prepares the student for the State of Texas examination for Plumbers and Pipefitters. The student will also cover additional math and science, communications, planning, problem solving, human relations and management skills.

Plumbing and Pipefitting Construction is a nationally approved apprenticeship program. Additional admission requirements are necessary for enrollment in this program.

		CREDIT HOURS
SEMESTER I		
CNBT 1201	Introduction to Construction	2
WLDG 1221	Introduction to Welding Fundamentals	2
DFTG 1232	Mechanical Drafting	2
WLDG 1222	Introduction to Welding Fundamentals	2
+Elective	Plumbing/Pipefitting/HVAC Electives	2-3
TECM 1341	Technical Algebra **OR**	3
MATH 1314	College Algebra	(3)
Elective	Natural Science	3-4
		16-18
SEMESTER II		
PFPB 2347	Plumbing and Pipefitting Equipment and Safety	3
DFTG 1208	Basic Computer-Aided Drafting	2
#PFPB 1345	Plumbing Option **OR**	3
##ELPT 1311	Pipefitting/HVAC Option	(3)
+Elective	Plumbing/Pipefitting/HVAC Electives	2-3
SPCH 1311	Introduction to Speech Communication	3
ENGL 1301	Composition I	3
		16-17
SEMESTER III		
WLDG 2213	Intermediate Welding Using Multiple Processes	2
WLDG 1273	Introduction to Layout and Fabrication	2
+Elective	Plumbing/Pipefitting/HVAC Electives	4-6
++Electives	Humanities/Fine Arts	3
+++Elective	Social/Behavioral Science	3
		14-16
SEMESTER IV		
DFTG 2234	Industrial Drafting Applications	2
+Elective	Plumbing/Pipefitting/HVAC Electives	10
++++Elective	Management Elective	3
		15
Minimum Hours Required		61-66

+Electives – students must complete one of the three options listed below.

+PIPEFITTERS OPTION:

WLDG	2206	Intermediate Pipe Welding	2
HART	2271	Commercial Air Conditioning	2
WLDG	1274	Intermediate Layout and Fabrication	2
HART	2273	Industrial Air Conditioning	2
WLDG	2207	Intermediate Pipe Welding	2
HART	2274	Commercial and Industrial Pneumatic Controls	2
HART	1273	Air Conditioning Control Principles	2
HART	2270	Commercial and Industrial Heating Systems	2
PFPB	2235	Commercial and Industrial Control Systems	2
PFPB	2239	Commercial and Industrial System Start-Up	2

+PLUMBING OPTION:

PFPB	1291	Special Topics in Plumbing Technology/ Plumber	2
PFPB	1225	Mechanics of Plumbing	2
PFPB	1219	Commercial Plumbing I	2
PFPB	1253	Commercial Plumbing II	2
PFPB	1255	Industrial Plumbing	2
PFPB	1323	Plumbing Codes I	3
PFPB	1251	Commercial and Industrial Gas Installation	2
PFPB	1357	Plumbing Codes II	3
PFPB	2240	Medical Gas	2
PFPB	1247	Backflow Prevention	2

+HVAC OPTION:

WLDG	2206	Intermediate Pipe Welding	2
HART	2271	Commercial Air Conditioning	2
HART	2273	Industrial Air Conditioning	2
HART	2274	Commercial and Industrial Pneumatic Controls	2
HART	1273	Air Conditioning Control Principles	2
HART	2270	Commercial and Industrial Heating Systems	2
PFPB	2235	Commercial and Industrial Control Systems	2
PFPB	2239	Commercial and Industrial System Start-Up	2
PFPB	1272	Basic HVAC for Plumbing/Pipefitting	2
ELPT	1215	Electrical Calculations I	2
PFPB	1225	Mechanics of Plumbing	2
PFPB	2271	Advanced HVAC for Plumbers/Pipefitters/AC	2
ELMT	2239	Advanced Programmable Logic Controllers	2
PFPB	2277	Motors and Pump Alignment for Plumbers/Pipefitters/AC	2

(continued on next page)

++ Humanities/Fine Arts elective -- must be selected from the DCCCD Humanities/Fine Arts Core list.

+++ Social/Behavioral Science -- must be selected from the DCCCD Social/Behavioral Science Core list.

++++Management course: This includes any three-credit rubric from ACCT, ACNT, BMGT, BUSG, BUSI, HAMG, and HRPO.

 # PLUMBING OPTION:
PFPB 1345 Commercial Construction and Fixture Setting ...3

PIPEFITTING/HVAC OPTION:
ELPT 1311 Basic Electrical Theory 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

PLUMBING AND PIPEFITTING CONSTRUCTION -- PIPEFITTING

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.PPFA.PIPEFITTING

In partnership with the Dallas Joint Apprenticeship Committee for the Plumbing and Pipefitting Industry, this program provides a one-year certificate in Pipefitting when the students complete the technical and on-the-job training outlined in the certificate for Pipefitting. Topics covered include layout and fabrication of pipe, welding, print reading, trade math, science, rigging, residential, commercial and industrial HVAC, control drafting applications, pipefitting equipment with an emphasis on safety.

Plumbing and Pipefitting Construction is a nationally approved apprenticeship program. Additional admission requirements are necessary for enrollment in this program.

		CREDIT HOURS
SEMESTER I		
CNBT 1201	Introduction to Construction	2
WLDG 1221	Introduction to Welding Fundamentals	2
DFTG 1232	Mechanical Drafting	2
WLDG 1222	Introduction to Welding Fundamentals	2
ELPT 1311	Basic Electrical Theory	3
WLDG 2206	Intermediate Pipe Welding	2
		13
SEMESTER II		
PFPB 2347	Plumbing and Pipefitting Equipment and Safety	3
WLDG 2207	Intermediate Pipe Welding	2
WLDG 1273	Introduction to Layout and Fabrication	2
HART 2271	Commercial Air Conditioning	2
WLDG 1274	Intermediate Layout and Fabrication	2
HART 2273	Industrial Air Conditioning	2
PFPB 2239	Commercial and Industrial System Start-Up	2
		15
SEMESTER III		
HART 2274	Commercial and Industrial Pneumatic Controls	2
HART 1273	Air Conditioning Control Principles	2
HART 2270	Commercial and Industrial Heating Systems	2
DFTG 1208	Basic Computer-Aided Drafting	2
DFTG 2234	Industrial Drafting Applications	2
PFPB 2235	Commercial and Industrial Control Systems	2
WLDG 2213	Intermediate Welding Using Multiple Processes	2
		14
Minimum Hours Required		42

PLUMBING AND PIPEFITTING CONSTRUCTION -- PLUMBING

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.PPFA.PLUMBING

In partnership with the Dallas Joint Apprenticeship Committee for the Plumbing and Pipefitting Industry, this program provides a one-year certificate in Plumbing when the students complete the technical and on-the-job training outlined in the certificate for Plumbing. Topics covered include welding, print reading, trade math, science, rigging, water supply and waste systems, residential, commercial and industrial plumbing systems, natural gas, plumbing codes, drafting applications, plumbing equipment with an emphasis on safety.

Plumbing and Pipefitting Construction is a nationally approved apprenticeship program. Additional admission requirements are necessary for enrollment in this program.

		CREDIT HOURS
SEMESTER I		
CNBT 1201	Introduction to Construction	2
WLDG 1221	Introduction to Welding Fundamentals	2
DFTG 1232	Mechanical Drafting	2
WLDG 1222	Introduction to Welding Fundamentals	2
PFPB 1225	Mechanics of Plumbing	2
DFTG 2234	Industrial Drafting Applications	2
		12
SEMESTER II		
PFPB 2347	Plumbing and Pipefitting Equipment and Safety	3
PFPB 1219	Commercial Plumbing I	2
PFPB 1253	Commercial Plumbing II	2
PFPB 1255	Industrial Plumbing	2
WLDG 1273	Introduction to Layout and Fabrication	2
PFPB 1323	Plumbing Codes I	3
		14
SEMESTER III		
PFPB 1251	Commercial and Industrial Gas Installation	2
PFPB 1357	Plumbing Codes II	3
PFPB 1345	Commercial Construction and Fixture Setting	3
PFPB 2240	Medical Gas	2
WLDG 2213	Intermediate Welding Using Multiple Processes	2
DFTG 1208	Basic Computer-Aided Drafting	2
PFPB 1247	Backflow Prevention	2
		16
Minimum Hours Required		42

PLUMBING AND PIPEFITTING CONSTRUCTION – HEATING, VENTILATION, AND AIR CONDITIONING

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.PLUM.PIPE.HVAC

In partnership with the Dallas Joint Apprenticeship Committee for the Plumbing and Pipefitting Industry, this program provides a one-year certificate in Plumbing when the students complete the technical and on-the-job training outlined in the certificate for Plumbing. Topics covered include welding, print reading, trade math, science, rigging, residential and commercial air conditioning systems, pneumatic systems and controls, commercial and industrial heating systems, programmable logic controllers, and motors and pump related control systems.

		CREDIT HOURS
SEMESTER I		
CNBT 1201	Introduction to Construction	2
WLDG 1221	Introduction to Welding Fundamentals	2
DFTG 1232	Mechanical Drafting	2
WLDG 1222	Introduction to Welding Fundamentals	2
ELPT 1311	Basic Electrical Theory	3
WLDG 2206	Intermediate Pipe Welding	2
		13
SEMESTER II		
PFPB 2347	Plumbing and Pipefitting Equipment and Safety	3
PFPB 1272	Basic HVAC for Plumbing/Pipefitting	2
ELPT 1215	Electrical Calculations	2
PFPB 1225	Mechanics of Plumbing	2
HART 2271	Commercial Air Conditioning	2
HART 2273	Industrial Air Conditioning	2
PFPB 2239	Commercial and Industrial System Start-Up	2
		15
SEMESTER III		
HART 2274	Commercial and Industrial Pneumatic Controls	2
HART 1273	Air Conditioning Control Principles	2
HART 2270	Commercial and Industrial Heating Systems	2
PFPB 2271	Advanced HVAC for Plumbers/ Pipefitters/AC	2
ELMT 2239	Advanced Programmable Logic Controllers	2
PFPB 2235	Commercial and Industrial Control Systems	2
PFPB 2277	Motors and Pump Alignment for Plumbers/Pipefitters/AC	2
		14
Minimum Hours Required		42

RADIOLOGIC SCIENCES

Brookhaven and El Centro only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.RADIOLOG.SCI.04

This program prepares the student to become a professional radiologic technologist with a specialty in radiography. The radiographer uses radiation to produce internal images of the patient which are used by the physicians to make a diagnosis. For the vast majority of diagnostic procedures, the radiographer has total responsibility for the care and well-being of the patient and must be prepared to produce quality images with care and empathy.

The graduate radiographer is eligible to sit for the examination given by the American Registry of Radiologic Technologists and eligible to be a Certified Medical Radiologic Technologist licensed by the Texas Department of Health. Radiographers work in hospitals, physician's offices, and primary care facilities.

Students wishing to be admitted to the El Centro Radiography program must comply with the following criteria outlined in this paragraph. Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of four prerequisite courses with a minimum of 2.5 grade point average and completion of all requirements for admission as a full-time student to the College. Applicants are rank-ordered for admission based on grade point average earned for the prerequisite courses. Applicants should contact the Assessment Center at El Centro College to sign up for the assessment tests and Health Occupations Admissions to obtain an information packet.

Students wishing to be admitted to the Brookhaven Radiography program must comply with the following criteria outlined in this paragraph. The student must be admitted to a DCCCD college, have completed the four prerequisite courses with a 3.0 grade point average or higher and a "B" or higher in SCIT 1407 or BIOL 2401, attend an information session for the program and complete an application packet within the designated filing period. Applicants will be required to submit a comprehensive application packet to the BHC Radiologic Science office that will be used during the selection process. The selection process contains several criteria that are outlined on the BHC Radiology website http://www.brookhavencollege.edu/instrudiv/emshealth/radtech.html. Application packets will be available at the information sessions.

Completion of the program and successful completion of the ARRT examination provides the graduate with credentials to continue their education in other radiologic specialty disciplines. The El Centro program is accredited by the Joint Review Committee in Radiologic Technology (JRCERT, 20 N. Wacker Drive, Suite 900, Chicago, Illinois 60606-2901: Telephone number 312-704-5300). The Brookhaven program is in the process of obtaining accreditation from the above organization.

		CREDIT HOURS
PREREQUISITES:		
SCIT 1407	Human Anatomy and Physiology I **OR**	4
#BIOL 2401	Anatomy and Physiology I	(4)
MATH 1314	College Algebra	3
PSYC 2301	Introduction to Psychology	3
ENGL 1301	Composition I	3
		13
SEMESTER I		
HPRS 2231	General Health Professions Management	2
RADR 2213	Radiation Biology and Protection	2
HPRS 1204	Basic Health Profession Skills	2
RADR 1411	Basic Radiographic Procedures	4
SCIT 1408	Human Anatomy and Physiology II **OR**	4
BIOL 2402	Anatomy and Physiology II	(4)
		14
SEMESTER II		
RADR 1313	Principles of Radiographic Imaging I	3
RADR 2301	Intermediate Radiographic Procedures	3
HPRS 1291	Special Topics in Health Professions and Related Sciences, Other	2
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
+Elective	Humanities/Fine Arts	3
		14
SEMESTER III		
RADR 1166	Practicum (or Field Experience) – Radiologic Technology/Science – Radiographer	1
HPRS 1202	Wellness and Health Promotion	2
		3
SEMESTER IV		
HPRS 2201	Pathophysiology	2
RADR 2305	Principles of Radiographic Imaging II	3
RADR 2331	Advanced Radiographic Procedures	3
RADR 1202	Radiographic Image Evaluation I	2
RADR 1267	Practicum (or Field Experience) – Radiologic Technology/Science – Radiographer	2
		12

(continued on next page)

SEMESTER V

HPRS 2300	Pharmacology for Heath Professions	3
RADR 2309	Radiographic Imaging Equipment	3
RADR 2217	Radiographic Pathology	2
RADR 2266	Practicum (or Field Experience) – Radiologic Technology/Science – Radiographer	2
RADR 2235	Radiologic Technology Seminar	2
RADR 1250	Radiographic Image Evaluation II	2
		14

SEMESTER VI

RADR 2267	Practicum (or Field Experience) - Radiologic Technology/Science – Radiographer	2
		2

Minimum Hours Required 72

+Humanities/Fine Arts Elective – must be selected from any 3-credit hour course in the DCCCD Core Curriculum for Humanities/Fine Arts.

#BIOL 1406, General Biology and BIOL 1407, General Biology are prerequisites to BIOL 2401.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

REAL ESTATE

Cedar Valley, North Lake and Richland only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.REAL.ESTATE.02

The program in real estate is designed to develop the fundamental skills, attitudes and experiences which enable the student to function in decision-making positions in the real estate profession. Successful completion of the program leads to the Associate in Applied Sciences Degree and may be applied toward licensing requirements as determined by the Texas Real Estate Commission.

		CREDIT HOURS
SEMESTER I		
RELE 1301	Principles of Real Estate **AND**	3
RELE 2309	Principles of Real Estate II **OR**	3
RELE 1406	Real Estate Principles **AND**	(4)
+Elective		(3)
RELE 2301	Law of Agency	3
BUSI 1301	Introduction to Business	3
ENGL 1301	Composition I	3
		15-16
SEMESTER II		
RELE 1321	Real Estate Marketing	3
RELE 1311	Law of Contracts	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
RELE 1319	Real Estate Finance	3
+Elective		3
		15
SEMESTER III		
MATH 1324	Mathematics for Business and Economics **OR**	3
RELE 1325	Real Estate Mathematics **AND**	(3)
ECOL 1305	People and Their Environment	(3)
PSYC 2302	Applied Psychology	3
RELE 1303	Real Estate Appraisal **OR**	(3)
RELE 1327	Real Estate Commercial Appraisal	3
+Elective		3
+++Elective	Humanities/Fine Arts	3
		15-18
SEMESTER IV		
RELE 1309	Real Estate Law	3
RELE 2388	Internship-Real Estate **OR**	3
RELE 2380	Cooperative Education-Real Estate	(3)
RELE 1323	Real Estate Computer Application	3
ECON 2301	Principles of Economics I **OR**	3
ECON 1303	Economics of Contemporary Social Issues	(3)
+Elective		3
++Elective		1-2
		16-17
Minimum Hours Required		61-66

+Electives -- must be selected from the following:

BMGT	1333	Principles of Selling	3
RELE	1307	Real Estate Investment	3
RELE	1315	Property Management	3
RELE	1391	Special Topics in Real Estate	3
RELE	2305	Real Estate Inspection	3
RELE	2331	Real Estate Brokerage	3
RELE	2381	Cooperative Education-Real Estate	3
RELE	2389	Internship-Real Estate	3

++Electives -- must be selected from the following:

RELE	1105	Uniform Standards of Professional Appraisal Practice	1
RELE	1191	Special Topics in Real Estate	1
RELE	1291	Special Topics in Real Estate	2

A student cannot take more than THREE Special Topics courses toward the degree.

+++Electives – Humanities/Fine Arts electives must be selected from the DCCCD Humanities/Fine Arts CORE list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

REAL ESTATE

Cedar Valley, North Lake and Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.REAL.ESTATE.02

This 15- to 16-hour Certificate program develops the basic skills for a real estate salesperson. Three of the five courses are required by the Texas Real Estate Commission for Licensure.

		CREDIT HOURS
SEMESTER I		
RELE 1301	Principles of Real Estate **AND**	3
RELE 2309	Principles of Real Estate II **OR**	3
RELE 1406	Real Estate Principles **AND**	(4)
+Elective	Real Estate Elective	(3)
RELE 2301	Law of Agency	3
RELE 1311	Law of Contracts	3
+Elective	Real Estate Elective	3
		15-16
Minimum Hours Required		15-16

+Electives – Student must take any three-credit RELE course.

NOTE: A total of at least 15 semester credit hours is required to receive the Real Estate Certificate.

REAL ESTATE -- BUILDING PROPERTY MANAGEMENT

North Lake only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.REAL.EST.BPM.01

In partnership with the Dallas Building Owners and Managers Association (BOMA), this program is designed to provide the student with the skills and knowledge required to perform the duties of a commercial building manager. These duties include financial forecasting and budgeting, marketing, contract negotiation, tenant retention, public relations, personnel administration, risk management, provision of building services and maintenance of the property.

		CREDIT HOURS
SEMESTER I		
CBFM 1311	Building Maintenance I	3
RELE 1301	Principles of Real Estate **AND**	3
RELE 2309	Principles of Real Estate II **OR**	3
RELE 1406	Real Estate Principles	(4)
ENGL 1301	Composition I	3
MATH 1324	Mathematics for Business and Economics **OR**	3
TECM 1341	Technical Algebra **AND**	(3)
ECOL 1305	People and Their Environment	(3)
		13-18
SEMESTER II		
CBFM 2311	Building Maintenance II	3
RELE 1309	Real Estate Law **OR**	3
INSR 1351	Essentials of Risk Management	(3)
CBFM 1391	Special Topics in Building/Property Maintenance and Manager	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
++Elective	Social/Behavioral Science	3
		15
SEMESTER III		
ITSC 1401	Introduction to Computer	4
RELE 1315	Property Management	3
ACCT 2301	Principles of Accounting I **OR**	3
PBAD 2331	Budgeting in the Public Sector	(3)
+++Elective	Real Estate	1-3
++++Electives	Business	3
		14-16
SEMESTER IV		
+Elective	Humanities/Fine Arts	3
EPCT 1307	Introduction to Environmental Safety and Health	3
RELE 1307	Real Estate Investment	3
RELE 1321	Real Estate Marketing	3
BMGT 2341	Strategic Management	3
CBFM 1380	Cooperative Education– Building/Property Maintenance and Manager	3
		18

Minimum Hours Required 60-67

+Elective - must be selected from the DCCCD Humanities/Fine Arts CORE list.

++ Elective - must be selected from DCCCD Social/Behavioral Sciences CORE list.

+++ Elective - must be selected from the following business courses:

CBFM	1191	Special Topics in Building/Property Maintenance and Manager	1
CBFM	1381	Cooperative Education - Building/Property and Maintenance Manager	3
RELE	1291	Special Topics in Real Estate	2
RELE	1303	Real Estate Appraisal	3
RELE	1311	Law of Contracts	3
RELE	1319	Real Estate Finance	3
RELE	1323	Real Estate Computer Application	3
RELE	1325	Real Estate Mathematics	3
RELE	1391	Special Topics in Real Estate	3
RELE	2301	Law of Agency	3
RELE	2305	Real Estate Inspections	3
RELE	2331	Real Estate Brokerage	3

++++ Elective - must be selected from the following business courses:

BUSI	1301	Introduction to Business	3
ECON	2301	Principles of Economics I	3
ECON	2302	Principles of Economics II	3
BMGT	1303	Principles of Management	3
BMGT	1301	Supervision	3
HRPO	2307	Organizational Behavior	3
HAMG	2337	Hospitality Facilities Management	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

REAL ESTATE -- FACILITIES MANAGEMENT ADMINISTRATOR

North Lake only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.REAL.FMA

This FMA certificate program teaches you to manage facilities by helping you develop valuable skills in strategic planning, project management, corporate finance, capital investment, and physical asset management. You will also learn about new facilities technologies, environmental health and worker safety, and other timely issues.

		CREDIT HOURS
SEMESTER I		
CBFM 1311	Building Maintenance I	3
RELE 1301	Principles of Real Estate **AND**	3
RELE 2309	Principles of Real Estate II **OR**	3
RELE 1406	Real Estate Principles **AND**	(4)
ENGL 1301	Composition I	3
RELE 1307	Real Estate Investment	3
CBFM 1391	Special Topics in Building/Property Maintenance and Manager	3
		16-18
SEMESTER II		
CBFM 2311	Building Maintenance II	3
EPCT 1307	Introduction to Environment Safety and Health	3
RELE 1309	Real Estate Law **OR**	3
INSR 1351	Essentials of Risk Management	(3)
RELE 1315	Property Management	3
CBFM 1370	Facilities Planning and Project Management	3
		15
SEMESTER III		
ITSC 1401	Introduction to Computers	4
CBFM 2313	Building Maintenance Management	3
CBFM 1380	Cooperative Education - Building/ Property Maintenance and Manager	3
MATH 1324	Mathematics for Business and Economics **OR**	3
TECM 1341	Technical Algebra **AND**	(3)
ECOL 1305	People and Their Environment	(3)
		13-16

Minimum Hours Required 44-49

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

REAL ESTATE -- SYSTEMS MAINTENANCE TECHNICIAN AND ADMINISTRATOR

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.REAL.SYS.MAIN.TEC

This certificate is designed to meet the needs of hands-on technicians and building engineers and offer instruction in technologies and trends in the maintenance field. This program can help you increase the operating effectiveness of your building by teaching you how to manage energy-efficient, environmentally sound and cost-effective building systems.

		CREDIT HOURS
SEMESTER I		
CBFM 1407	Boiler Operations	4
ENGL 1301	Composition I	3
CBFM 2317	Mechanical Maintenance	3
CBFM 1315	Exterior Maintenance	3
		13
SEMESTER II		
HART 2442	Commercial Refrigeration	4
HART 1451	Energy Management	4
EPCT 1327	Water Treatment and Operations	3
EPCT 1307	Introduction to Environmental Safety and Health	3
		14
SEMESTER III		
BMGT 1303	Principles of Management	3
CBFM 1380	Cooperative Education - Building/ Property Maintenance and Manager	3
MATH 1324	Mathematics for Business and Economics **OR**	3
TECM 1341	Technical Algebra **AND**	(3)
ECOL 1305	People and Their Environment	(3)
		9-12

Minimum Hours Required 36-39

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

RESPIRATORY CARE

El Centro only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.RESPIRATOR.CARE

The Respiratory Care Program prepares students to become respiratory therapists and perform complex patient care procedures in specialized patient care units and diagnostic laboratories.

The Associate in Applied Sciences degree is awarded for successful completion of the program, enabling the graduate to apply for the Entry Level Credentialing Examination to become a Certified Respiratory Therapist (CRT). After CRT certification is obtained, the graduate may then apply for the Advanced Practitioner Examination to become a Registered Respiratory Therapist (RRT). Passing the Entry Level Examination enables the graduate to obtain licensure as a Respiratory Care Practitioner (RCP) in the State of Texas.

The Respiratory Care Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208: Telephone number 312-553-9355) in cooperation with the Committee on Accreditation for Respiratory Care (CoARC, 1248 Harwood Rd., Bedford, Texas 76021-4244: Telephone number 817-283-2835).

Admission requirements include satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point average of 2.5 or better, rank ordering by grade point average, and completion of all requirements for admission as a full-time student to the college. Clinical skills testing may be required for advanced placement. Contact the Health Occupations Admissions Office at El Centro College to receive an information packet, and the Assessment Center to sign up for the assessment tests.

		CREDIT HOURS
SEMESTER I		
HPRS 1204	Basic Health Profession Skills	2
HPRS 1202	Wellness and Health Promotion	2
HPRS 2231	General Health Professions Management	2
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
#SCIT 1407	Human Anatomy and Physiology I **OR**	4
#BIOL 2401	Anatomy and Physiology I	(4)
		16
SEMESTER II		
HPRS 2201	Pathophysiology	2
HPRS 2300	Pharmacology for Health Professions	3
HPRS 1291	Special Topics in Health Professions and Related Sciences, Other	2
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
PSYC 2301	Introduction to Psychology	3
SCIT 1408	Human Anatomy and Physiology II **OR**	4
BIOL 2402	Anatomy and Physiology II	(4)
		17
SEMESTER III		
+Elective	Humanities/Fine Arts	3
RSPT 1227	Applied Physics for Respiratory Care	2
RSPT 1431	Respiratory Care Fundamentals II	4
		9
SEMESTER IV		
RSPT 1307	Cardiopulmonary Anatomy and Physiology	3
RSPT 1213	Basic Respiratory Care Pharmacology	2
RSPT 1311	Respiratory Care Procedures II	3
RSPT 2201	Cardiopulmonary Assessment	2
RSPT 2310	Cardiopulmonary Disease	3
RSPT 1260	Clinical-Respiratory Care Therapy/ Therapist	2
		15
SEMESTER V		
RSPT 2453	Neonatal/Pediatric Cardiopulmonary Care	4
RSPT 2314	Mechanical Ventilation	3
RSPT 2258	Advanced Respiratory Care Patient Assessment	2
RSPT 2131	(Clinical) Simulations in Respiratory Care	1
RSPT 1141	Respiratory Home Care/Rehabilitation	1
RSPT 2262	Clinical-Respiratory Care Therapy/ Therapist	2
		13
SEMESTER VI		
RSPT 2163	Clinical-Respiratory Care Therapy/ Therapist	1
RSPT 2166	Practicum (or Field Experience)-Respiratory Care Therapy/ Therapist	1
		2
Minimum Hours Required		72

+ Humanities/Fine Arts Elective – must be selected from the DCCCD Humanities/Fine Arts CORE list.

#BIOL 1406 Biology for Science Majors I or SCIT 1407 Human Anatomy and Physiology I is prerequisite to BIOL 2401.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

SEMICONDUCTOR MANUFACTURING -- EQUIPMENT TECHNICIAN

Richland only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.SEMICONDUC.MANUF

Richland College has partnered with Collin County Community College and industry to develop this program for students who are interested in working for companies who use the latest equipment and the latest technological developments in the field of semiconductors. The increasing demand for semiconductor products challenges the industry to find the highly skilled and knowledgeable technicians needed in semiconductor manufacturing. This program has been designed to provide the student with the skills to perform technical duties associated with the installation, repair, maintenance and calibration of equipment used for the manufacture and test of semiconductor products.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
MATH 1414	College Algebra **OR**	4
TECM 1341	Technical Algebra	(3)
HYDR 1445	Hydraulics and Pneumatics	4
CETT 1403	DC Circuits	4
SMFT 1343	Semiconductor Manufacturing Technology I	3
		17-18
SEMESTER II		
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
MATH 1316	Plane Trigonometry **OR**	3
TECM 1317	Technical Trigonometry	(3)
PHYS 1401	Introductory General Physics **OR**	4
PHYS 1407	Concepts of Physics	(4)
CETT 1405	AC Circuits	4
		14
SEMESTER III		
CHEM 1405	Introductory Chemistry I	4
ENTC 1380	Cooperative Education - Engineering Technology, General **OR**	3
QCTC 1343	Quality Assurance	(3)
		7
SEMESTER IV		
INTC 1307	Electronic Test Equipment	3
CETT 1429	Solid State Devices	4
CETT 1425	Digital Fundamentals	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamental of Public Speaking	(3)
+Elective	Humanities/Fine Arts	3
		17
SEMESTER V		
CETT 2337	Microcomputer Control	3
INMT 1447	Industrial Automation	4
CETT 1457	Linear Integrated Circuits	4
SMFT 2343	Semiconductor Manufacturing Technology II **OR**	3
ENTC 2380	Cooperative Education - Engineering Technology, General	(3)
		14

Minimum Hours Required 69-70

+Elective - must be selected from the DCCCD Humanities/Fine Arts CORE list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

SEMICONDUCTOR MANUFACTURING -- OPERATOR

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.SEMICOND.MANUF

Richland College has partnered with Collin County Community College and industry to develop this certificate program for students who are interested in working for companies who use the latest equipment and the latest technological developments in the field of semiconductors. This program has been designed to provide the student with the skills to operate equipment used in the semiconductor manufacturing process.

		CREDIT HOURS
SEMESTER		
ENGL 1301	Composition I	3
MATH 1414	College Algebra **OR**	4
TECM 1341	Technical Algebra	(3)
HYDR 1445	Hydraulics and Pneumatics	4
CETT 1403	DC Circuits	4
SMFT 1343	Semiconductor Manufacturing Technology I	3
		17-18
SEMESTER II		
PSYC 2301	Introduction to Psychology **OR**	3
PSYC 2302	Applied Psychology	(3)
MATH 1316	Plane Trigonometry **OR**	3
TECM 1317	Technical Trigonometry	(3)
PHYS 1401	Introductory General Physics **OR**	4
PHYS 1407	Concepts of Physics	(4)
CETT 1405	AC Circuits	4
		14
SEMESTER III		
CHEM 1405	Introductory Chemistry I	4
ENTC 1380	Cooperative Education – Engineering Technology, General **OR**	3
QCTC 1343	Quality Assurance	(3)
		7
Minimum Hours Required		38-39

SMALL BUSINESS ACADEMY

El Centro only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.SMALL.BUS.ACAD.04

This is a 15-semester credit hour Level I Certificate Program in entrepreneurship. The program is designed to teach foundational business competencies which will provide learners with the knowledge and practical skills to plan, start and run their own business.

Coursework in Accounting, Business Law and Computer Information Systems enhance the emphasized skills in entrepreneurship; life skills, opportunity identification, opportunity evaluation, and opportunity realization. Instruction focuses on such topics as financial feasibility, products and services, marketing, operations legal and ethical issues, and attracting customers. Students will keep journals, make oral presentations and construct a business plan which they can apply in their own community.

		CREDIT HOURS
SEMESTER I		
BUSG 2309	Small Business Management	3
ACNT 1303	Introduction to Accounting I **OR**	3
ACCT 2301	Principles of Accounting I **OR**	(3)
ACCT 2401	Principles of Accounting I	(4)
		6-7
SEMESTER II		
BUSG 1315	Small Business Operations	3
BUSI 2301	Business Law	3
		6
SEMESTER III		
ITSC 1391	Special Topics in Computer and Information Sciences, General **OR**	3
BMGT 1391	Special Topics in Business Administration and Management, General	(3)
		3
Minimum Hours Required		15-16

SOCIAL WORK ASSOCIATE -- GENERALIST

Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.SOC.WORK.GENERAL

The Social Work Associate Program is designed to prepare individuals interested in working with people to obtain entry-level employment in public and private social service agencies. The social service worker is equipped with skills, knowledge, values, and sensitivity to effectively serve human needs in a variety of community settings. Students have the options to select courses that will prepare them to work in general social services or specialized social services for chemical abuse or the aging.

		CREDIT HOURS
SEMESTER I		
SCWK 1321	Orientation to Social Services	3
SCWK 2311	Interviewing and Counseling Theories	3
SCWK 2331	Abnormal Behavior	3
ENGL 1301	Composition I	3
PSYC 2301	Introduction to Psychology	3
ARTS 1301	Art Appreciation	3
		18
SEMESTER II		
SCWK 1313	Introduction to Social Work	3
SPCH 1311	Introduction to Speech Communication	3
SOCI 1301	Introduction to Sociology	3
+Elective	Social Work	3-5
DAAC 1319	Introduction to Alcohol and Other Drug Addictions	3
		15-17
SEMESTER III		
SCWK 2301	Assessment and Case Management	3
SCWK 1305	Group Work Intervention	3
SCWK 1364	Practicum (or Field Experience) – Social Work **OR**	3
SCWK 1365	Practicum (or Field Experience) – Social Work	(3)
CMSW 1405	Nursing Home Activity Director	4
++Elective	MATH Elective	3-4
		16-17
SEMESTER IV		
SCWK 2307	Human Behavior and the Social Environment	3
SCWK 1365	Practicum (or Field Experience) – Social Work **OR**	3
DAAC 2366	Practicum (or Field Experience) – Alcohol/Drug Abuse Counseling	(3)
ITSC 1401	Introduction to Computers	4
SPAN 1411	Beginning Spanish **OR**	4
+++Elective	Humanities/Fine Arts	(3)
		13-14
Minimum Hours Required		62-66

+ Social Work Electives must be selected from the following:

DAAC	1304	Pharmacology of Addiction	3
DAAC	1307	Addicted Family Intervention	3
DAAC	1311	Counseling Theories	3
DAAC	1341	Counseling Alcohol and Other Drug Addictions	3
DAAC	1343	Current Issues	3
SCWK	1301	Adolescent Life Cycle	3
SCWK	2305	Special Problems of Youth	3
CMSW	1505	Nursing Home Activity Director	5
GERS	1301	Introduction to Gerontology	3
GERS	1392	Special Topics in Gerontology	3
CMSW	1353	Families Intervention Strategies	3

++ Math course must be selected from the following:

MATH	1332	College Mathematics I	3
MATH	2342	Introductory Statistics	3
MATH	1414	College Algebra	4
MATH	1314	College Algebra	3

+++ Approved Humanities Electives must be selected from the following:

HUMA	1301	Introduction to the Humanities	3
PHIL	1301	Introduction to Philosophy	3
PHIL	1313	Critical Thinking	3
PHIL	2303	Logic	3
PHIL	2306	Ethics	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

SOCIAL WORK -- HUMAN SERVICES

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.SWAT.HUMAN.SERV

This certificate is designed to assist associate degree majors in Social Work and Substance Abuse to obtain cross training in the delivery of human services to the aging clients. Students will choose a concentration in either substance Abuse or Social Work courses. The certificate will provide majors in these programs to enhance their skills in meeting the social service needs for target populations.

		CREDIT HOURS
SEMESTER I		
SCWK 1321	Orientation to Social Services	3
SCWK 2311	Interviewing and Counseling Theories	3
SCWK 2331	Abnormal Behavior	3
GERS 1301	Introduction to Gerontology	3
CMSW 1405	Nursing Home Activity Director	4
ENGL 1301	Composition I	3
		19
SEMESTER II		
SCWK 2307	Human Behavior and the Social Environment	3
SCWK 1365	Practicum (or Field Experience) – Social Work	3
GERS 1392	Special Topics in Gerontology	3
CMSW 1505	Nursing Home Activity Director	5
CMSW 1353	Families Intervention Strategies	3
SPCH 1311	Introduction to Speech Communication	3
		20
Minimum Hours Required		39

SUBSTANCE ABUSE COUNSELING

Eastfield only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.SUB.ABUSE.COUNS

The Substance Abuse Counseling Program is designed to prepare qualified and competent graduates to enter the field of human services and to provide specialized services to individuals and their families who are experiencing the affects of substance abuse. Completers of the program will have the necessary educational requirements to become eligible for testing and licensure as a Licensed Chemical Dependency Counselor (LCDC). Students will gain required work experience as Counselor Interns (CI) upon completion of the required hours of classroom instruction. A special section of cooperative work experience will provide a structured supervised practicum in off-campus approved laboratory training sites.

		CREDIT HOURS
SEMESTER I		
SCWK 1321	Orientation to Social Services	3
SCWK 2311	Interviewing and Counseling Theories	3
DAAC 1304	Pharmacology of Addiction	3
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra **OR**	(4)
MATH 2342	Introductory Statistics	(3)
		15-16
SEMESTER II		
DAAC 1311	Counseling Theories	3
SCWK 2301	Assessment and Case Management	3
PSYC 2301	Introduction to Psychology	3
SPCH 1311	Introduction to Speech Communication	3
SOCI 1301	Introduction to Sociology	3
		15
SEMESTER III		
DAAC 1319	Introduction to Alcohol and Other Drug Addictions	3
DAAC 1307	Addicted Family Intervention	3
SCWK 1301	Adolescent Life Cycle **OR**	3
SCWK 2305	Special Problems of Youth	(3)
SCWK 1305	Group Work Intervention	3
SCWK 1365	Practicum (or Field Experience) – Social Work	3
Elective	Any Non-DAAC or Non-SCWK course	3
		18
SEMESTER IV		
DAAC 1341	Counseling Alcohol and Other Drug Addictions **OR**	3
+ Elective		(3)
DAAC 1343	Current Issues **OR**	3
++Elective		(3)
DAAC 2366	Practicum (or Field Experience) - Alcohol/Drug Abuse Counseling	3
ITSC 1401	Introduction to Computers	4
SPAN 1411	Beginning Spanish **OR**	4
+++Elective	Humanities/Fine Arts	3
		20
Minimum Hours Required		68-69

+ Social Work electives must be selected from the following:

SCWK	2331	Abnormal Behavior	3
SCWK	1313	Introduction to Social Work	3
CMSW	1327	Treatment Modalities with Special Populations	3
SCWK	2307	Human Behavior and the Social Environment	3

++ Electives must be selected from the following:

PSYC	2306	Human Sexuality	3
PSYC	2314	Developmental Psychology	3
PSYC	2316	Psychology of Personality	3
SOCI	2306	Human Sexuality	3

+++ Approved Humanities Electives must be selected from the following:

HUMA	1301	Introduction to the Humanities	3
PHIL	1301	Introduction to Philosophy	3
PHIL	1313	Critical Thinking	3
PHIL	2303	Logic	3
PHIL	2306	Ethics	3
PHIL	2307	Introduction to Social and Political Philosophy	3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

SUBSTANCE ABUSE COUNSELING

Eastfield only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.SWAT.SUB.ABUSE

The Substance Abuse Counseling Certificate is designed to provide cross-training for helping professionals in other disciplines, i.e., bachelor and master level social workers, counselors, psychologists, nurses, criminal justices, etc. It also trains students for employment as a counselor intern. After completing the 18 hours (270 educational hrs.) of credit plus 336 practicum hours' experience in an approved substance abuse agency, students may qualify for testing as a Licensed Chemical Dependency Counselor.

		CREDIT HOURS
SEMESTER I		
SCWK 1321	Orientation to Social Services	3
SCWK 2311	Interviewing and Counseling Theories	3
DAAC 1304	Pharmacology of Addiction	3
DAAC 1341	Counseling Alcohol and Other Drug Addictions **OR**	3
DAAC 1319	Introduction to Alcohol and Other Drug Addictions	(3)
ENGL 1301	Composition I	3
		15
SEMESTER II		
DAAC 1311	Counseling Theories	3
DAAC 1307	Addicted Family Intervention	3
DAAC 1343	Current Issues	3
SCWK 2301	Assessment and Case Management	3
SCWK 1305	Group Work Intervention	3
DAAC 2366	Practicum (or Field Experience) – Alcohol/ Drug Abuse Counseling	3
		18
Minimum Hours Required		33

SURGICAL TECHNOLOGIST

El Centro only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.SGTC.TECHNOLOGY

The Surgical Technologist program is 15 months in length and offers the student a learning opportunity to provide patient services in the surgical setting under the supervision of the operating room director. The Surgical Technologist, as a part of the operating team, aids in providing safe and efficient patient care. The technologist prepares the instruments, supplies and equipment for use at the operating room table and assists in the use of these materials during surgical procedures.

The Surgical Technologist program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208: Telephone number 312-553-9355) in cooperation with the Accreditation Review Committee for Educational Programs in Surgical Technology (ARC-ST, 7108-C South Alton Way, Centennial, Colorado 80112: Telephone number 303-694-9262).

ADMISSION TO THE PROGRAM:

Admission requirements include:

1. Completion of all requirements for admission as a full time student to the college.
2. High school diploma or GED.
3. Satisfactory scores on assessment exams.
4. An information session.
5. Must complete prerequisites to program with a 2.5 G.P.A. or better.
6. Must have a G.P.A. of 2.5 or better from previous college courses. Developmental course grades are not included in the G.P.A. calculation.
7. Applicants are rank ordered for admission based on the grade point average earned on five (5) prerequisite courses.

Contact the Assessment Center at El Centro College to schedule the assessment exams. Visit the web site http://www.elcentrocollege.edu/healthcareers/ or call Health Occupations Admissions, 214-860-2272, to receive an information packet.

		CREDIT HOURS
PREREQUISITES		
ENGL 1301	Composition I	3
SCIT 1407	Human Anatomy and Physiology I	4
SPCH 1311	Introduction to Speech Communication	3
HPRS 1204	Basic Health Professions Skills	2
HPRS 2231	General Health Professions Management	2
		14
SEMESTER I		
SRGT 1505	Introduction to Surgical Technology	5
SRGT 1509	Fundamentals of Perioperative Concepts and Techniques	5
SRGT 1166	Practicum (or Field Experience) - Surgical Technology/Technologist	1
#HPRS 2300	Pharmacology for Health Professions	3
#SCIT 1408	Human Anatomy and Physiology II	4
		18
SEMESTER II		
SRGT 1441	Surgical Procedures I	4
SRGT 1442	Surgical Procedures II	4
SRGT 1367	Practicum (or Field Experience) - Surgical Technology/Technologist	3
#HPRS 1202	Wellness and Health Promotion	2
		13
SEMESTER III		
SRGT 2266	Practicum (or Field Experience) - Surgical Technology/Technologist	2
SRGT 2130	Professional Readiness	1
		3
Minimum Hours Required		48

#Support courses may be completed before, but not after the semester indicated. A "C" grade or better is required in all courses.

TRAVEL, EXPOSITION AND MEETING MANAGEMENT

Richland only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.TRAVEL.EXPO.MEET

This program is designed to develop the necessary knowledge and skills so that a graduate may advance in career paths appropriate to an individual's particular interests, in the travel and tourism industry. Individual areas of specialization include: (a) convention/meeting planner, (b) exposition/trade show planner, or (c) travel agency operations. In addition to specific technical skills and knowledge related to the travel and tourism field, the graduate will have received instruction in other areas such as principles of management, applied mathematics, reading and writing skills, and verbal communication skills.

		CREDIT HOURS
SEMESTER I		
ENGL 1301	Composition I	3
TRVM 1300	Introduction to Travel and Tourism	3
TRVM 2301	Introduction to Convention/Meeting Management	3
TRVM 1308	Travel Destinations I – Western Hemisphere	3
TRVM 1101	Customer Sales and Service	1
		13
SEMESTER II		
ENGL 1302	Composition II	3
POFT 1321	Business Math** **AND**	3
ECOL 1305	People and Their Environment** **OR**	3
MATH 1332	College Mathematics** I	(3)
ITSC 1401	Introduction to Computers	4
TRVM 1325	Exposition and Trade Show Management	3
TRVM XXXX	Specialization Course	1-4
		14-20
SEMESTER III		
SPCH 1311	Introduction to Speech Communication	3
TRVM 2300	Applied Industry On-line and Software Products	3
TRVM 1345	Travel and Tourism Sales and Marketing Techniques	3
TRVM 1341	Travel Destinations II – Eastern Hemisphere	3
+Elective	Humanities/Fine Arts	3-4
		15-16
SEMESTER IV		
++Elective XXXX	Management Elective	3
SOCI 1301	Introduction to Sociology **OR**	3
PSYC 2301	Introduction to Psychology **OR**	(3)
HDEV 2315	Principles and Processes of Personal And Social Adjustment	(3)
TRVM 2331	Convention and Exposition Law and Ethics	3
+++TRVM XXXX	Special Topics Elective	2-4
TRVM XXXX	Specialization Course	1-4
ACNT 1303	Introduction to Accounting I	3
		15-20
SEMESTER V		
TRVM 2380	Cooperative Education in Travel and Tourism	3
		3
Minimum Hours Required		60-72

+ Humanities/Fine Arts electives must be selected from the following:

ARTS	1301	Art Appreciation	3
ENGL	2332	World Literature	3
HIST	2321	World Civilizations	3
HIST	2322	World Civilizations	3
HUMA	1301	Introduction to the Humanities	3
MUSI	1306	Music Appreciation	3
PHIL	1313	Critical Thinking	3
FREN	1411	Beginning French I	4
FREN	1412	Beginning French II	4
GERM	1411	Beginning German I	4
GERM	1412	Beginning German II	4
JAPN	1411	Beginning Japanese I	4
JAPN	1412	Beginning Japanese II	4
PORT	1411	Beginning Portuguese I	4
PORT	1412	Beginning Portuguese II	4
SPAN	1411	Beginning Spanish I	4
SPAN	1412	Beginning Spanish II	4

++Management Elective must be selected from the following:

BMGT	1303	Principles of Management	3
BUSG	2309	Small Business Management	3
HRPO	2307	Organizational Behavior	3

+++ Special Topics Elective – Students may select one course from the list below or any one of the specialization courses listed below.

TRVM	1291	Special Topics in Travel and Tourism	2
TRVM	1391	Special Topics in Travel and Tourism	3
TRVM	1491	Special Topics in Travel and Tourism	4

SPECIALIZATION COURSES:

Meeting and Convention Management

TRVM	2333	Applied Convention/Meetings Management	3
TRVM	2341	International Convention/Meeting Management	3
TRVM	1327	Special Events Design	3
ITSW	1310	Introduction to Presentation Graphics Software	3

(continued on next page)

Exposition/Trade Show Management

TRVM	2343	Exposition Service Contracting	3
TRVM	2355	Exposition and Trade Show Operations	3

Travel Management

TRVM	1306	Travel Automation I	3
TRVM	2435	Travel Automation II	4
TRVM	1323	Group Tour Operations	3
TRVM	1331	Introduction to the Hospitality Industry	3
TRVM	1117	Cruises	1

POFT 1321 Business Math **AND ECOL 1305 People and Their Environment OR MATH 1332 College Mathematics I

TRVM	1331	Introduction to the Hospitality Industry	3
TRVM	1117	Cruises	1

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

TECH PREP ENHANCED SKILLS CERTIFICATES

These Enhanced Skills Certificates are attached to the Travel, Exposition and Meeting Management AAS Degree and are designed to provide the students with advanced skills required by the industry to specialize in Meeting and Convention Management, Exposition/Trade Show Management and Travel Management.

Note: Student may not duplicate or receive credit for a course in the Enhanced Skills Certificate that the students have already received credit for in the AAS degree.

MEETING AND CONVENTION MANAGEMENT

Effective January 1, 2003, this award has been deactivated for Richland College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Richland (see above) only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.TRAV.CONVENTION

		CREDIT HOURS
SEMESTER I		
TRVM 2333	Applied Convention/Meetings Management	3
TRVM 2341	International Meeting Management	3
+TRVM	Meeting and Convention Management Specialization Course	3
		9

Minimum Hours Required 9

ENHANCED SKILLS SPECIALIZATION COURSES:

+Meeting and Convention Management

TRVM	1327	Hospitality and Special Events	3
ITSW	1310	Presentation Media Software	3

EXPOSITION/TRADE SHOW MANAGEMENT

Effective January 1, 2003, this award has been deactivated for Richland College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Richland (see above) only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.TRAV.EXPO/TRADE

		CREDIT HOURS
SEMESTER I		
TRVM 2343	Exposition Service Contracting	3
TRVM 2355	Exposition and Trade Show Operations	3
		6

Minimum Hours Required 6

TRAVEL MANAGEMENT

Effective January 1, 2003, this award has been deactivated for Richland College. For current students, the award will be closed on or before January 1, 2006. New students should not attempt to pursue this award.

Richland (see above) only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.TRAV.MANAGEMENT

		CREDIT HOURS
SEMESTER I		
TRVM 1349	Travel Operations I	3
TRVM 2437	Travel Industry Operations II	4
++TRVM	Travel Management Specialization Course	1-3
		8-10

Minimum Hours Required 8-10

ENHANCED SKILLS SPECIALIZATION COURSES:

++Travel Management

TRVM	1323	Group Tour Operations	3
TRVM	1331	Introduction to Hospitality Industry	3
TRVM	1117	Cruises	1

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

TRAVEL, EXPOSITION AND MEETING MANAGEMENT -- CERTIFICATE IN TRAVEL

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.TRAV.MANAGEMENT

This is a thirty-one hour certificate that provides the student with the technical knowledge and practical skills required to work as a travel reservationist or a travel counselor. In addition to basic reservation skills, students will receive instruction in the following topics: (a) effective written/verbal communication, (b) positive work ethics and habits, and (c) basic office clerical activities.

		CREDIT HOURS
SEMESTER I		
POFT 1321	Business Math** **AND**	3
ECOL 1305	People and Their Environment** **OR**	3
MATH 1332	College Mathematics I**	(3)
TRVM 1300	Introduction to Travel and Tourism	3
TRVM 1308	Travel Destination I – Western Hemisphere	3
TRVM 1306	Travel Automation I	3
+TRVM XXXX	Travel Management Elective	1-3
		13-18
SEMESTER II		
ENGL 1301	Composition I	3
TRVM 1345	Travel and Tourism Sales and Marketing Techniques	3
TRVM 2435	Travel Automation II	4
TRVM 1341	Travel Destinations II – Eastern Hemisphere	3
TRVM 1101	Customer Sales and Service	1
		14
EMESTER III		
TRVM 2380	Cooperative Education in Travel and Tourism	3
		3
Minimum Hours Required		30-35

+Travel Management Elective – Students must select one course from the list below.

Travel Management

TRVM	2301	Introduction to Convention/Meeting Management	3
TRVM	1323	Group Tour Operations	3
TRVM	1331	Introduction to Hospitality Industry	3
TRVM	1117	Cruises	1
TRVM	1191	Special Topics in Travel and Tourism	1
TRVM	2300	Applied Industry On-line and Software Products	3
TRVM	1391	Special Topics in Travel and Tourism	3

POFT 1321 Business Math **AND ECOL 1305 People and Their Environment **OR** MATH 1332 College Mathematics I

TRAVEL, EXPOSITION AND MEETING MANAGEMENT -- CERTIFICATE IN MEETINGS

Richland only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.TRAV.MEETINGS

This is a thirty-two hours certificate provides the student with the skills required to work in the meeting planning industry.

		CREDIT HOURS
SEMESTER I		
POFT 1321	Business Math* **AND**	3
ECOL 1305	People and Their Environment* **OR**	3
MATH 1332	College Mathematics I*	(3)
TRVM 2301	Introduction to Convention/Meeting Management	3
ITSW 1310	Introduction to Presentation Graphics Software	3
TRVM 1325	Exposition and Trade Show Management	3
TRVM 1101	Customer Sales and Service	1
		13-16
SEMESTER II		
ENGL 1301	Composition I	3
TRVM 2333	Applied Convention/Meetings Management	3
+TRVM XXXX	Meeting Specialization Elective	3
TRVM 2300	Applied Industry On-line and Software Products	3
TRVM 2331	Convention and Exposition Law and Ethics	3
		15
SEMESTER III		
TRVM 2380	Cooperative Education in Travel and Tourism	3
		3
Minimum Hours Required		31-34

+Meeting Specialization Elective - Students must select one course from the list below.

TRVM	2341	International Convention/Meeting Management	3
TRVM	1327	Special Events Design	3

POFT 1321 Business Math **AND ECOL 1305 People and Their Environment **OR** MATH 1332 College Mathematics I

VETERINARY TECHNOLOGY

Cedar Valley only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.VETERINARY.TECH

This program is designed to help meet the need for graduate veterinary technicians as indicated by the American Veterinary Medical Association. The graduate serves primarily as an assistant to veterinarians in private practice, functions in biological research or serves to meet the needs of allied health industries.

The Veterinary Technology curriculum is designed to provide the graduate with information, experience and skills needed to perform all technical duties in a practice, excluding diagnosis, prescribing and surgery. The Veterinary Technology program is accredited by the American Veterinary Medical Association and graduates are qualified to take the Texas Veterinary Medical Association Examination to become a Registered Veterinary Technician (RVT).

Admission to the Veterinary Technology program is limited and applicants should be assessed and advised prior to enrolling in the program. Students are encouraged to have a good academic background in English, mathematics, and the biological sciences.

		CREDIT HOURS
PREREQUISITE TO PROGRAM ADMISSION		
BIOL 1406	General Biology	4
ENGL 1301	Composition I	3
+MATH Elective		3
++SPCH Elective		3
		13
SEMESTER I		
VTHT 1105	Veterinary Medical Terminology	1
VTHT 1401	Introduction to Veterinary Technology	4
VTHT 1413	Veterinary Anatomy and Physiology	4
VTHT 2321	Veterinary Parasitology	3
		12
SEMESTER II		
VTHT 2201	Canine and Feline Clinical Management	2
VTHT 2435	Advanced Veterinary Anatomy and Physiology	4
VTHT 1317	Veterinary Office Management	3
VTHT 2323	Veterinary Clinical Pathology I	3
		12
SEMESTER III (Summer Session)		
VTHT 1349	Veterinary Pharmacology	3
VTHT 2331	Veterinary Clinical Pathology II	3
		6
SEMESTER IV		
VTHT 1341	Anesthesia and Surgical Assistance	3
VTHT 2425	Large Animal Assisting Techniques	4
VTHT 2213	Lab Animal Clinical Management	2
VTHT 2205	Equine Clinical Management	2
+++Elective	Humanities/Fine Arts	3
		14
SEMESTER V		
VTHT 2209	Food Animal Clinical Management	2
VTHT 1345	Veterinary Radiology	3
VTHT 2439	Veterinary Nursing Care	4
++++Elective	Social/Behavioral Sciences	3
		12
SEMESTER VI		
VTHT 2380	Cooperative Education - Veterinarian Assistant/Animal Health Technician	3
		3
Minimum Hours Required		72

+MATH Elective must be selected from *TECM 1303 Technical Mathematics* or any three-credit hour course contained in the DCCCD Approved List for Mathematics.

++Speech Elective must be selected from the following:

SPCH	1311	Introduction to Speech Communication	3
SPCH	1335	Fundamentals of Public Speaking	3
SPCH	1318	Interpersonal Communication	3
SPCH	1321	Business and Professional Communication	3

+++Humanities/Fine Arts Elective - must be selected from any three-credit hour course contained in the Humanities/Fine Arts approved list.

++++Social/Behavioral Sciences Elective - must be selected from any three-credit hour course contained in the Social/Behavioral Sciences approved list.

NOTE: Students enrolling in this program who plan to transfer to a 4 year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

VETERINARY TECHNOLOGY -- LARGE ANIMAL VETERINARY ASSISTING

Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.VETT.LARGE

Large Animal Veterinary Assistants are an important part of the veterinary practice team. Individuals in this position assist the veterinarian and the veterinary technician in performing procedures on large animal species, including horses and cattle. Students in this program can continue their studies in the Veterinary Technology program to attain the Associate Degree in Veterinary Technology.

The curriculum is designed to provide the graduate with the information, experience, and skills needed to perform all large animal veterinary assistant duties in a clinical practice or research setting. Admission to the Large Animal Veterinary Assisting certificate program is limited. Students must be advised by the Program Director prior to enrolling in the required courses. Students are encouraged to have a good background in English, mathematics, and the biological sciences.

		CREDIT HOURS
SEMESTER I		
VTHT 1105	Veterinary Medical Terminology	1
VTHT 1401	Introduction to Veterinary Technology	4
VTHT 2205	Equine Clinical Management	2
VTHT 2425	Large Animal Assisting Techniques	4
		11
SEMESTER II		
VTHT 2209	Food Animal Clinical Management	2
VTHT 1321	Equine Reproduction	3
		5
Minimum Hours Required		16

VETERINARY TECHNOLOGY -- SMALL ANIMAL VETERINARY ASSISTING

Cedar Valley only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.VETT.SMALL

Small Animal Veterinary Assistants are an integral part of the veterinary health team in the companion animal practice. Individuals in this position assist both the veterinarian and the veterinary technician in performing veterinary procedures in clinical settings as well as in research areas and other veterinary related fields. Students in this program can continue their studies in the Veterinary Technology program to attain the Associate Degree in Veterinary Technology.

The curriculum is designed to provide the graduate with the information, experience, and skills needed to perform veterinary assistant duties in a companion animal practice. Admission to the Veterinary Technology program and the Veterinary Assisting certificate program is limited. Applicants should be assessed and advised prior to enrolling in the program. Students are encouraged to have a good background in English, mathematics, and the biological sciences.

		CREDIT HOURS
SEMESTER I		
+Elective	Humanities/Fine Arts	3
TECM 1303	Technical Mathematics **OR**	3
++Elective	Natural Science and Math	(3)
VTHT 1105	Veterinary Medical Terminology	1
VTHT 1401	Introduction to Veterinary Technology	4
		11
SEMESTER II		
BIOL 1406	General Biology	4
VTHT 2201	Canine and Feline Clinical Management	2
VTHT 2323	Veterinary Clinical Pathology I	3
		9
Minimum Hours Required		20

+Humanities/Fine Arts Elective must be selected from the following:

ENGL	1301	Composition I	3
SPCH	1311	Introduction to Speech Communication	3
SPCH	1315	Fundamentals of Public Speaking	3
SPCH	1318	Interpersonal Communication	3
SPCH	1321	Business and Professional Communication	3

++Elective must be selected from any three-credit hour course contained in the DCCCD approved lists for Mathematics and Natural Sciences.

VIDEO TECHNOLOGY

North Lake only

(Associate in Applied Sciences Degree, Tech Prep)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.VIDEO.TECH

The Video Technology program is designed to prepare students for entry level or advanced employment in the video industry. Opportunities in medicine, entertainment, advertising, industry, broadcast, cable, education, military, government, and business are among the career options. Students will develop skills and knowledge necessary to plan, budget, produce, and perform post-production of various video projects.

		CREDIT HOURS
SEMESTER I		
RTVB 1305	Introduction to Television Technology	3
RTVB 1425	TV Studio Production	4
ITSC 1401	Introduction to Computers **OR**	4
COSC 1401	Microcomputer Concepts and Applications	(4)
ENGL 1301	Composition I	3
MATH 1314	College Algebra **OR**	3
MATH 1414	College Algebra **OR**	(4)
TECM 1341	Technical Algebra **AND**	(3)
++Elective	Natural Science	(3-4)
		17-21
SEMESTER II		
RTVB 1371	Television Lighting	3
RTVB 1421	TV Field Production	4
RTVB 2430	Non-Linear Video Editing	4
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
+++Elective	Social/Behavioral Science	3
		17
SEMESTER III		
RTVB 1409	Audio/Radio Production I	4
RTVB 2437	TV Production Workshop I	4
HUMA 1301	Introduction to the Humanities **OR**	3
ARTS 1301	Art Appreciation **OR**	(3)
MUSI 1306	Music Appreciation	(3)
+Electives		6
		17
SEMESTER IV		
RTVB 1345	Broadcast Engineering	3
ARTC 1345	3D Modeling and Rendering	3
RTVB 2455	TV Production Workshop II	4
RTVB 2382	Cooperative Education - Radio and Television Broadcasting Technology/Technician	3
+Electives		3-4
		16-17
Minimum Hours Required		67-72

+Elective - A minimum of 9 credit hours must be selected from the following:

IMED	2341	Advanced Digital Video	3
JOUR	2311	News Gathering and Writing	3
RTVB	1191	Special Topics in Radio and Television Broadcasting	1
RTVB	1317	Survey of Electronic Media	3
RTVB	1329	Writing for Electronic Media	3
RTVB	1347	Audio/Radio Production II	3
RTVB	1391	Special Topics in Radio and Television Broadcasting	3
RTVB	2335	TV Production	3
RTVB	2345	Advanced Broadcast Engineering	3
RTVB	2383	Cooperative Education – Radio and Television Broadcasting Technology/Technician	3
PHOT	1316	Introduction to Photography and Photojournalism	3
PHOT	1317	Advanced Photography and Photojournalism	3
DRAM	1330	Stagecraft I	3
ARTC	1301	Basic Animation	3
ARTC	1341	3-D Animation I	3
ARTC	2341	3-D Animation II	3

++Elective - one of the following Natural Science courses may be taken:

BIOL	1406	Biology for Science Majors I	4
ECOL	1305	People and Their Environment	3
GEOL	1403	Physical Geology	4
PHYS	1311	Descriptive Astronomy	3
PHYS	1401	Introductory General Physics	4
PHYS	1415	Physical Science	4

+++The Social/Behavioral Science elective--must be selected from the DCCCD Core Curriculum for Social/Behavioral Science.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Video Technology and provides the student advanced skills required by the industry to specialize in Video Technology.

VIDEO TECHNOLOGY

Effective January 1, 2004, this award has been deactivated for North Lake College. For current students, the award will be closed on or before January 1, 2007. New students should not attempt to pursue this award.

North Lake (see above) only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.VIDEO.TECH

		CREDIT HOURS
SEMESTER I		
ARTC 1301	Basic Animation	3
ARTC 1341	3-D Animation I	3
ARTC 2341	3-D Animation II	3
		9

Minimum Hours Required 9

Students interested in pursuing the Enhanced Skills certificate need to consult with their advisor.

VIDEO TECHNOLOGY -- MULTIMEDIA SPECIALIST

Effective September 1, 2004, this award has been deactivated for North Lake College. For current students, the award will be closed on or before September 1, 2007. New students should not attempt to pursue this award.

North Lake (see above) only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: CERT.RFTV.MULTIMEDIA

This multi-disciplinary program prepares students for the exciting field of multi-media production. Students will study in Art, Photography, Computer Information Systems, and Video Technology. Upon completion of this certificate, students will be equipped to produce, design, author, shoot and edit a complete interactive multi-media project, and then press it to a CD-ROM for distribution and permanent storage.

		CREDIT HOURS
SEMESTER I		
IMED 1301	Introduction to Multimedia	3
ENGL 1301	Composition I	3
ARTS 2313	Computer Graphics Design I	3
+Elective		3-4
		12-13
SEMESTER II		
IMED 1305	Multimedia Authoring I	3
SPCH 1311	Introduction to Speech Communication	3
PHOT 2325	Introduction to Digital Imaging	3
+Elective		3-4
		12-13
SEMESTER III		
ARTC 1345	3D Modeling and Rendering	3
IMED 2311	Portfolio Development	3
+Elective		3-4
		9-10

Minimum Hours Required 33-36

+Electives should be chosen from the following:

ARTC	1301	Basic Animation	3
ARTC	1341	3-D Animation I	3
ARTC	2341	3-D Animation II	3
ARTS	1311	2D Design	3
ARTS	1312	3D Design	3
ARTS	2314	Computer Graphics Design II	3
IMED	1391	Special Topics in Educational/Instructional Media Technology/Technician	3

(continued on next page)

IMED	2341	Advanced Digital Video	3
ITSE	1391	Special Topics in Computer Programming	3
ITSE	1402	Introduction to Computer Programming	4
PHOT	1316	Introduction to Photography and Photojournalism	3
POFI	2331	Desktop Publishing for the Office	3
POFI	1341	Computer Applications II	3
RTVB	2335	TV Production	3
RTVB	1347	Audio/Radio Production II	3
RTVB	1409	Audio/Radio Production I	4
RTVB	2430	Non-Linear Video Editing	4

VIDEO TECHNOLOGY – ANIMATION AND SPECIAL EFFECTS

This award is pending Texas Higher Education Coordinating Board approval effective Fall 2004.

North Lake only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.VIDEO.ANIMAT

This program provides the student with the technical knowledge and hands-on skills required for entry-level employment in the field of animation and special effects. Emphasis is placed on computer-based animation and visual effects for film, video and interactive multimedia production.

		CREDIT HOURS
SEMESTER I		
ARTC 1345	3D Modeling and Rendering	3
ARTC 1301	Basic Animation	3
RTVB 1305	Introduction to Television Technology	3
		9
SEMESTER II		
RTVB 2340	Non-Linear Video Editing	4
ARTC 1301	3-D Animation I	3
+Elective		3-4
		10-11
SEMESTER III		
ARTC 2341	3-D Animation II	3
RTVB 1371	Television Lighting	3
RTVB 1391	Special Topics in Radio and Television Broadcasting	3
		9
Minimum Hours Required		28-29

+Electives must be chosen from the following:

ARTC	1302	Digital Imaging I	3
PHOT	2325	Introduction to Digital Imaging	3
RTVB	1409	Audio/Radio Production I	4

VISUAL COMMUNICATIONS

Brookhaven only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.VISUAL.COMM

The Visual Communications curriculum is designed to provide the student with a foundation of knowledge and technical skills required for various fields within the visual communications industry. Completion of the VCOM Core Curriculum enables the student to enter a specialized track of study of either Communication Design, Creative Web Design, Multimedia Communications, or Visual Journalism. Upon completion of the second year courses, an Associate of Applied Arts Degree is awarded. The complete course of study provides for the development of creative, conceptual, technical, interpersonal and communication skills necessary for a career within the visual communications industry. Each specialized area of study is described as follows:

Specialization in COMMUNICATION DESIGN
This course of study prepares the student to enter the graphic and internet design, advertising art, desktop publishing, and print production fields. Emphasis is upon concept development and technical skills for visual communication.

Specialization in CREATIVE WEB DESIGN
This course of study prepares the student for a career in creative web design, interface design and/or design for e-commerce application. Emphasis is upon the visual presentation of websites, including concept development, page design, and preparation of graphics and images as well as technical skills required in web page construction.

Specialization in MULTIMEDIA COMMUNICATIONS
This course of study is designed to develop the skills and technical knowledge to enable students to create multimedia presentations. Emphasis is upon development of concept and design for multimedia communications and presentation materials.

Specialization in VISUAL JOURNALISM
This course of study is designed to integrate writing and design skills to enable students to produce clear, effective media packages. Emphasis is upon writing and designing newspaper and magazine content, newsletters, press kits, web pages and other forms of journalistic communication.

		CREDIT HOURS
CORE CURRICULUM		
SEMESTER I		
ARTC 1305	Basic Graphic Design	3
ARTC 1302	Digital Imaging I	3
ARTC 2311	History of Communication Graphics	3
ARTS 1316	Drawing I	3
ENGL 1301	Composition I	3
		15
SEMESTER II		
ARTC 1309	Basic Illustration	3
ARTC 1317	Design Communication I	3
ARTC 1373	Creative Web Site Design I	3
GRPH 1359	Object Oriented Computer Graphics	3
SPCH 1311	Introduction to Speech Communication	3
		15
SEMESTER III		
ARTC 2305	Digital Imaging II **OR**	3
PHTC 1349	Photo Digital Imaging I	(3)
MATH 1314	College Algebra **OR**	3
+Elective	Lab Science	(3-4)
++Elective	Social/Behavioral Science	3
		9-10
Minimum Hours Required		39-40

A student must complete the Semester I, II, and III Core Curriculum and all courses in one of the following specializations (Communication Design, Multimedia Communications, Creative Web Design, or Visual Journalism) in Semesters IV and V in order to be awarded the AAS in Visual Communications.

+Elective: Must be selected from any 3 or 4 credit hour course contained in the DCCCD approved list for Natural Sciences.

++Elective: Must be selected from any course contained in the DCCCD approved list for Social/Behavioral Sciences.

COMMUNICATION DESIGN SPECIALIZATION

SEMESTERS I, II, III		
Visual Communications Core Curriculum		39-40
		39-40
SEMESTER IV		
ARTC 2347	Design Communication II	3
ARTC 2372	Writing for Visual Media	3
ARTC 2373	Creative Web Site Design II	3
ARTC 1313	Digital Publishing I	3
BUSI 1301	Introduction to Business **OR**	3
POFT 1321	Business Math	(3)
		15
SEMESTER V		
GRPH 2309	Electronic Prepress	3
ARTC 2333	Publication Design **OR**	3
ARTC 1353	Computer Illustration	(3)
ARTC 2335	Portfolio Development for Graphic Design **OR**	3
ARTC 1392	Special Topics in Design and Visual Communication	(3)
ARTC 2378	Design Studio Practices **OR**	3
ARTC 2388	Internship – Graphic Design, Commercial Art and Illustration **OR**	(3)
ARTC 2488	Internship – Graphic Design, Commercial Art and Illustration	(4)
		12-13
Minimum Hours Required		66-68

(continued on next page)

MULTIMEDIA COMMUNICATIONS SPECIALIZATION

SEMESTERS I, II, III

Visual Communications Core Curriculum			39-40
			39-40

SEMESTER IV

ARTC	2372	Writing for Visual Media	3
ARTC	2373	Creative Web Site Design II	3
ARTC	1345	3D Modeling and Rendering	3
IMED	1345	Interactive Multimedia I	3
BUSI	1301	Introduction to Business **OR**	3
POFT	1321	Business Math	(3)
			15

SEMESTER V

IMED	1351	Digital Video	3
ARTC	2335	Portfolio Development for Graphic Design **OR**	3
ARTC	1392	Special Topics in Design and Visual Communications	(3)
ARTC	2378	Design Studio Practices **OR**	3
ARTC	2388	Internship – Graphic Design, Commercial Art and Illustration **OR**	(3)
ARTC	2488	Internship – Graphic Design, Commercial Art and Illustration	(4)
IMED	2345	Interactive Multimedia II	3
			12-13

Minimum Hours Required 66-68

VISUAL JOURNALISM SPECIALIZATION

SEMESTERS I, II, III

Visual Communications Core Curriculum			39-40
			39-40

SEMESTER IV

ARTC	2372	Writing for Visual Media	3
BUSI	1301	Introduction to Business **OR**	3
POFT	1321	Business Math	(3)
ARTC	1313	Digital Publishing I	3
JOUR	1307	Introduction to Mass Communication	3
JOUR	2311	News Gathering and Writing	3
			15

SEMESTER V

ARTC	2333	Publication Design	3
ARTC	2373	Creative Web Site Design II **OR**	3
ARTC	1353	Computer Illustration	(3)
ARTC	2378	Design Studio Practices **OR**	3
ARTC	2388	Internship – Graphic Design, Commercial Art and Illustration **OR**	(3)
ARTC	2488	Internship – Graphic Design, Commercial Art and Illustration	(4)
JOUR	2309	News Editing and Copy Reading	3
			12-13

Minimum Hours Required 66-68

CREATIVE WEB DESIGN SPECIALIZATION

SEMESTERS I, II, III

Visual Communications Core Curriculum			39-40
			39-40

SEMESTER IV

ARTC	2372	Writing for Visual Media	3
ARTC	2373	Creative Web Site Design II	3
ARTC	1392	Special Topics in Design and Visual Communications	3
BUSG	2309	Small Business Management	3
BUSI	1301	Introduction to Business **OR**	3
POFT	1321	Business Math	(3)
			15

SEMESTER V

IMED	2349	Internet Communications **OR**	3
IMED	2409	Internet Commerce	(4)
IMED	1345	Interactive Multimedia I	3
ARTC	2335	Portfolio Development for Graphic	3
ARTC	2388	Internship – Graphic Design, Commercial Art and Illustration **OR**	3
ARTC	2488	Internship – Graphic Design, Commercial Art and Illustration	(4)
			12-14

Minimum Hours Required 66-69

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice

TECH PREP ENHANCED SKILLS CERTIFICATE

The Enhanced Skills Certificate is attached to the Visual Communications Associate Degree and provides the student advanced skills required by the industry.

VISUAL COMMUNICATIONS

Brookhaven only

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: ES.VISUAL.COMM

		CREDIT HOURS
SEMESTER I		
ARTC 13453	D Modeling and Rendering **OR**	3
IMED 1351	Digital Video	(3)
GRPH 2309	Electronic PrePress **OR**	3
ARTC 2333	Publication Design	(3)
ARTC 2373	Creative Web Site Design II	3
		9

Minimum Hours Required 9

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

VISUAL COMMUNICATIONS

Brookhaven only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.VISUAL.COMM

The Visual Communications certificate course of study is designed to provide the student with a basic foundation of knowledge and technical skills required for various fields within the visual communications industry. The certificate curriculum provides an introduction to the creative, conceptual, technical, interpersonal and communication skills necessary for a career within the visual communications industry.

		CREDIT HOURS
SEMESTER I		
ARTC 1305	Basic Graphic Design	3
ARTC 1302	Digital Imaging I	3
ARTC 2311	History of Communication Graphics	3
ARTS 1316	Drawing I	3
ENGL 1301	Composition I	3
		15
SEMESTER II		
ARTC 1309	Basic Illustration	3
ARTC 1317	Design Communication I	3
ARTC 1373	Creative Web Site Design I	3
GRPH 1359	Object Oriented Computer Graphics	3
SPCH 1311	Introduction to Speech Communication	3
		15

Minimum Hours Required 30

VOCATIONAL NURSING

El Centro only

(Certificate)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C2.NURS.VOCATIONAL

The Vocational Nursing program is a twelve-month program that prepares students to give direct nursing care to acutely and chronically ill patients with predictable outcomes in structured health care settings. The program is approved by the Board of Nurse Examiners for the State of Texas (333 Guadalupe, Suite 3-460, Austin, Texas 78701; Telephone number 512.305.7400) and accredited by the National League for Nursing Accrediting Commission (61 Broadway, 33rd floor, New York, New York 10006; Telephone number 212.363.5555, ext. 153). Upon completion of the program, the student is awarded a certificate and may write the Licensing Examination for Vocational Nurses (NCLEX PN) in order to become a Licensed Vocational Nurse (LVN) in Texas. The program includes classroom and laboratory work on campus as well as clinical experience at various area health care facilities.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, a GPA of at least 2.5 in prerequisite courses and a cumulative grade point average of 2.0 or better on any college course work completed. Applications are ranked by (1) GPA on the 3 prerequisites courses, (2) total number of required support courses, (3) GPA on required support courses, and (4) program information session attendance date.

		CREDIT HOURS
PREREQUISITES		
SCIT 1407	Human Anatomy and Physiology I	4
ENGL 1301	Composition I	3
SPCH 1311	Introduction to Speech Communication **OR**	3
SPCH 1315	Fundamentals of Public Speaking	(3)
		10
SEMESTER I		
VNSG 1227	Essentials of Medication Administration	2
VNSG 1323	Basic Nursing Skills	3
VNSG 1509	Nursing in Health and Illness II	5
VNSG 1304	Foundations of Nursing	3
VNSG 1360	Clinical-Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS)	3
HPRS 1204	Basic Health Profession Skills	2
		18
SEMESTER II		
VNSG 1510	Nursing in Health and Illness III	5
VNSG 2460	Clinical-Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS)	4
SCIT 1408	Human Anatomy and Physiology II	4
HPRS 2300	Pharmacology for Health Professions	3
		16
SEMESTER III		
VNSG 1406	Maternal/Newborn Nursing	4
VNSG 1163	Clinical-Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS)	1
		5
SEMESTER IV		
VNSG 1334	Pediatrics	3
VNSG 1263	Clinical-Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS)	2
		5
Minimum Hours Required		54

WELDING TECHNOLOGY

Mountain View only

(Associate in Applied Sciences Degree)

- **Students pursuing this award are required to meet Texas Success Initiative (TSI) standards and course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: AAS.WELDING.TECH

The Welding Technology program is designed to prepare the student in the basic processes of oxyacetylene and arc welding plus many specialized welding applications as options to fit the specific needs of the student. In addition, instruction is offered in related support areas such as metallurgy, tooling, drafting, pattern layout and characteristics of materials. Thus the program offers preparation for both entry-level jobs as well as welding inspectors.

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.

		CREDIT HOURS
FIRST YEAR		
SEMESTER I		
WLDG 1425	Introduction to Oxyfuel Welding and Cutting	4
WLDG 1428	Introduction to Shielded Metal Arc Welding	4
DFTG 1224	Blueprint Reading and Sketching	2
TECM 1303	Technical Mathematics	3
ENGL 1301	Composition I	3
		16
SEMESTER II		
WLDG 1337	Introduction to Metallurgy	3
WLDG 1457	Intermediate Shielded Metal Arc Welding	4
NDTE 2411	Preparation for Welding Inspection	4
PSYC 2302	Applied Psychology	3
SPCH 1311	Introduction to Speech Communication	3
		17
SEMESTER III		
WLDG 1313	Introduction to Blueprint Reading	3
WLDG 1430	Introduction to Gas Metal Arc Welding	4
WLDG 1434	Introduction to Gas Tungsten Arc Welding	4
++Elective	Humanities/Fine Arts	3
PHYS 1405	Concepts in Physics	4
		18
SEMESTER IV		
WLDG 2331	Advanced Blueprint Interpretation and Cost Analysis	3
WLDG 2443	Advanced Shielded Metal Arc Welding	4
WLDG 2447	Advanced Gas Metal Arc Welding	4
WLDG 2451	Advanced Gas Tungsten Arc	4
+Elective		1-4
		16-19

Minimum Hours Required 67-70

+Electives - must be selected from the following:

WLDG	1191	Special Topics in Welder/Welding Technologist....1
WLDG	1225	Introduction to Oxy-Fuel Welding and Cutting.....2
WLDG	1230	Introduction to Gas Metal Arc (MIG) Welding.....2
WLDG	1234	Introduction to Gas Tungsten Arc (TIG) Welding..2
WLDG	1291	Special Topics in Welder/Welding Technologist....2
MATH	1324	Mathematics for Business and Economics 3
WLDG	1371	Welding Standards 3
WLDG	1381	Cooperative Education-Welder/Welding Technologist 3
WLDG	1471	Welding Qualifications 4
WLDG	2413	Welding Using Multiple Processes 4
WLDG	2455	Advanced Welding Metallurgy 4

++Humanities/Fine Arts course: Any three-credit course from the Humanities/Fine Arts DCCCD CORE.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

WELDING TECHNOLOGY

Mountain View only

(Certificate)

- **Students pursuing this certificate are waived from the Texas Success Initiative (TSI) standards, but must meet course prerequisites.**
- Students must complete 25% of the degree requirements at the college awarding the degree.

Degree Plan Code: C1.WLDG.TECH

The Welding certificate program is designed to qualify students in the Shielded Metals Arc (SMAW), Gas Tungsten Arc (GTAW), or Gas Metal Arc (GMAW) process on either plate or pipe in accordance to the American Welding Society (AWS) or the American Petroleum Institute (API) welding procedures. The student may elect to complete the program either as a CEU program or as a credit certificate program.

The certificate program provides learning experiences and/or capstone experiences in accordance to AWS D1.1 or API 1104 certifications.

		CREDIT HOURS
SEMESTER I		
TRACK A		
WLDG 1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
WLDG 1457	Intermediate Shielded Metal Arc Welding (SMAW)	4
	OR	
TRACK B		
WLDG 1425	Introduction to Oxy-Fuel Welding and Cutting	4
WLDG 1434	Introduction to Gas Tungsten Arc (TIG) Welding	4
	OR	
TRACK C		
WLDG 1430	Introduction to Gas Metal Arc (MIG) Welding	4
WLDG 2447	Advanced Gas Metal Arc Welding	4
		8

SEMESTER II		
TRACK A		
WLDG 2443	Advanced Shielded Metal Arc Welding (SMAW)	4
WLDG 1471	Welding Qualifications	4
	OR	
TRACK B		
WLDG 2451	Advanced Gas Tungsten Arc (TIG) Welding	4
WLDG 1471	Welding Qualifications	4
	OR	
TRACK C		
WLDG 1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
WLDG 1471	Welding Qualifications	4
		8

Minimum Hours Required 16

Student must complete all courses in one track (A, B, or C) to be considered a completer for this certificate.

— Course Descriptions —

The course description section of the catalog includes a complete list of those Academic and WECM courses available at one or more colleges within the Dallas County Community College District. Not all courses are offered at all of the colleges. To determine which courses are available at specific colleges, please consult the college course schedule. There are two categories of courses: (1) academic courses and (2) WECM or technical courses.

The actual course prefix/number has a specific meaning or identifier for each number. The first digit indicates freshman [1] or sophomore [2] level; the second digit indicates credit hours; for academic courses the third digit, if "7," "8," or "9," generally indicates courses that are not Texas Common Course Numbers. While for WECM courses, the "7" indicates Local Need; "8" indicates External Learning; and "9" indicates Special Topics. The fourth digit is a free number. To help meet your transfer needs, the college is a member of the Texas Common Course Numbering System Consortium. Course descriptions will indicate if a course has been assigned a common course number. The common course number facilitates the transfer of these courses between and among the participating institutions. All Texas community/junior colleges, including the DCCCD colleges, participate in this system. Most Texas public universities are cooperating with this new numbering system by indicating which courses are equivalent to the common course number.

Most course descriptions are developed based upon the descriptions published by the Texas Higher Education Coordinating Board (THECB) in the *Lower Division Academic Course Guide Manual (LDACGM)* and the *Workforce Education Course Manual (WECM).*

ACADEMIC/GENERAL EDUCATION COURSES

Academic courses or general education courses, as they are sometimes referred to, are those courses that have been designated by the Texas Higher Education Coordinating Board for transfer among community colleges and state public four year colleges and universities as freshman and sophomore general education courses. These courses can be found in the *Lower Division Academic Course Guide Manual (LDACGM).* You may view/access the manual on the THECB website at http://www.thecb.state.tx.us/ctc/ip/acgm2k/ACGM-LD.htm.
(Please note: The above web address is upper and lower case sensitive.)

The *Lower Division Academic Course Guide Manual (LDACGM)* is the official list of approval numbers for general academic transfer courses that may be offered for state funding by public community and technical colleges in Texas. The *LDACGM* serves as the generic course inventory for all community and technical colleges in Texas. Courses listed in the manual may be offered and reported for funding without requesting approval from the Coordinating Board. If a community or technical college wishes to offer a course not listed here, or offer an *LDACGM* course for more credit or contact hours than listed, it must request approval for such a course on the basis of "unique need". These courses are listed on the DCCCD Academic Unique Need Inventory. The state will not fund academic courses at community and technical colleges that are not listed either in the *LDACGM* or on the college's Academic Unique Need Inventory.

WECM/TECHNICAL COURSES

WECM (**W**orkforce **E**ducation **C**ourse **M**anual) courses are those courses that have been designated by the Texas Higher Education Coordinating Board as workforce education (technical) courses offered for credit and CEUs (Continuing Education Units). While these courses are not designed to automatically transfer to public four-year colleges and universities, they are designated to transfer among state community colleges. These courses can be found in the *Workforce Education Course Manual.* You may view/access the manual on the THECB website at *http://www.thecb.state.tx.us/ctc/ip/wecm2000/index.htm*.

The *Workforce Education Course Manual (WECM)* is a statewide inventory of workforce education courses offered for semester credit hours and Continuing Education Units (CEUs). These courses are used by the college to respond rapidly to the needs of business and industry. The *WECM* offers a means for the college to continually design and update high quality workforce courses by receiving input from business/industry and community college faculty throughout Texas.

The Texas Higher Education Coordinating Board approves all courses cited in the *WECM* for use by the Texas public community and technical colleges. Therefore, if students earn semester credit hours and CEUs by successfully completing the requirements for the course(s), they will be able to transfer the credits or CEUs to another Texas public community or technical college offering the same course(s).

Figure 1 - Academic/General Education Course

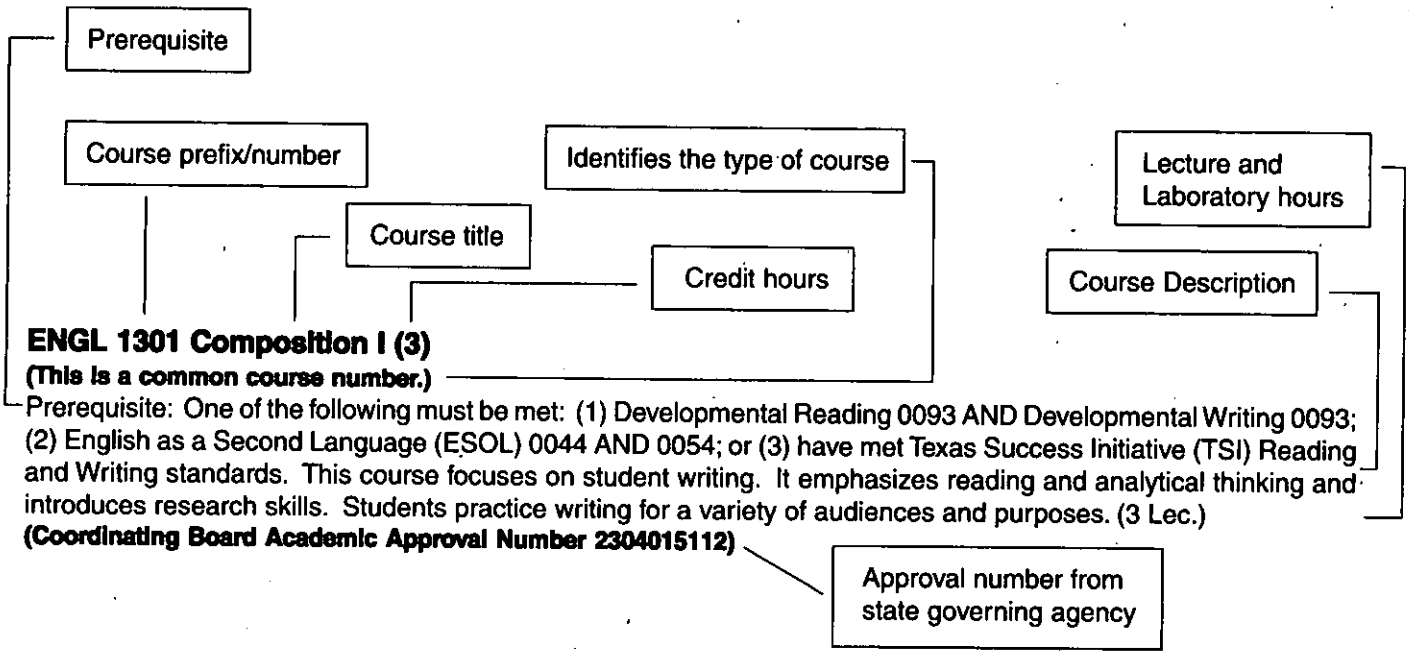
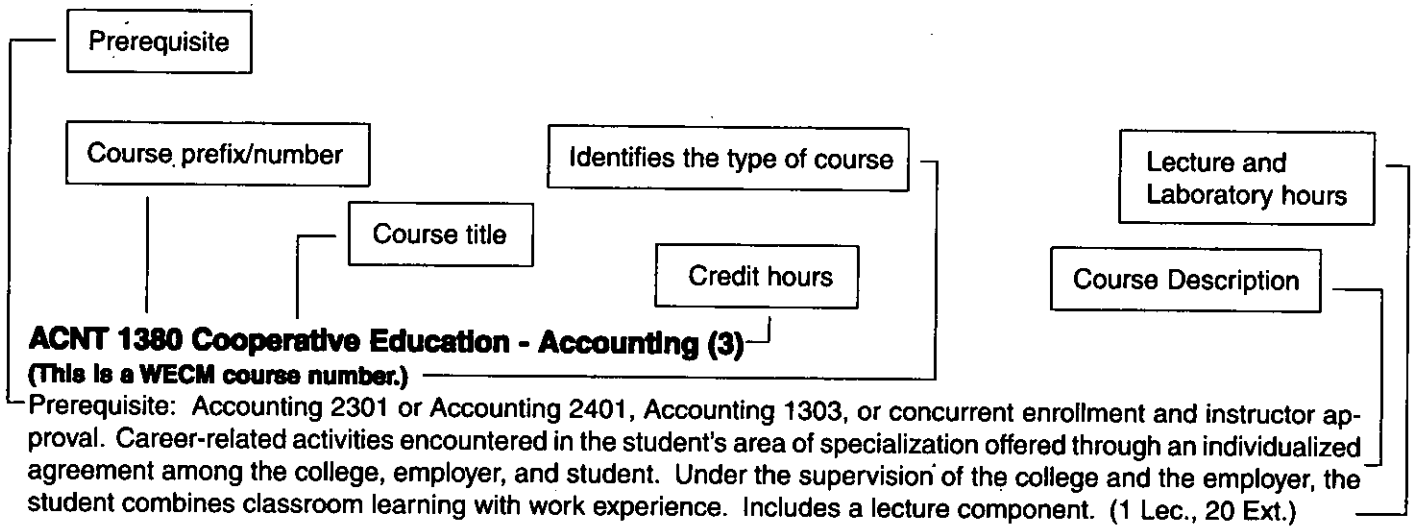


Figure 2 - WECM/Technical Course



ABDR 1191 Special Topics in Auto/Automotive Body Repairer (1)
(This is a WECM Course.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lab.)

ABDR 1307 Auto Body Welding (3)
(This is a WECM Course.)
Fundamentals of automotive welding processes. Skill development in oxy/acetylene, stick arc, MIG, and cutting processes in a variety of applications. (2 Lec., 3 Lab.)

ABDR 1391 Special Topics in Auto/Automotive Body Repairer (3)
(This is a WECM Course.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

ABDR 1431 Basic Refinishing (4)
(This is a WECM Course.)
An introduction to terms, trade practices, hand tools, power tools, current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Painting of trim and replacement parts included. Emphasis on surface preparation. Introduction to masking techniques. (2 Lec., 6 Lab.)

ABDR 1519 Basic Metal Repair (5)
(This is a WECM Course.)
Basic current metal working techniques, shop safety, proper tool usage, product application, and skill development utilizing various body features including metal principles. (3 Lec., 6 Lab.)

ABDR 1555 Minor Metal Repair (5)
(This is a WECM Course.)
Sheet metal alignment principles using mechanical and hydraulic equipment. Emphasis on attachment devices used to straighten and align exterior body panels. (3 Lec., 6 Lab.)

ABDR 1558 Intermediate Refinishing (5)
(This is a WECM Course.)
Mixing and spraying of automotive topcoats. Emphasis on formula ingredient, reducing, thinning, and special spraying techniques. Introduction to partial panel refinishing techniques and current industry paint removal techniques. (3 Lec., 6.Lab.)

ABDR 2353 Color Analysis and Paint Matching (3)
(This is a WECM Course.)
Color theory, color analysis, tinting, and advanced blending techniques for commercially acceptable paint matching. (2 Lec., 2 Lab.)

ABDR 2355 Collision Repair Estimating (3)
(This is a WECM Course.)
An advanced course in collision estimating and development of an accurate damage report. (3 Lec.)

ABDR 2357 Collision Repair Shop Management (3)
(This is a WECM Course.)
A study of methods and equipment used in state of the art repair shops to improve management functions and profitably. (3 Lec.)

ABDR 2380 Cooperative Education – Autobody/Collision and Repair Technology/Technician (3)
(This is a WECM Course.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. (1 Lec., 15 Lab.)

ABDR 2388 Internship – Autobody/Collision and Repair Technology/Technician (3)
(This is a WECM Course.)
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. (16 Ext.)

ABDR 2402 Auto Body Mechanical and Electrical Service (4)
(This is a WECM Course.)
Instruction in the repair, replacement, and/or service of those mechanical or electrical systems that are subject to damage from a collision. Topics include drive train removal, reinstallation and service; cooling system service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading wiring diagrams, and troubleshooting. (4 Lec.)

ABDR 2537 Structural Analysis and Damage Repair V (5)
(This is a WECM Course.)
Skill development in the operation of equipment and the procedures involved in making satisfactory repairs of supporting structures on both conventional and unitized constructed vehicles. Special emphasis on conducting a thorough damage analysis as well as demonstrating proper holding, blocking, and pulling. (3 Lec., 6 Lab.)

ABDR 2541 Major Collision Repair and Panel Replacement (5)
(This is a WECM Course.)
Instruction in preparation of vehicles for repair including removal and reinstallation of fenders, bumpers, trims, head and door liners, locks, handles, fascia, headers, doors, tailgates, deck lids, hatches, and hoods. Interpreting information from damage reports, planning repair sequences, selecting appropriate tools, and organizing removed parts for reinstallation are also included. Special emphasis on developing safe work habits. (3 Lec., 6 Lab.)

ACCT 2301 is a 3 credit hour lecture course. ACCT 2401 is a 4 credit hour lecture and laboratory course. Either course will meet degree requirements.

ACCT 2301 Principles of Accounting I (3)
(This is a Texas Common Course Number.)
This course covers the theory and practice of measuring and interpreting financial data for business units. Basic concepts, principles, and procedures are applied to the following topics: operating cycle, accruals and deferrals, financial statements, internal controls, receivables, inventory, fixed assets, and liabilities. This course is cross-listed as Accounting 2401. The student may register for either Accounting 2301 or Accounting 2401, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 5203015104)

ACCT 2302 is a 3 credit hour lecture course. ACCT 2402 is a 4 credit hour lecture and laboratory course. Either course will meet degree requirements.

ACCT 2302 Principles of Accounting II (3)
(This is a Texas Common Course Number.)
Prerequisite: Accounting 2301 or Accounting 2401. This course is a continuation of Accounting 2301 or Accounting 2401. This course covers the theory and practice of measuring and interpreting financial data for business units, with emphasis on corporations and managerial applications. Basic concepts, principles, and procedures are applied to the following topics: preparation and analysis of financial statements, budgeting, cash flow, cost systems, responsibility accounting, and cost-volume-profit analysis. This course is cross-listed as Accounting 2402. The student may register for either Accounting 2302 or 2402, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 5203015104)

ACCT 2401 is a 4 credit hour lecture and laboratory course. ACCT 2301 is a 3 credit hour lecture course. Either course will meet degree requirements.

ACCT 2401 Principles of Accounting I (4)
(This is a Texas Common Course Number.)
This course covers the theory and practice of measuring and interpreting financial data for business units. Basic concepts, principles, and procedures are applied to the following topics: operating cycle, accruals and deferrals, financial statements, internal controls, receivables, inventory, fixed assets, and liabilities. This course is cross-listed as Accounting 2301. The student may register for either Accounting 2401 or Accounting 2301, but may receive credit for only one of the two.
(3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5203015104)

ACCT 2402 is a 4 credit hour lecture and laboratory course. ACCT 2302 is a 3 credit hour lecture course. Either course will meet degree requirements.

ACCT 2402 Principles of Accounting II (4)
(This is a Texas Common Course Number.)
Prerequisite: Accounting 2301 or Accounting 2401. This course is a continuation of Accounting 2301 or Accounting 2401. This course covers the theory and practice of measuring and interpreting financial data for business units, with emphasis on corporations and managerial applications. Basic concepts, principles, and procedures are applied to the following topics: preparation and analysis of financial statements, budgeting, cash flow, cost systems, responsibility accounting, and cost-volume-profit analysis. This course is cross-listed as Accounting 2302. The student may register for either Accounting 2402 or 2302, but may receive credit for only one of the two. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5203015104)

ACNT 1303 Introduction to Accounting I (3)
(This is a WECM Course.)
A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. (3 Lec.)

ACNT 1304 Introduction to Accounting II (3)
(This is a WECM Course.)
Prerequisite: Accounting 1303. A study of accounting for merchandising, notes payable, notes receivable, valuation of receivables and equipment, and valuation of inventories in a manual and computerized environment. (3 Lec.)

ACNT 1311 Introduction to Computerized Accounting (3)
(This is a WECM Course.)
Prerequisite: Accounting 2301 or Accounting 2401, Accounting 1303, or concurrent enrollment. Introduction to utilizing the computer in maintaining accounting records, making management decisions, and processing common business applications with primary emphasis on a general ledger package. (2 Lec., 2 Lab.)

ACNT 1313 Computerized Accounting Applications (3)
(This is a WECM Course.)
Prerequisite: Accounting 2301 or Accounting 2401, Accounting 1303, or concurrent enrollment. A study of utilizing the computer to develop and maintain accounting record keeping systems, make management decisions, and process common business applications with emphasis on utilizing a spreadsheet and/or data base package/program. (2 Lec., 2 Lab.)

ACNT 1329 Payroll and Business Tax Accounting (3)
(This is a WECM Course.)
Prerequisite: Accounting 2301 or Accounting 2401, Accounting 1303, or concurrent enrollment. A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. (3 Lec.)

ACNT 1331 Federal Income Tax: Individual (3)
(This is a WECM Course.)
Prerequisite: Accounting 2301 or Accounting 2401. Basic instruction in the tax laws as currently implemented by the Internal Revenue Service providing a working knowledge of preparing taxes for the individual. (3 Lec.)

ACNT 1366 Practicum (or Field Experience) - Accounting (3)
(This is a WECM Course.)
Prerequisite: Accounting 2301 or Accounting 2401, Accounting 1303, or concurrent enrollment and instructor approval. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This course is cross-listed as ACNT 2366. The student may register for either ACNT 1366 or ACNT 2366, but may receive credit for only one of the two. (1 Lec., 20 Ext.)

ACNT 1380 Cooperative Education - Accounting (3)
(This is a WECM Course.)
Prerequisite: Accounting 2301 or Accounting 2401, Accounting 1303, or concurrent enrollment and instructor approval. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. (1 Lec., 20 Ext.)

ACNT 1391 Special Topics in Accounting (3)
(This is a WECM Course.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

ACNT 2303 Intermediate Accounting I (3)
(This is a WECM Course.)
Prerequisite: Accounting 2301 or Accounting 2401. Critical analysis of generally accepted accounting principles, concepts, and theory underlying the preparation of financial statements. Emphasis on current theory and practice. (3 Lec.)

ACNT 2304 Intermediate Accounting II (3)
(This is a WECM Course.)
Prerequisite: Accounting 2303. Continued in-depth analysis of generally accepted accounting principles underlying the preparation of financial statements, including comparative analysis and statement of cash flows. (3 Lec.)

ACNT 2309 Cost Accounting (3)
(This is a WECM Course.)
Prerequisite: Accounting 2302 or Accounting 2402. A study of budgeting and cost control systems including a detailed study of manufacturing cost accounts and reports, job order costing, and process costing. Includes introduction to alternative costing methods such as activity-based and just-in-time costing. (3 Lec.)

ACNT 2311 Managerial Accounting (3)
(This is a WECM Course.)
Prerequisite: Accounting 2302 or Accounting 2402. A study of practical applications of accounting with emphasis on cost behavior, capital management decisions, budgeting, financial statement analysis, and income taxation. (3 Lec.)

ACNT 2366 Practicum (or Field Experience) - Accounting (3)
(This is a WECM Course.)
Prerequisite: Accounting 1366 and instructor approval. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This course is cross-listed as ACNT 1366. The student may register for either ACNT 2366 or ACNT 1366, but may receive credit for only one of the two. (1 Lec., 20 Ext.)

ACNT 2380 Cooperative Education - Accounting (3)
(This is a WECM Course.)
Prerequisite: Accounting 1380 and instructor approval. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

AIRP 1215 Private Flight (2)
(This is a WECM Course.)
Flight training to prepare the student for the completion of the Federal Aviation Administration private pilot certification process, including dual and solo flight in the areas of maneuvers and cross-country navigation.
(1 Lec., 2 Lab.)

AIRP 1255 Intermediate Flight (2)
(This is a WECM Course.)
Provides students with flight hours and skills necessary to fulfill solo cross-country hours required for the Federal Aviation Administration Commercial Pilot, single engine land, airplane rating. (1 Lec., 2 Lab.)

AIRP 1301 Air Navigation (3)
(This is a WECM Course.)
Instruction in Visual Flight Navigation in the National Airspace System. Topics include sectional charts, flight computers, plotters, and navigation logs. Qualifies as part of a program leading to Federal Aviation Administration certification. (3 Lec.)

AIRP 1307 Aviation Meteorology (3)
(This is a WECM Course.)
In-depth coverage of meteorological phenomena affecting aircraft flight. Topics include basic concepts of aviation meteorology in the study of temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing, and fog. Also includes analysis and use of weather data for flight planning. (3 Lec.)

AIRP 1311 Flight Theory (3)
(This is a WECM Course.)
Instruction in basic flight information needed for flight in the National Aerospace System. Topics include publications, regulations, aircraft systems, and performance. Qualifies as part of a program leading to Federal Aviation Administration certification. (3 Lec.)

AIRP 1313 Introduction to Aviation (3)
(This is a WECM Course.)
A study of the historical development of the aviation industry, including key events in civil, military, and space exploration and an overview of legislation relating to aviation. (3 Lec.)

AIRP 1317 Private Pilot Ground School (3)
(This is a WECM Course.)
Basic ground school for the Private Pilot Certificate, providing the student with the necessary aeronautical knowledge that can be used for private pilot certification. Topics include principles of flight, radio procedures, weather, navigation, aerodynamics, and Federal Aviation Administration regulations. (3 Lec.)

AIRP 1343 Aerodynamics (3)
(This is a WECM Course.)
Study of the general principles of the physical laws of flight. Topics include physical terms and the four forces of flight, lift, weight, thrust, and drag; aircraft design; stability control; and high-speed flight characteristics.
(3 Lec.)

AIRP 1347 Human Factors in Aviation (3)
(This is a WECM Course.)
Instruction in flight physiology, the decision-making process, pilot health maintenance, psychological aspects of flight, human behavior as related to the aircraft cockpit, and aeromedical information of significance to flight crews. (3 Lec.)

AIRP 1351 Instrument Ground School (3)
(This is a WECM Course.)
A study of basic instrument radio and navigation fundamentals used in instrument flight. Topics include a description and practical use of aerial navigation systems and instruments, charts used for instrument flight, and Federal Aviation Administration certification. (3 Lec.)

AIRP 2236 Certified Flight Instructor-Airplane (2)
(This is a WECM Course.)
Flight instruction necessary to qualify for the Federal Aviation Administration Certified Flight Instructor - Airplane Certificate. Topics include ground and flight instruction. (1 Lec., 2 Lab.)

AIRP 2239 Commercial Flight (2)
(This is a WECM Course.)
Flight instruction necessary to qualify for the Federal Aviation Administration Commercial Pilot Certificate. Instruction includes both dual and solo flight training to prepare the student for mastery of all commercial pilot maneuvers. (1 Lec., 2 Lab.)

AIRP 2242 Flight Instructor - Instrument Airplane (2)
(This is a WECM Course.)
Skill development for flight instructors necessary to qualify for the Federal Aviation Administration Certified Flight Instructor Instrument Rating, airplane single-engine land. (1 Lec., 2 Lab.)

AIRP 2250 Instrument Flight (2)
(This is a WECM Course.)
Preparation for completion of the Federal Aviation Administration Instrument Pilot Rating with mastery of all instrument procedures. (1 Lec., 2 Lab.)

AIRP 2251 Multiengine Flight (2)
(This is a WECM Course.)
Preparation for the multiengine class rating which will be added to a current pilot certificate. Includes explanation and demonstration of all required Federal Aviation Administration normal and emergency operations and procedures. (1 Lec., 2 Lab.)

AIRP 2333 Aircraft Systems (3)
(This is a WECM Course.)
Study of the general principles, operation, and application of pneumatic, hydraulic, electrical, fuel, environmental, protection, and warning systems. Emphasis on types of aircraft structures and their control systems. (3 Lec.)

AIRP 2337 Commercial Ground School (3)
(This is a WECM Course.)
A study of advanced aviation topics that can be used for Federal Aviation Administration certification at the commercial pilot level. Includes preparation for the Commercial Airplane knowledge test. (3 Lec.)

AIRP 2349 Instructor Ground School (3)
(This is a WECM Course.)
Skill development in the fundamentals of teaching and learning in an aviation-oriented environment. Introduction to the techniques of instruction and analysis of flight maneuvers. Topics include flight instructor responsibilities and federal aviation regulations relating to the instructor rating. (3 Lec.)

AIRP 2352 Practical Dispatching I (3)
(This is a WECM Course.)
Study of advanced concepts in weight and balance, performance calculations, avionics, and engine and airplane specifications including Federal Aviation regulations. Preparation for the Federal Aviation Administration knowledge examination. (3 Lec.)

AIRP 2353 Practical Dispatching II (3)
(This is a WECM Course.)
A study of the duties and responsibilities required of an aircraft dispatcher. Topics include instruction in Federal Aviation Administration regulations, flight planning, and company operations for both domestic and international operations. Preparation for the Federal Aviation Administration Practical Examination. (3 Lec.)

AIRP 2355 Propulsion Systems (3)
(This is a WECM Course.)
In-depth coverage of aircraft engine theory and principles of operation of various types of aircraft engines including reciprocating, turboprop, turbojet, and turbo fan. Topics include propellers, superchargers, engine accessories, controls, and instrumentation.
(3 Lec.)

ANTH 1101 Physical Anthropology (1)
(This is a Texas Common Course Number.)
Corequisite: Students must concurrently be enrolled in ANTH 1101 and ANTH 2301. Overview of human origins and biocultural adaptations. Also introduces methods and theory in the excavation and interpretation of material remains of past cultures. (3 Lab.)
(Coordinating Board Academic Approval Number 4503015125)

ANTH 2301 Physical Anthropology (3)
(This is a Texas Common Course Number.)
Corequisite: Students must concurrently be enrolled in ANTH 2301 and ANTH 1101. Overview of human origins and biocultural adaptations. Also introduces methods and theory in the excavation and interpretation of material remains of past cultures. (3 Lec.)
(Coordinating Board Academic Approval Number 4503015125)

ANTH 1370 American Indian Culture (3)
(This is a Unique Need Course.)
Native Americans are studied from three perspectives: Native American history and prehistory; traditional Indian cultures; and native Americans today. The latter theme stresses current topics such as discrimination, poverty, employment, reservations, The Bureau of Indian Affairs, self- determination, health care, etc. (3 Lec.)
(Coordinating Board Academic Approval Number 0502029325)

ANTH 2302 Introduction to Archeology (3)
(This is a WECM Course.)
This course is an anthropological approach to archeology. Topics include an introduction to the study of humanity's past. How archeologist retrieve, process, analyze and interpret surviving prehistoric materials is covered, as well as a survey of world prehistory through Neolithic times. (3 Lec.)
(Coordinating Board Academic Approval Number 4503015125)

ANTH 2346 Introduction to Anthropology (3)
(This is a Texas Common Course Number.)
This course surveys the origin of mankind involving the processes of physical and cultural evolution, ancient man, and preliterate man. Attention is centered on fossil evidence, physiology and family/group roles and status. (3 Lec.)
(Coordinating Board Academic Approval Number 4502015125)

ANTH 2351 Cultural Anthropology (3)
(This is a Texas Common Course Number.)
This course introduces students to the elements and processes that create culture, society and social interaction. Language, cross-cultural communication, fieldwork, and analysis of multi-cultural societies are covered. A special emphasis is given to cross-cultural comparison and analysis of basic social institutions on a global scale in order to provide students with an appreciation and understanding of the underlying unity of diverse cultural expressions. (3 Lec.)
(Coordinating Board Academic Approval Number 4502015325)

ANTH 2380 The Heritage of Mexico (3)
(This is a Texas Common Course Number.)
The first part of the course deals with the archeology of Mexico beginning with the first humans to enter the North American continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on archaic cultures, the Maya, the Toltec, and Aztec empires. The second part of the course deals with Mexican history and modern relations between the United States and Mexico. This course is cross-listed as History 2380. The student may register for either History 2380 or Anthropology 2380, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015325)

ARAB 1470 Beginning Arabic I (3)
(This is a Unique Need Course.)
This course is an introductory course intended for students with little or no knowledge of the language. It's aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1601019113)

ARAB 1471 Beginning Arabic II (4)
(This is a Unique Need Course.)
Prerequisite: Arabic 1470 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Arabic 1470. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1601019213)

ARAB 2370 Intermediate Arabic I (3)
(This is a Unique Need Course.)
Prerequisite: Arabic 1471 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1601019313)

ARAB 2371 Intermediate Arabic II (3)
(This is a Unique Need Course.)
Prerequisite: Arabic 2370 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Arabic 2370. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture. (3 Lec.)
(Coordinating Board Academic Approval Number 1601019413)

ARCH 1205 Architectural Aesthetics (3)
(This is a Texas Common Course Number.)
Visual experiences in the aesthetics of architecture are studied in context with architecture as a contemporary philosophical concept. (3 Lec.)
(Coordinating Board Academic Approval Number 0402015202)

ARCH 1301 History of Architecture Survey to 1850 (3)
(This is a Texas Common Course Number.)
The architectural contributions of Ancient, Classical, Medieval, and Renaissance societies are surveyed, along with their relationships to the cultural heritage of the Western World. (3 Lec.)
(Coordinating Board Academic Approval Number 3012015112)

ARCH 1302 History of Modern Architecture (3)
(This is a Texas Common Course Number.)
The evolution of 20th. Century design theory is surveyed, from the Industrial Revolution to the present. Special attention is given to significant architects, designers, and personalities and their effect on the modern movement. (3 Lec.)
(Coordinating Board Academic Approval Number 3012015112)

ARCH 1303 Architectural Design I (3)
(This is a Texas Common Course Number.)
Basic concepts of design are studied including form, scale, proportion, rhythm, unity, accent, texture, and pattern, as applied to two-dimensional and three-dimensional abstract projects. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0402015402)

ARCH 1304 Architectural Design II (3)
(This is a Texas Common Course Number.)
Prerequisite: For architecture majors only, Architecture 1307 and Architecture 1303. This course is a continuation of Architecture 1303, with emphasis upon architecture theories, perceptions, environmental factors and communication of those elements in design.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0402015402)

ARCH 1307 Architectural Graphics I (3)
(This is a Texas Common Course Number.)
Basic architectural drafting techniques are studied including orthographic projection and isometric drawing. Linework in pencil and ink are emphasized.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 1513035311)

ARCH 1308 Architectural Graphics II (3)
(This is a Texas Common Course Number.)
Prerequisite: Architecture 1307 or demonstrated competence approved by the division dean. Three-dimensional drawing utilizing perspective and shade/shadow theory is studied in pencil and ink.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 1513035311)

ARCH 1311 Introduction to Architecture (3)
(This is a Texas Common Course Number.)
This course is an introduction to the elements of architecture; opportunities within the architectural profession are explored. (3 Lec.)
(Coordinating Board Academic Approval Number 0402015902)

ARCH 1315 Architectural Computer Graphics I (3)
(This is a Texas Common Course Number.)
Basic computer terminology and software applications utilizing the microcomputer in architecture and design are studied. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1513035211)

ARCH 1403 Fundamental Design Studio I (4)
(This is a Texas Common Course Number.)
Prerequisite: Interior Design program major. Basic concepts of design limited to black and white values are studied including form, scale, space, proportion, rhythm, theme, variety, accent, unity, texture, and pattern as applied to two-dimensional and three-dimensional abstract projects. This course is intended for students enrolled in applied arts programs. (2 Lec., 5 Lab.)
(Coordinating Board Academic Approval Number 0402015402)

ARCH 2301 Freehand Drawing I (3)
(This is a Texas Common Course Number.)
Representational drawing is studied with emphasis upon eye-to-hand coordination utilizing light, shade, line, and tonal quality. Pencil media is utilized. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 1513035111)

ARCH 2302 Freehand Drawing II (3)
(This is a Texas Common Course Number.)
Prerequisite: Architecture 2301. Representational drawing is continued using a variety of techniques in pen and ink media. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 1513035111)

ARCH 2312 Materials of Construction (3)
(This is a Texas Common Course Number.)
The nature and use of materials in construction are explored. Emphasis is placed upon appropriateness and use in design as they relate to design expression and codes. (3 Lec.)
(Coordinating Board Academic Approval Number 1501015111)

ARCT 1302 Architectural Materials and Methods of Construction (3)
(This is a WECM Course Number.)
Properties, specifications, vendor references, and uses of materials as related to architectural systems of structures. Lab required. (3 Lec.)

ARTC 1301 Basic Animation (3)
(This is a WECM Course Number.)
Examination of concepts, characters, and storyboards for basic animation production. Emphasis on creating movement and expression utilizing traditional or electronically generated image sequences.
(2 Lec., 4 Lab.)

ARTC 1302 Digital Imaging I (3)
(This is a WECM Course Number.)
Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions.
(2 Lec., 4 Lab.)

ARTC 1305 Basic Graphic Design (3)
(This is a WECM Course Number.)
A study of two-dimensional (2-D) design with emphasis on the visual communication design process. Topics include basic terminology and graphic design principles.
(2 Lec., 4 Lab.)

ARTC 1309 Basic Illustration (3)
(This is a WECM Course Number.)
Introduction to drawing techniques, skills, and concepts using various black and white media. Emphasis on perspective construction of the human figure and principles of shading as they pertain to the commercial illustration industry. (2 Lec., 4 Lab.)

ARTC 1313 Digital Publishing I (3)
(This is a WECM Course Number.)
The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with typography and page layout.
(2 Lec., 4 Lab.)

ARTC 1317 Design Communication I (3)
(This is a WECM Course Number.)
Prerequisite: ARTC 1305, 2305, and 2311, or demonstrated competence approved by the instructor. Study of design development relating to graphic design terminology, tools and media, and layout and design concepts. Topics include integration of type, images and other design elements, and developing computer skills in industry standard computer programs. (2 Lec., 4 Lab.)

ARTC 1341 3-D Animation I (3)
(This is a WECM Course Number.)
Instruction in three-dimensional (3-D) modeling and rendering techniques including lighting, staging, camera, and special effects. Emphasis on 3-D modeling building blocks using primitives to create simple or complex objects. (2 Lec., 4 Lab.)

ARTC 1345 3-D Modeling and Rendering (3)
(This is a WECM Course Number.)
Prerequisite: IMED 1301. A studio course in the theory and technique of three-dimensional (3-D) modeling utilizing appropriate software. Topics include the creation and modification of 3-D geometric shapes; a variety of rendering techniques; and use of camera light sources, texture, and surface mapping. (2 Lec., 4 Lab.)

ARTC 1353 Computer Illustration (3)
This is a WECM course number.)
Prerequisite: ARTC 1302. Implementation of software for illustration and/or photo manipulation for reproduction.
(2 Lec., 4 Lab.)

ARTC 1373 Creative Web Site Design I (3)
(This is a WECM Local Need Course.)
Prerequisite: ARTC 1302 and ARTC 1305 or demonstrated competence approved by the instructor. Instruction in creation of web pages, graphics and images for use on the internet. Focus is on creating well designed web pages and maintaining continuity throughout web sites through use of color, graphics and placement and use of embedded elements. Overall visual communication of concept is emphasized.
(2 Lec., 4 Lab.)

ARTC 1391 Special Topics in Graphic Design, Commercial Art and Illustration (3)
(This is a WECM Course Number.)
Prerequisite: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

ARTC 1392 Special Topics in Design and Visual Communications (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

ARTC 1402 Digital Imaging I (4)
(This is a WECM Course Number.)
Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions.
(3 Lec., 4 Lab.)

ARTC 2305 Digital Imaging II (3)
(This is a WECM Course Number.)
Principles of digital image processing and electronic painting. Emphasis on bitmapped- or raster-based image marking and the creative aspects of electronic illustration for commercial and fine art applications. (2 Lec., 4 Lab.)

ARTC 2311 History of Communication Graphics (3)
(This is a WECM Course Number.)
Prerequisite: Credit or concurrent enrollment in ENGL 1301, or demonstrated competence approved by the instructor. Survey of the evolution of graphic arts as it relates to the history of art. Topics include formal, stylistic, social, political, economic, and historical aspects. Emphasis on the art movement, schools of thought, individuals, and technology as they interrelate with graphic arts. (3 Lec.)

ARTC 2313 Digital Publishing II (3)
(This is a WECM Course Number.)
Layout procedures from thumbnails and roughs to final comprehensive and printing; emphasis on design principles for the creation of advertising and publishing materials, and techniques for efficient planning and documenting projects. (2 Lec., 4 Lab.)

ARTC 2333 Publication Design (3)
(This is a WECM Course Number.)
Prerequisite: ARTC 1313 and GRPH 1322 or demonstrated competence approved by the instructor. A continuation in the development of skills and advanced knowledge of desktop publishing software, with emphasis on the maintenance of visual continuity in documents for publication. (2 Lec., 4 Lab.)

ARTC 2335 Portfolio Development for Graphic Design (3)
(This is a WECM Course Number.)
Prerequisite: Visual Communication First year Curriculum or demonstrated competence approved by the instructor. Preparation of a portfolio comprised of completed graphic design class projects. Evaluation and demonstration of portfolio presentation methods based on the student's specific area of study. It is recommended that this class be taken in the final semester of the program. (2 Lec., 4 Lab.)

ARTC 2341 3-D Animation II (3)
(This is a WECM Course Number.)
Skill development in three-dimensional modeling and rendering techniques using lighting, staging, and special effects for digital output. Emphasis on the production of three-dimensional (3-D) animation as final digital outputting using modeling, rendering, animation, and outputting software. (2 Lec., 4 Lab

ARTC 2347 Design Communication II (3)
(This is a WECM Course Number.)
Prerequisite: ARTC 1317 or demonstrated competence approved by the instructor. An advanced study of design, development, and art direction. Emphasis on form and content through the selection, creation, and integration of typographic, photographic, illustrative, and design elements. (2 Lec., 4 Lab.)

ARTC 2348 Digital Publishing III (3)
(This is a WECM Course Number.)
A project based page layout course from concept to completion addressing design problems, preflight of files, color separations, and trapping techniques.
(2 Lec., 4 Lab.)

ARTC 2372 Writing for Visual Media (3)
(This is a WECM Local Need Course.)
Prerequisite: Credit or concurrent enrollment in ENGL 1301 or demonstrated competence approved by the instructor. This course covers techniques for writing effective headlines, captions and copy for a variety of visual media. Students learn to gather facts, generate ideas, present information and edit copy for advertisements, web pages, brochures, newsletters, press kits, multimedia presentations and other forms of visual communication. (3 Lec.)

ARTC 2373 Creative Web Site Design II (3)
(This is a WECM Local Need Course.)
Prerequisite: ARTC 1373 or demonstrated competence approved by the instructor. A continuation of ARTC 1373, advanced concepts of creative web site design are presented. Focus is on integrating graphics software with HTML editing software to produce advanced interactive web sites that maintain integrity of design. Topics also include preparation of proposals for websites, legal issues and visual communication of concept toward target audience. (2 Lec., 4 Lab.)

ARTC 2378 Design Studio Practices (3)
(This is a WECM Local Need Course.)
Prerequisite: Visual Communications First year Curriculum and demonstrated competence approved by the instructor. The student serves as a designer, illustrator, computer graphics artist and/or art director in the Brookhaven College Visual Communications Design Studio. This course provides the student study and application in design studio practices. A portfolio is required for approval prior to registration. (2 Lec., 4 Lab.)

ARTC 2388 Internship - Graphic Design, Commercial Art and Illustration (3)
(This is a WECM Course Number.)
Prerequisite: Visual Communications First Year Curriculum and demonstrated competence approved by the instructor. A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. This course is cross-listed as ARTC 2488. The student may register for either ARTC 2388 or ARTC 2488, but may receive credit for only one of the two. (15 Ext.)

ARTC 2488 Internship - Graphic Design, Commercial Art and Illustration (4)
(This is a WECM Course Number.)
Prerequisite: Visual Communications First Year Curriculum and demonstrated competence approved by the instructor. A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. . This course is cross-listed as ARTC 2388. The student may register for either ARTC 2488 or ARTC 2388, but may receive credit for only one of the two. (20 Ext.)

ARTS 1170 Problems in Contemporary Art (1)
Area artists, critics, and art educators speak with students about the work exhibited in the gallery and discuss current art styles and movements. They also discuss specific aspects of being artists in contemporary society. This course may be repeated for credit. (1 Lec.)
(Coordinating Board Academic Approval Number 5007035326)

ARTS 1301 Art Appreciation (3)
(This is a Texas Common Course Number.)
Films, lectures, slides, and discussions focus on the theoretical, cultural, and historical aspects of the visual arts. Emphasis is on the development of visual and aesthetic awareness. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035126)

ARTS 1303 Survey of Art History (3)
(This is a Texas Common Course Number.)
This course covers the history of western art from prehistoric time through the Gothic period. It explores the cultural, geophysical, and personal influences on art styles. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035226)

ARTS 1304 Survey of Art History (3)
(This is a Texas Common Course Number.)
This course covers the history of art from the Renaissance through the present. It explores the cultural, geophysical, and personal influences on art styles. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035226)

ARTS 1311 2D Design (3)
(This is a Texas Common Course Number.)
Basic concepts of design with two-dimensional materials are explored. The use of line, color, illusion of space or mass, texture, value, shape, and size in composition is considered. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015326)

ARTS 1312 3D Design (3)
(This is a Texas Common Course Number.)
Basic concepts of design with three-dimensional materials are explored. The use of mass, space, movement, and texture, line, plane, volume, color, and scale is considered. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015326)

ARTS 1316 Drawing I (3)
(This is a Texas Common Course Number.)
This beginning course investigates various media, techniques, and subjects. It explores perceptual and descriptive possibilities and considers drawing as a developmental process as well as an end in itself.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055226)

ARTS 1317 Drawing II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 1316. This course is an expansion of Arts 1316. It stresses the expressive and conceptual aspects of drawing, including advanced composition arrangements, a range of wet and dry media, and the development of an individual approach to theme and content. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055226)

ARTS 2311 Advanced Design (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. This course will focus on two- or three-dimensional projects in a special topics area. Emphasis is on individual expression. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015326)

ARTS 2312 Advanced Design (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. This course will focus on two- or three-dimensional projects in a special topics area. Emphasis is on individual expression. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015326)

ARTS 2313 Computer Graphics Design I (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. Introduction to the computer as an art tool with emphasis on design principles and visual communication or ideas. Course will include exposure to basic computer graphic technology including computer illustration and electronic imaging techniques. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015126)

ARTS 2314 Computer Graphics Design II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2313. This course is a continuation of Computer Graphics Design I. Students will further explore advanced design problems through continued experimentation with computer graphics techniques.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015126)

ARTS 2316 Painting I (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. This studio course stresses fundamental concepts of painting with acrylics and oils. Emphasis is on painting from still life, models, and the imagination.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085226)

ARTS 2317 Painting II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2316. This course continues Arts 2316. Emphasis is on individual expression.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085226)

ARTS 2323 Drawing III (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 1317. Arts 1311, Arts 1312 and Arts 1316 are recommended for Art Majors. This course covers the analytic and expressive drawing of the human figure. Movement and volume are stressed.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055326)

ARTS 2324 Drawing IV (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2323, sophomore standing, or demonstrated competence approved by the instructor. This course continues Arts 2323. Emphasis is on individual expression. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055326)

ARTS 2326 Sculpture I (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. Various sculptural approaches are explored. Different media and techniques are used. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007095126)

ARTS 2327 Sculpture II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2326. This course continues Arts 2326. Emphasis is on individual expression.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007095126)

ARTS 2333 Printmaking I (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. Basic printmaking processes are introduced. Included are planographic, intaglio, stencil and relief processes. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007105126)

ARTS 2334 Printmaking II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2333. This course is a continuation of Printmaking I. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007105126)

ARTS 2336 Fibers I (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art majors. This course explores the problems of design, construction, and form utilizing basic fiber techniques. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007125126)

ARTS 2337 Fibers II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2336 This course explores the problems of design, construction, and form utilizing basic fiber techniques. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007125126)

ARTS 2341 Art Metals/Jewelry I (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. This course explores the uses of metal in design, basic fabrication techniques in metal, bezel setting of stones, and simple casting. Emphasis is on original design.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007135126)

ARTS 2342 Art Metals/Jewelry II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2341. Advanced fabrication, lost wax casting, setting of faceted stones, and forging and shaping of metal, including repousse and chasing are presented. Emphasis is on original design.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007135126)

ARTS 2346 Ceramics I (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. This course focuses on the building of pottery forms by coil, slab, and use of the wheel. Glazing and firing are also included. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007115126)

ARTS 2347 Ceramics II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2346 or demonstrated competence approved by the instructor. Glaze technology is studied. Advanced problems in the creation of artistic and practical ceramic works. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007115126)

ARTS 2348 Digital Art I (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, ARTS 1311 and ARTS 1316. Studio art course that explores the potential of the computer hardware and software media for their visual, conceptual, and practical uses in the visual arts. (2 Lec, 4 Lab.)
(Coordinating Board Academic Approval Number 5004025126)

ARTS 2349 Digital Art II (3)
(This is a Texas Common Course Number.)
Prerequisite: ARTS 2348. Studio art course that continues the exploration of the computer hardware and software media for their visual, conceptual, and practical uses in the visual arts. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004025126)

ARTS 2356 Photography I (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. Creative use of the camera is studied. Photosensitive materials are examined as a means of making expressive graphic images. Emphasis is on black and white processing and printing techniques. This course is cross-listed as Photography 2356. The student may register for either Arts 2356 or Photography 2356, but may receive credit for only one of the two.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055126)

ARTS 2357 Photography II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2356. This course is a continuation of Arts 2356. Emphasis is on individual expression. This course is cross-listed as Photography 2357. The student may register for either Arts 2357 or Photography 2357, but may receive credit for only one of the two.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055226)

ARTS 2366 Watercolor I (3)
(This is a Texas Common Course Number.)
Prerequisite: Recommended prerequisites for Art Majors, Arts 1311, Arts 1312, Arts 1316, and Arts 1317. This course explores studio techniques in water base media. Emphasis is placed on exploration of a variety of modes and techniques as a means to original expression. This course may be repeated for credit.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085326)

ARTS 2367 Watercolor II (3)
(This is a Texas Common Course Number.)
Prerequisite: Arts 2366. This course continues the development of skills in water base media.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085326)

ARTS 2370 Art History (3)
(This is a Unique Need Course.)
Prerequisite: Arts 1303 and Arts 1304 are recommended for Art Majors. The development of the art of western culture during the Renaissance Period is presented. Emphasis is on the development of Renaissance art in Northern and Southern Europe. (3 Lec.)
(Coordinating Board Academic Approval Number 5007039126)

ARTS 2371 Art History (3)
(This is a Unique Need Course.)
Prerequisite: Arts 1303 and Arts 1304 are recommended for Art Majors. The development of the art of western culture from the late 19th century through today is presented. Emphasis is on the development of modern art in Europe and America. (3 Lec.)
(Coordinating Board Academic Approval Number 5007039226)

ARTS 2372 Commercial Arts I (3)
(This is a Unique Need Course.)
Prerequisite: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art majors. The working world of commercial art is introduced. Typical commercial assignments are used to develop professional attitudes and basic studio skills.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004027126)

ARTS 2389 Academic Cooperative in Art, Photography/Digital Imaging (3)
(This is a Texas Common Course Number.)
An instructional program designed to integrate on-campus study with practical hands-on work experience in the humanities and/or fine arts. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of languages, art, music, philosophy, or religion. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2401035212)

ARTV 1301 Animation 2-D (3)
(This is a WECM Course Number.)
Skill development in the use of software to develop storyboards and two-dimensional animation including creating, importing, and sequencing media elements to create multimedia presentation. Emphasis on conceptualization, creativity, and visual aesthetics. This course is cross-listed as ARTV 1401. The student may register for either ARTV 1301 or ARTV 1401, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

ARTV 1401 Animation 2-D (4)
(This is a WECM Course Number.)
Skill development in the use of software to develop storyboards and two-dimensional animation including creating, importing, and sequencing media elements to create multimedia presentation. Emphasis on conceptualization, creativity, and visual aesthetics. This course is cross-listed as ARTV 1301. The student may register for either ARTV 1401 or ARTV 1301, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

AUMT 1280 Cooperative Education-Auto/Automotive Mechanic/Technician (2)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. This course is cross-listed as AUMT 1380. The student may register

for either AUMT 1280 or AUMT 1380, but may receive credit for only one of the two. (1 Lec., 15 Ext.)

AUMT 1281 Cooperative Education-Auto/Automotive Mechanic/Technician (2)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

AUMT 1305 Introduction to Automotive Technology (3)
(This is a WECM Course Number.)
An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance. May be taught manufacturer specific.
(2 Lec., 4 Lab.)

AUMT 1306 Automotive Engine Removal and Installation (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1305 or concurrent enrollment in AUMT 1305. Fundamentals of engine inspection, removal and installation procedures. May be taught manufacturer specific. (2 Lec., 4 Lab.)

AUMT 1307 Automotive Electrical Systems (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1305 or concurrent enrollment in AUMT 1305. An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of batteries, charging and starting systems, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. May be taught manufacturer specific. (2 Lec., 4 Lab.)

AUMT 1310 Automotive Brake Systems (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1307 or concurrent enrollment in AUMT 1307. Operation and repair of drum/disc type brake systems. Emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. May be taught with manufacturer specific instructions. (2 Lec., 4 Lab.)

AUMT 1316 Automotive Suspension and Steering Systems (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1307 or concurrent enrollment in AUMT 1307. A study of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. May be taught manufacturer specific. (2 Lec., 4 Lab.)

AUMT 1319 Automotive Engine Repair (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1305 or concurrent enrollment in AUMT 1305. Fundamentals of engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, and disassembly, repair, and reassembly of the engine. May be taught manufacturer specific. (2 Lec., 4 Lab.)

AUMT 1345 Automotive Heating and Air Conditioning (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1307 or concurrent enrollment in AUMT 1307. Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements. May be taught manufacturer specific. (2 Lec., 4 Lab.)

AUMT 1380 Cooperative Education-Automobile/Automotive Mechanics Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. This course is cross-listed as AUMT 1280. The student may register for either AUMT 1380 or AUMT 1280, but may receive credit for only one of the two. (1 Lec., 20 Ext.)

AUMT 1381 Cooperative Education-Automobile/Automotive Mechanics Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

AUMT 2280 Cooperative Education-Automobile/Automotive Mechanics Technology/Technician (2)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

AUMT 2281 Cooperative Education-Auto/Automotive Mechanic/Technician (2)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

AUMT 2311 Automotive Electronic Controls (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1307. A study of electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. May be taught manufacturer specific. (2 Lec., 4 Lab.)

AUMT 2313 Automotive Drive Train and Axles (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1305 or concurrent enrollment in AUMT, 1305. A study of automotive clutches, clutch operation devices, manual transmissions/ transaxles, and differentials with emphasis on the diagnosis and repair of transmissions/transaxles and drive lines. May be taught with manufacturer specific instructions.
(2 Lec., 4 Lab.)

AUMT 2317 Automotive Engine Performance Analysis I (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1307. Theory, operation, diagnosis, and repair of basic engine dynamics, ignition systems, and fuel delivery systems. Use of basic engine performance diagnostic equipment. May be taught with manufacturer specific instructions. (2 Lec., 4 Lab.)

AUMT 2325 Automotive Automatic Transmission and Transaxle (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1307. A study of the operation, hydraulic principles, and related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and proper repair techniques. May be taught manufacturer specific.
(2 Lec., 4 Lab.)

AUMT 2332 Automotive Automatic Transmission and Transaxle II (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 2325. A study of electronic controls and actuators and the related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, service, and repair procedures with emphasis on the use of special tools, and proper repair techniques. May be taught manufacturer specific. (2 Lec., 4 Lab.)

AUMT 2334 Automotive Engine Performance Analysis II (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 2317. A study of diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment. May be taught manufacturer specific. (2 Lec., 4 Lab.)

AUMT 2340 Automotive Alternative Fuels (3)
(This is a WECM Course Number.)
Prerequisite: AUMT 1307. A study of the composition and use of various alternative automobile fuels including retrofit procedures and applications, emission standards, availability, and course effectiveness. Overview of federal and state legislation concerning fuels.
(2 Lec., 4 Lab.)

AUMT 2375 Powertrain Diagnostics (3)
(This is a WECM Local Need Course.)
Prerequisite: AUMT 2334 or AUMT 2374. Diagnosis and repair of powertrain systems including engine and/or transmission systems; with emphasis on the application of advanced diagnostic information, tools and techniques. May be taught manufacturer specific.
(2 Lec., 4 Lab.)

AUMT 2380 Cooperative Education-Automobile/Automotive Mechanics Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval.
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

AUMT 2381 Cooperative Education-Automobile/Automotive Mechanics Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

AVIM 2331 Airline Management (3)
(This is a WECM Course Number.)
An examination of the organization, operation, and management of airlines. Topics include financing, aircraft selection, route feasibility studies, load factors, and marketing. (3 Lec.)

AVIM 2335 Airport Management (3)
(This is a WECM Course Number.)
A study of the major functions of airport management including facilities and services, organization, human resources, maintenance, planning and zoning, operations, revenues and expenses, public relations, ecology, and safety. (3 Lec.)

AVIM 2337 Aviation Law (3)
(This is a WECM Course Number.)
A study of the historical development of aviation law including in-depth coverage of constitutional, criminal, civil, common, and international law as it relates to aviation activities. (3 Lec.)

AVIM 2339 Aviation Marketing (3)
(This is a WECM Course Number.)
A study of the significance and functions of airline marketing including market research, sales, advertising and promotion, traffic demand analysis, and price determination theory. (3 Lec.)

AVIM 2380 Cooperative Education - Aviation Management (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

AVNC 1303 Introduction to Aircraft Electronic Systems (3)
(This is a WECM Course Number.)
This course is a study of the relationship between aircraft electronic systems and aircraft flight and navigation. Emphasis on the operation and function of the electronic systems and the operation of the systems and ramp. The student will describe the function and operation of aircraft electronic systems and operate aircraft electronic systems. (2 Lec., 2 Lab.)

AVNC 1443 Aircraft Electrical and Electronic Systems Installation (4)
(This is a WECM Course Number.)
Prerequisite: AVNC 1303. This course is a study of and practical experience in the installation of avionic systems in aircraft, mounting electronic equipment, construction and installation of electrical wiring and cables, proper use of tools, and selection of materials. The student will describe and lay out avionic systems and install avionic systems. (3 Lec., 3 Lab.)

AVNC 1453 Operational Testing of Aircraft Electronic Systems (4)
(This is a WECM Course Number.)
Prerequisite: AVNC 1303. Topics in this course include integration of technical drawing interpretation, wiring interface checkout, and the application of ramp test equipment in common usage. Emphasis on performance of functional checks of aircraft electrical and electronic systems. The student will identify, describe, and use proper procedures and techniques for testing aircraft electronic systems. (3 Lec., 3 Lab.)

BCIS 1405 Business Computer Applications (4)
(This is a Texas Common Course Number.)
The main focus of this course is on business applications of software, including word processing, spreadsheets, databases, presentation graphics, and business-oriented use of the Internet. Topics include computer terminology, hardware, software, operating systems, and information systems. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1102025404)

BCIS 1431 Programming in Visual BASIC (4)
(This is a Texas Common Course Number.)
Prerequisite: BCIS 1405 or COSC 1401 or demonstrated competence approved by the instructor. Introduction to business programming techniques using Visual BASIC with an emphasis on the fundamentals of design, development, testing, implementation, and documentation. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1102025204)

BCIS 2390 Systems Analysis and Design (3)
(This is a Texas Common Course Number.)
Prerequisite: Any programming course or demonstrated competence approved by the instructor. Analysis of business information needs and preparation of specifications and requirements for appropriate data system solutions. Topics include information requirements analysis, specification development and writing, prototype evaluation, and network application interfaces. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1105015104)

BCIS 2431 Advanced Programming in Visual BASIC (4)
(This is a Texas Common Course Number.)
Prerequisite: BCIS 1431 or demonstrated competence approved by the instructor. Advanced applications and business programming techniques using Visual BASIC. Topics include file access methods, data structures, modular programming, program testing, and documentation. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1102025304)

BIOL 1406 Biology for Science Majors I (4)
(This is a Texas Common Course Number.)
Prerequisite: One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards. An introductory survey of contemporary biology for students majoring in the sciences. Topics emphasized will include the chemical basis of life, structure and function of cells, energy transformations, and molecular biology and genetics. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2601015103)

BIOL 1407 Biology for Science Majors II (4)
(This is a Texas Common Course Number.)
Prerequisite: Biology 1406 Biology for Science Majors I. An introductory survey of current biological concepts for students majoring in the sciences. Emphasis will be placed on topics which include evolution, biological diversity, ecology, and comparative structure and function of organisms. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2601015103)

BIOL 1408 Biology for Non-Science Majors I (4)
(This is a Texas Common Course Number.)
Presentation of biological concepts for the non-science major. Emphasis will be on scientists and their contributions to the science field, scientific problem solving, unity of life including cells and genetic information, energy pathways important to life, and current issues in biology. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2601015103)

BIOL 1409 Biology for Non-Science Majors II (4)
(This is a Texas Common Course Number.)
Presentation of biological concepts for the non-science major. Emphasis will be on current biological concepts pertaining to evolutionary and behavioral adaptations, biological diversity, ecology, form and function of organisms. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2601015103)

BIOL 1411 Introductory Botany (4)
(This is a Texas Common Course Number.)
Prerequisite: One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards. This course introduces plant form and function. Topics ranging from the cell through organs are included. Emphasis is on the vascular plants, including the taxonomy and life cycles of major plant divisions. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2603015103)

BIOL 1424 Intermediate Botany (4)
(This is a Texas Common Course Number.)
Prerequisite: Biology 1406 and 1407. The major plant groups are surveyed. Emphasis is on morphology, physiology, classification, and life cycles. Evolutionary relationships of plants to each other and their economic importance to humans are also covered. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2603015203)

BIOL 2306 Environmental Biology (3)
(This is a Texas Common Course Number.)
Prerequisite: One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards. The principles of aquatic and terrestrial communities are presented. Emphasis is on the relationship of these principles to the problems facing people in a modern technological society. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0301025101)

BIOL 2370 Field Biology (3)
(This is a Unique Need Course.)
Prerequisite: One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards. Local plant and animal life are surveyed in relationship to the environment. Aquatic and terrestrial communities are studied with reference to basic ecological principles and techniques. Emphasis is upon classification, identification, and collection of specimens in the field. This course may be repeated for credit. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2613019203)

BIOL 2401 Anatomy and Physiology I (4)
(This is a Texas Common Course Number.)
Prerequisite: Biology 1406 or SCIT 1407. This course examines cell structure and function, tissues, and the skeletal, muscular, and nervous systems. Emphasis is on structure, function, and the interrelationships of the human systems. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2607075103)

BIOL 2402 Anatomy and Physiology II (4)
(This is a Texas Common Course Number.)
Prerequisite: Biology 2401. This is the second course of a two-course sequence. Structure and function as related to the human circulatory, respiratory, urinary, digestive, reproductive, and endocrine systems are studied. Emphasis is placed on the interrelationships of these systems. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2607075103)

BIOL 2406 Environmental Biology (4)
(This is a Texas Common Course Number.)
Prerequisite: One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards. The principles of aquatic and terrestrial communities are presented. Emphasis is on the relationship of these principles to the problems facing people in a modern technological society. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0303035101)

BIOL 2416 Genetics (4)
(This is a Texas Common Course Number.)
Prerequisite: Biology 1406. This course focuses on genetics. Topics include Mendelian inheritance, recombinant genetics, the biochemical theory of genetic material, and mutation theory. Plant and animal materials are used to study population genetics, linkage, gene structure and function, and other concepts of heredity. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2608045103)

BIOL 2418 Invertebrate Zoology (4)
(This is a Unique Need Course.)
Prerequisite: Eight hours of biological science. This course surveys the major groups of animals below the level of chordates. Consideration is given to phylogeny, taxonomy, morphology, physiology, and biology of the various groups. Relationships and importance to higher animals and humans are stressed. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2607079303)

BIOL 2420 Microbiology for Non-Science Majors (4)
(This is a Texas Common Course Number.)
Prerequisite: Biology 1406 or SCIT 1407 or BIOL 2401. An overview of the morphology, physiology, and taxonomy of representative groups of pathogenic and non-pathogenic organisms. Emphasis is placed on applications to humans and techniques used in growing pure cultures of microorganisms on selected media. A brief preview on public health issues is also presented. Designed for non-science majors and allied health students. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2605035103)

BIOL 2421 Microbiology for Science Majors (4)
(This is a Texas Common Course Number.)
Prerequisite: Biology 1406, Biology 1407 and Chemistry 1411. A study of the morphology, physiology, and taxonomy of representative groups of pathogenic and non-pathogenic organisms. Emphasis is placed on relationships that influence humans: public health, infectious diseases, and immunology, biotechnology, and environmental and industrial applications. Lab experimentation with pure cultures and selected media will be used to study extensively the medical, environmental, and industrial importance of these microbes. Designed for students in science or pre-professional programs. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2605035103)

BIOL 2428 Comparative Anatomy of the Vertebrates (4)
(This is a Texas Common Course Number.)
Prerequisite: Biology 1406 and Biology 1407. For science majors and pre-medical and pre-dental students. Major groups of vertebrates are studied. Emphasis is on morphology and evolutionary relationships.
(3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2607015303)

BITC 1301 Biotechnology Laboratory Instrumentation (3)
(This is a WECM Course Number.)
Prerequisite: BITC 1311 and/or approval of instructor. The student will demonstrate proper handling of laboratory chemicals; operate common analytical instruments; describe the theory and applications of various analytical instruments including types of electrophoresis, spectrophotometry, chromatography, and centrifugation; and practice laboratory safety.
(2 Lec., 4 Lab.)

BITC 1302 Biotechnology Laboratory Methods and Techniques (3)
(This is a WECM Course Number.)
Prerequisite: BITC 1311 and/or approval of the instructor. A study of laboratory operations, management, equipment, instrumentation, quality control techniques, and safety procedures. Laboratory practice in using pH meters, mixing buffers, performing measurements, preparing solutions, and performing separatory techniques to specifications; and practice laboratory safety. (2 Lec., 3 Lab.)

BITC 1311 Introduction to Biotechnology (3)
(This is a WECM Course Number.)
An introduction to biotechnology including career exploration, history and applications of DNA/RNA technology, molecular biology, bioethics, and laboratory safety practices. (2 Lec., 3 Lab.)

BITC 1391 Special Topics in Biological Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: BITC 1311 and/or approval of instructor. Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(3 Lec.)

BITC 2286 Internship- Biology Technician/ Biotechnology Laboratory Technician (2)
(This is a WECM Course Number.)
Prerequisite: BITC 1311 and BITC 1302 and/or approval of instructor. A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. This course is cross-listed as BITC 2486. The student may register for either BITC 2286 or BITC 2486, but may receive credit for only one of the two. (6 Ext)

BITC 2401 Molecular Biology Techniques (4)
(This is a WECM Course Number.)
Prerequisite: BITC 1311 and/or approval of instructor. An introduction to the theory and laboratory techniques in molecular biology with an emphasis on proteins, gene expression and regulation, recombinant DNA, and nucleic acids. (3 Lec., 4 Lab.)

BITC 2431 Cell Culture Techniques (4)
(This is a WECM Course Number.)
Prerequisite: BITC 1311 and/or approval of instructor. A study of cell culture techniques. Laboratory emphasis on the principles and practices of initiation, cultivation, maintenance, preservation of cell lines and applications. (3 Lec., 4 Lab.)

BITC 2486 Internship- Biology Technician/Biotechnology Laboratory Technician (4)
(This is a WECM Course Number.)
Prerequisite: BITC 1311 and/or approval of instructor. A work based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. This course is cross-listed as BITC 2286. The student may register for either BITC 2486 or BITC 2286, but may receive credit for only one of the two. (12 Ext.)

BMGT 1191 Special Topics in Business Administration and Management, General (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

BMGT 1303 Principles of Management (3)
(This is a WECM Course Number.)
Concepts, terminology, principles, theories and issues in the field of management. (3 Lec.)

BMGT 1305 Communications in Management (3)
(This is a WECM Course Number.)
Basic theory and processes of communication skills necessary for the management of an organization's workforce. (3 Lec.)

BMGT 1306 Facilities Management (3)
(This is a WECM Course Number.)
For individuals whose responsibility includes general management and supervision of public buildings, business and industrial facilities, and other complexes requiring supervision and control. Includes fire alarm maintenance, plant maintenance, occupational safety, OSHA rules and regulations, management of maintenance supervisors, and hazardous materials awareness. (2 Lec., 4 Lab.)

BMGT 1313 Principles of Purchasing (3)
(This is a WECM Course Number.)
The purchasing process as it relates to such topics as inventory control, price determination, vendor selection, negotiation techniques, and ethical issues. (3 Lec.)

BMGT 1382 Cooperative Education - Business Administration And Management, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student should have previous credit in or concurrent enrollment in BMGT 1301 or demonstrated competence approved by the instructor. (1 Lec., 14 Ext.)

BMGT 1383 Cooperative Education - Business Administration And Management, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student should have previous credit in or concurrent enrollment in HRPO 2301 or demonstrated competence approved by the instructor. (1 Lec., 14 Ext.)

BMGT 1391 Special Topics in Business Administration and Management, General (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

BMGT 2303 Problem Solving and Decision Making (3)
(This is a WECM Course Number.)
Decision making and problem solving processes in organizations, utilizing logical and creative problem solving techniques. Application of theory is provided by experiential activities such as small group discussions, case studies, and the use of other managerial decision aids. (3 Lec.)

BMGT 2331 Total Quality Management (3)
(This is a WECM Course Number.)
Quality of productivity in organizations. Includes planning for quality throughout the organization, analysis of costs of quality, and employee empowerment. (3 Lec.)

BMGT 2341 Strategic Management (3)
(This is a WECM Course Number.)
Strategic management process involving analysis of how organizations develop and implement a strategy for achieving organizational objectives in a changing environment. (3 Lec.)

BMGT 2347 Critical Thinking and Problem Solving (3)
(This is a WECM Course Number.)
Instruction in interpreting data for effective problem solving and recommending corrective action with emphasis on a structured approach to critical thinking and problem solving in a team environment. (3 Lec.)

BMGT 2382 Cooperative Education - Business Administration And Management, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student should have previous credit in or concurrent enrollment in HRPO 2307 or demonstrated competence approved by the instructor. (1 Lec.; 14 Ext.)

BMGT 2383 Cooperative Education - Business Administration And Management, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student should have previous credit in or concurrent enrollment in BMGT 2303 or demonstrated competence approved by the instructor. (1 Lec., 14 Ext.)

BMGT 2384 Cooperative Education - Operations Management and Supervision (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

BNKG 1191 Special Topics in Banking and Financial Services (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

BNKG 1301 Money and Banking (3)
(This is a WECM course.)
Survey of the role of monetary policy and related effects upon financial intermediaries. Overview of financial markets, regulatory functions, and structures. Description of investments and funds management. (3 Lec.)

BNKG 1353 Mortgage Lending (3)
(This is a WECM Course Number.)
Overview of the mortgage lending market and process. Emphasis on documentation, credits evaluation, federal regulation and state laws related to mortgage loans. (3 Lec.)

BNKG 1358 Secondary Market (3)
(This is a WECM Course Number.)
A study of the purpose of the secondary mortgage market and its history. Included are secondary market conduits, review of the basic strategies used in the selling of closed real estate mortgages into the secondary market, conventional and governmental segments, mortgage-backed securities and bonds, regulatory requirements, GNMA mortgage-backed securities, preparing and completing loans for sale, and servicing sold loans. Other topics included are institutional and non-institutional lenders, types of mortgages, and alternative mortgage instruments. (3 Lec.)

BNKG 1359 Loan Servicing (3)
(This is a WECM Course Number.)
This course examines how mortgage lenders handle loans from the time a loan is closed until the final payment is made. The course focuses on the legal aspects and actual procedures used in the daily operations of the loan servicing function. Topics include escrow accounting, contract servicing, governmental regulations, taxing authorities and establishing tax rates and economic impacts of delinquency. (3 Lec.)

BNKG 1370 Loan Closing: Shipping and Warehousing (3)
(This is a WECM Local Need Course.)
The purpose of this course is to prepare the student to understand the dynamics of loan closing and their impact on real estate loans. This course can be one of several to prepare the individual to become more aware of all the aspects of the mortgage banking industry. This course will help students to develop the understanding and skills necessary to become more effective reviewers of real estate loans. This course integrates all aspects of understanding the federal regulations documentation required and the processing of real estate loans. It incorporates the understanding and importance and purpose of each and every document involved in real estate transactions. Various techniques and tools will be reviewed, as will the understanding the importance of properly completion of these legal documents. (3 Lec.)

BNKG 1380 Cooperative Education - Banking and Financial Support Services (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

BNKG 1381 Cooperative Education - Banking and Financial Support Services (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

BNKG 1382 Cooperative Education-Banking and Financial Support Services (3)
(This is a WECM Course Number.)
Completion of two core Mortgage Banking courses, concurrent enrollment in a core or related course or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the development of a personalized on-the-job training plan and discussions with field experts on the application of mortgage banking fundamentals which may include finance, law, lending practices, government regulations and servicing.
(1 Lec., 20 Lab.)

BNKG 1391 Special Topics in Banking and Financial Support Services (3)
(This is a WECM Course Number.)
This course provides the student with comprehensive training in mortgage loan closing with an in-depth study of title commitments/policies, engineer's survey, deed restrictions, and various documents (legal and other) used for residential mortgage loans. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

BNKG 2281 Cooperative Education - Banking and Financial Support Services (2)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

BNKG 2370 Loan Underwriting: Sub Prime (3)
(This is a WECM Local Need Course.)
This course is designed to provide in-depth training for all facets of risk analysis and collateral review pertaining to analyzing the risk and determining the credit grade of the sub-prime mortgage loan. Topics covered in-depth will include, but are not limited to, grading the credit to determine the level of credit grade, analyzing and evaluating documentation to determine credit risk and analyzing the collateral to determine risk of collateral value. (3 Lec.)

BNKG 2371 Loan Servicing (3)
(This is a WECM Local Need Course.)
This specialized course examines how mortgage lenders handle loans from the time a loan is closed until the final payment is made. The course focuses on the legal aspects and actual procedures used in the daily operations of the loan servicing function. Topics include escrow accounting, contract servicing, governmental regulations, taxing authorities and establishing tax rates and economic impacts of delinquency. (3 Lec.)

BNKG 2372 Loan Underwriting (3)
(This is a WECM Local Need Course.)
This course is designed to provide an introduction to mortgage loan underwriting. This will include a review and training in all facets of risk analysis and collateral review. Topics covered in detail will be the conventional underwriting review process. Additional topics will be a basic review of the differences in FHA and VA underwriting requirements and the determination of credit risk and analysis of collateral used in the determination of risk of collateral value used in Sub Prime underwriting. (3 Lec.)

BUSG 1302 E-Business Management (3)
(This is a WECM Course Number.)
Prerequisite: Integrated Software Applications I. Unique aspects of creating and managing an E-Commerce business; topics address the Internet, infrastructure for electronic commerce, markup languages, web-based tools and software, security issues, electronic payment systems, strategies for marketing, sales and purchasing, legal, ethical and tax issues, management functions including how managers plan, exercise leadership, organize, and control the operations. (3 Lec.)

BUSG 1315 Small Business Operations (3)
(This is a WECM Course Number.)
A course in the unique aspects of managing a small business. Topics address management functions including how managers plan, exercise leadership, organize, and control the operations. (3 Lec.)

BUSG 1341 Small Business Financing (3)
(This is a WECM Course Number.)
A study of the financial structure of a small business. Topics address business finance, including where the funds come from and what they are used for; budgeting including planning and preparing, record keeping, taxation, insurance, and banking. (3 Lec.)

BUSG 2309 Small Business Management (3)
(This is a WECM Course Number.)
A course on how to start and operate a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, financial needs, marketing strategies, and legal issues. (3 Lec.)

BUSI 1301 Introduction to Business (3)
(This is a Texas Common Course Number.)
This course provides an introduction to business operations. Topics include: the business system, legal forms of business, organization and management, business functions (production, marketing, finance, risk management, information systems, accounting) and the environments affecting business (the economy, labor, government regulation, social responsibility, law, international business, and technology). (3 Lec.)
(Coordinating Board Academic Approval Number 5201015104)

BUSI 1307 Personal Finance (3)
(This is a Texas Common Course Number.)
Personal financial issues are explored. Topics include financial planning, insurance, budgeting, credit use, home ownership, savings, investment, and tax problems. (3 Lec.)
(Coordinating Board Academic Approval Number 1904015109)

BUSI 2301 Business Law (3)
(This is a Texas Common Course Number.)
This course presents the legal principles affecting business decisions. The law of contracts, agency, sales, negotiable instruments, and secured transactions are specifically covered. (3 Lec.)
(Coordinating Board Academic Approval Number 2201015124)

CBFM 1311 Building Maintenance I (3)
(This is a WECM Course Number.)
Introduction to the basic principles of residential and commercial maintenance and repair. Emphasis on safety, materials, and tool identification. (3 Lec.)

CBFM 2311 Building Maintenance II (3)
(This is a WECM Course Number.)
This course is a continuation of CBFM 1311 which includes principles of residential and commercial maintenance and repair. Emphasis on safety, materials, and tool identification. (3 Lec. / 2 Lec., 3 Lab.)

CBFM 2317 Mechanical Maintenance (3)
(This is a WECM Course Number.)
Study of the general principles of mechanical and electrical systems as related to inspection, repair, and preventive maintenance of facility equipment. Lab required. (2 Lec., 3 Lab.)

CDEC 1141 CDA Preparation for Assessment (1)
(This is a WECM Course Number.)
Course designed to assist students in preparation for the CDA Credential assessment; write CDA competency statements and complete a CDA professional file.
(1 Lec.)

CDEC 1166 Practicum or (Field Experience) - Child Care Provider/Assistant (1)
(This is a WECM Course Number.)
Prerequisite: Concurrent enrollment in CDEC 2322. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. (7 Ext.)

CDEC 1167 Practicum or (Field Experience) - Child Care Provider/Assistant (1)
(This is a WECM Course Number.)
Prerequisite: CDEC 1317, 2322 and 2324 or concurrent enrollment: Third CDA Training course taken. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This

course may be repeated if topics and learning outcomes vary. (7 Ext.)

CDEC 1303 Family and the Community (3)
(This is a WECM Course Number.)
A study of the relationship between the child, the family, the community, and early childhood educators, including a study of parent education, family and community lifestyles, child abuse, and current issues. There is a credit sequel to this course. This same course with the prefix/number TECA 1303 can be taken for academic transfer credit. See course TECA 1303. (3 Lec.)

CDEC 1313 Curriculum Resources for Early Childhood Programs (3)
(This is a WECM Course Number.)
A study of the fundamentals of curriculum design and implementation in developmentally appropriate programs for children. This course is cross-listed as CDEC 1413. The student may register for either CDEC 1313 or CDEC 1413, but may receive credit for only one of the two. (3 Lec.)

CDEC 1317 Child Development Associate Training I (3)
(This is a WECM Course Number.)
Based on the requirements for the Child Development Associate National Credential (CDA). Topics on CDA overview, general observation skills, and child growth and development overview. The four functional areas of study are creative, cognitive, physical, and communication. (3 Lec.)

CDEC 1318 Nutrition, Health, and Safety (3)
(This is a WECM Course Number.)
A study of nutrition, health, safety, and related activities, including skill development in management of issues, guidelines, and practices in nutrition, as well as community health, hygiene, safety, and legal implications. Integration of these principles applied to a variety of settings. There is a credit sequel to this course. This same course with the prefix/number TECA 1318 can be taken for academic transfer credit. See course TECA 1318. (2 Lec., 2 Lab.)

CDEC 1319 Child Guidance (3)
(This is a WECM Course Number.)
An exploration of guidance strategies for promoting prosocial behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement and cultural influences. Practical application through direct participation with children. (3 Lec.)

CDEC 1321 The Infant and Toddler (3)
(This is a WECM Course Number.)
Prerequisite: CDEC 1339. A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality caregiving routines, appropriate environments, materials and activities, and teaching/guidance techniques. This course is cross-listed as CDEC 1421. The student may register for either CDEC 1321 or CDEC 1421, but may receive credit for only one of the two. (3 Lec.)

CDEC 1323 Observation and Assessment (3)
(This is a WECM Course Number.)
A study of child development observation, assessment skills and techniques. (3 Lec.)

CDEC 1330 Growth and Development: 6-14 years (3)
(This is a WECM Course Number.)
A study of the principles of child growth and development from six through thirteen years. Focus on physical, cognitive, social, and emotional domains of development. (3 Lec.)

CDEC 1334 School- Age Activities and Group Dynamics (3)
(This is a WECM Course Number.)
Prerequisite: CDEC 1330 and 2341. This course explores the theoretical, developmental, and practical application basis for school-age activities as a means of facilitating children's education and development. This course is cross-listed as CDEC 1434. The student may register for either CDEC 1334 or CDEC 1434, but may receive credit for only one of the two. (3 Lec.)

CDEC 1335 Early Childhood Development: 3-5 years (3)
(This is a WECM Course Number.)
This course covers the principles of normal growth and development from three to five years. Emphasis is on physical, emotional, and social development. (3 Lec.)

CDEC 1339 Early Childhood Development: 0-3 years (3)
(This is a WECM Course Number.)
This course covers the principles of normal growth and development from conception through three years of age. Emphasis is on physical, intellectual, and social development. (3 Lec.)

CDEC 1340 Instructional Techniques for Children with Special Needs (3)
(This is a WECM Course Number.)
Prerequisite: CDEC 1323 and 1359. Exploration of development and implementation of curriculum for children with special needs. This course is cross-listed as CDEC 1440. The student may register for either CDEC 1340 or CDEC 1440, but may receive credit for only one of the two. (3 Lec.)

CDEC 1343 Independent Study in Child Development (3)
(This is a WECM Course Number.)
Topic of career focus identified by the student with program approval; research, presentation of findings, and practical applications are emphasized as they relate to the selected topic. (3 Lec.)

CDEC 1356 Emergent Literacy for Early Childhood (3)
(This is a WECM Course Number.)
An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based, integrated curriculum. (3 Lec.)

CDEC 1357 Math and Science for Early Childhood (3)
(This is a WECM Course Number.)
An exploration of principles, methods, and materials for teaching children math and science concepts through discovery and play. (3 Lec.)

CDEC 1359 Children with Special Needs (3)
(This is a WECM Course Number.)
A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role, and legislative issues. (3 Lec.)

CDEC 1395 Special Topics in Early Childhood Provider/Assistant (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

CDEC 1396 Special Topics in Administration of Programs for Children (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

CDEC 1411 Introduction to Early Childhood Education (4)
(This is a WECM Course Number.)
An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues. There is a credit sequel to this course. This same course with the prefix/number TECA 1311 can be taken for academic transfer credit. See course TECA 1311. (3 Lec., 2 Lab.)

CDEC 1413 Curriculum Resources for Early Childhood Programs (4)
(This is a WECM Course Number.)
Fundamentals of curriculum design and implementation in developmentally appropriate programs for young children. This course is cross-listed as CDEC 1313. The student may register for either CDEC 1413 or CDEC 1313, but may receive credit for only one of the two. (3 Lec., 2 Lab.)

CDEC 1454 Child Growth and Development (4)
(This is a WECM Course Number.)
A study of the principles of normal child growth and development from conception to adolescence. Focus on physical, cognitive, social, and emotional domains of development. There is a credit sequel to this course. This same course with the prefix/number TECA 1354 can be taken for academic transfer credit. See course TECA 1354. (3 Lec., 2 Lab.)

CDEC 2187 Internship - Child Care Provider/Assistant (1)
(This is a WECM Course Number.)
Prerequisite: Concurrent enrollment with CDEC 1313. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (3 Ext.)

CDEC 2188 Internship - Child Care Provider/Assistant (1)
(This is a WECM Course Number.)
Prerequisite: CDEC 1339 and CDEC 1321. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (3 Ext.)

CDEC 2189 Internship - Child Care Provider/Assistant (1)
(This is a WECM Course Number.)
Prerequisite: CDEC 1330, CDEC 1334 and CDEC 2341. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (3 Ext.)

CDEC 2280 Cooperative Education – Early Childhood Provider/ Assistant (2)
(This is a WECM Course Number.)
Prerequisite: Two previous CDEC/TECA courses. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Ext.)

CDEC 2281 Cooperative Education - Child Care Provider/Assistant (2)
(This is a WECM Course Number.)
Prerequisite: All CDEC/ TECA courses in the Early Childhood Training Certificate. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Ext.)

CDEC 2284 Cooperative Education - Child Development (2)
(This is a WECM Course Number.)
Prerequisite: All CDEC/TECA courses in Child Development: Intervention Specialist Certificate. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid and /or non-paid work experience. This course may be repeated if topics and learning outcomes vary.
(1 Lec., 10 Ext.)

CDEC 2286 Internship – Child Care Provider/Assistant (2)
(This is a WECM Course Number.)
Prerequisite: CDEC/TECA 1318, 1311, 1354, 1319, 1313. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (8 Ext.)

CDEC 2287 Internship – Child Care Provider/Assistant (2)
(This is a WECM Course Number.)
Prerequisite: CDEC 2286. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (8 Ext.)

CDEC 2288 Internship – Child Care Provider Assistant (2)
(This is a WECM Course Number.)
Prerequisite: CDEC 1323, 1359, 1340. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (8 Ext.)

CDEC 2289 Internship – Child Care Provider Assistant (2)
(This is a WECM Course Number.)
Prerequisite: CDEC 2326, 2328, 2336. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (6 Ext.)

CDEC 2304 Child Abuse and Neglect (3)
(This is a WECM Course Number.)
Methods used by child care workers in the identification of physical, emotional, and sexual abuse and neglect with an emphasis on developing skills for working with children and families. Includes methods of referral to public and private agencies that deal with investigation and treatment. (3 Lec.)

CDEC 2315 Diverse Cultural/Multilingual Education (3)
(This is a WECM Course Number.)
An overview of multicultural education to include relationship with the family and community to develop awareness and sensitivity to diversity related to individual needs of children. (3 Lec.)

CDEC 2322 Child Development Associate Training II (3)
(This is a WECM Course Number.)
Concurrent enrollment with CDEC 1166. A continuation of the study of the requirements for the Child Development Associate National Credential (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance. (3 Lec.)

CDEC 2324 Child Development Associate Training III (3)
(This is a WECM Course Number.)
Concurrent enrollment with CDEC 1167. Continuation of the requirements for the Child Development Associate National Credential (CDA). Three of the 13 functional areas of study include family, program management and professionalism. (3 Lec.)

CDEC 2326 Administration of Programs for Children I (3)
(This is a WECM Course Number.)
A practical application of management procedures for early child care education programs, including a study of planning, operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluating, and communication. (3 Lec.)

CDEC 2328 Administration of Programs for Children II (3)
(This is a WECM Course Number.)
Prerequisite: Child Development 2326. An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy, professionalism, fiscal analysis and planning, parent education/partnerships, and technical applications in programs. (3 Lec.)

CDEC 2336 Administration of Programs for Children III (3)
(This is a WECM Course Number.)
Prerequisite: CDEC 2326 and 2328. An advanced study of the skills and techniques in managing early child care and education programs. (3 Lec.)

CDEC 2341 The School Age Child (3)
(This is a WECM Course Number.)
A study of appropriate programs for the school age child (5 to 13 years), including an overview of development, appropriate environments, materials, and activities and teaching/guidance techniques. This course is cross-listed as CDEC 2441. The student may register for either CDEC 2341 or CDEC 2441, but may receive credit for only one of the two. (3 Lec.)

CDEC 2380 Cooperative Education - Child Care Provider/Assistant (3)
(This is a WECM Course Number.)
Prerequisite: Two previous CDEC/TECA courses. An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience. (1 Lec., 15 Lab.)

CDEC 2480 Cooperative Education-Early Childhood Provider/Assistant (4)
(This is a WECM Course Number.)
Prerequisite: Two previous CDEC/TECA courses. An intermediate or advanced course with lecture and work-based instructions that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience. (1 Lec., 22 Ext.)

CETT 1331 Technical Programming (3)
(This is a WECM Course Number.)
Prerequisite: Credit or concurrent enrollment in MATH 1414 or the equivalent. Introduction to a high level programming language such as BASIC, PASCAL, or "C". Topics include structured programming and problem solving as they apply to technical applications.
(2 Lec., 4 Lab.)

CETT 1402 Electricity Principles (4)
(This is a WECM Course Number.)
Principles of electricity including proper use of test equipment, A/C and D/C circuits, and component theory and operation. The student will exhibit knowledge of basic principles of electricity, electrical current, circuitry, and A/C devices; apply Ohm's law to electrical calculations; perform electrical continuity, voltage, and current tests with appropriate meters; and demonstrate electrical safety. (3 Lec., 3 Lab.)

CETT 1403 DC Circuits (4)
(This is a WECM Course Number.)
A study of the fundamentals of direct current including Ohm's law, Kirchhoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements. This course is cross-listed as CETT 1303. The student may register for either CETT 1403 or CETT 1303, but may receive credit for only one of the two. (3 Lec., 3 Lab)

CETT 1405 AC Circuits (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1403. A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. This course is cross-listed as CETT 1305. The student may register for either CETT 1405 or CETT 1305, but may receive credit for only one of the two. (3 Lec., 3 Lab.)

CETT 1407 Fundamentals of Electronics (4)
(This is a WECM Course Number.)
Applies concepts of electricity, electronics, and digital fundamentals; supports programs requiring a general knowledge of electronics. (3 Lec., 2 Lab.)

CETT 1425 Digital Fundamentals (4)
(This is a WECM Course Number.)
An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. This course is cross-listed as CETT 1325. The student may register for either CETT 1425 or CETT 1325, but may receive credit for only one of the two. (3 Lec., 3 Lab.)

CETT 1429 Solid State Devices (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1403 and credit or concurrent enrollment in CETT 1405. A study of diodes, transistor characteristics and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations. This course is cross-listed as CETT 1329. The student may register for either CETT 1429 or CETT 1329, but may receive credit for only one of the two. (3 Lec., 3 Lab)

CETT 1441 Solid State Circuits (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Topics will include JFETs, MOSFETs, oscillators, thyristors, power supply systems, voltage regulators, multistage amplifiers and power amplifiers. (3 Lec., 3 Lab.)

CETT 1445 Microprocessor (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1425. An introductory course in microprocessor software and hardware; its architecture, timing sequence, operation, and programming; and discussion of appropriate software diagnostic language and tools. (3 Lec., 3 Lab.)

CETT 1449 Digital Systems (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. Digital Systems is a course in electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital circuits, digital-to-analog circuits, and large-scale integrated circuits. The student will evaluate the operation of digital systems while operating in correct and fault mode using various test instruments; describe the difference between a digital system and an analog system; and draw a simple block diagram of a digital computer system. (3 Lec., 3 Lab.)

CETT 1457 Linear Integrated Circuits (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. A study of the characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. Application in computation, measurements, instrumentation, and active filtering. (3 Lec., 3 Lab.)

CETT 2337 Microcomputer Control (3)
(This is a WECM Course Number.)
Prerequisite: CETT 1425. A study of microprocessors and microcomputers with an emphasis on embedded controllers for industrial and commercial applications. Topics include RAM, ROM and input/output (I/O) interfacing. Introduction to programming.
(2 Lec., 2 Lab.)

CETT 2433 Digital Computer Circuits (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. Digital Computer circuits is a study of the three major component systems of a digital computer including arithmetic logic operations, RAM and ROM memory systems, and control systems. The student will explain the operation of the three basic sections of any computer system. The student will construct and troubleshoot computer circuits including arithmetic logic units, memory systems, and control systems; describe the function of the BIOS (Basic Input Output System) in a computer system; and how a computer knows what to address when first cold booted. (3 Lec., 3 Lab.)

CETT 2435 Advanced Microprocessors (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1445. An advanced course utilizing the microprocessor in control systems and interfacing. Emphasis on microprocessor hardware and implementation of peripheral interfacing. (3 Lec., 3 Lab.)

CETT 2443 Principles of Color Television (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. This course covers the principles of color television receivers including signal processing circuits and provides color TV theory and hands-on experience in basic color TV service. The student will explain the principles of color television receivers; test color TV receiver circuits for proper operation and verify FCC color television parameters. (3 Lec., 3 Lab.)

CETT 2449 Research and Project Design (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. Principles of electrical/electronic design encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates. The student will build a project using the principles of the electrical/electronic design process; write an operations procedure of an electrical/electronic project; and demonstrate the operation of function of an electrical/electronic project. (2 Lec., 4 Lab.)

CHEF 1301 Basic Food Preparation (3)
(This is a WECM Course Number.)
A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. The student will discuss and prepare various stocks, sauces, soups, fruit, vegetables, starches, sandwiches, salads and dressings. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

CHEF 1302 Principles of Healthy Cuisine (3)
(This is a WECM Course Number.)
Prerequisite: CHEF 2331 with a "C" or better. Introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Adaptation of basic cooking techniques to lower the fat and caloric content. Alternative methods and ingredients will be used to achieve a healthier cooking style. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

CHEF 1305 Sanitation and Safety (3)
(This is a WECM Course Number.)
A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and work place safety standards. (3 Lec., 1 Lab.)

CHEF 1310 Garde Manger (3)
(This is a WECM Course Number.)
Prerequisite: CHEF 2331 with a "C" or better. A study of specialty foods and garnishes. Emphasis on design, techniques, and display of fine foods. Students will learn preparations in the cold kitchen to include salads, appetizers, cold sauces, and cold buffet display principles. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

CHEF 1364 Practicum (or Field Experience) - Culinary Arts/Chef Training (3)
(This is a WECM Course Number.)
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This course may be repeated if topics and learning outcomes vary. (21 Ext.)

CHEF 1441 American Regional Cuisine (4)
(This is a WECM Course Number.)
Prerequisite: CHEF 2331 with a "C" or better. A study of the development of regional cuisine's in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and build a portfolio of recipe strategies and production systems. Students will work in groups to plan, execute and evaluate a weekly meal served to the public. Focus will be on menu and production planning, as well as cost analysis. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 6 Lab.)

CHEF 1445 International Cuisine (4)
(This is a WECM Course Number.)
Prerequisite: CHEF 2331 with a "C" or better. The study of classical cooking skills associated with the preparation and service of international and ethnic cuisines. Topics include similarities between food production systems used in the United States and other regions of the world. Students will work in groups to plan, execute and evaluate a weekly meal served to the public. Focus will be on menu and production planning, as well as cost analysis. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 6 Lab.)

CHEF 2302 Saucier (3)
(This is a WECM Course Number.)
Prerequisite: CHEF 2331 with a "C" or better. Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. Students will learn classical preparations and butchering skills in addition to plate presentation and design. Emphasis will be on alternative varieties of meats, poultry, game and seafood. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

CHEF 2331 Advanced Food Preparation (3)
(This is a WECM Course Number.)
Prerequisite: CHEF 1301 with a "C" or better. Topics include the concept of pre-cooked food items and the preparation of canapes, hors d'oeuvres, and breakfast items. Meat, seafood, and poultry preparation, baking and menu planning are also included. The student will discuss and review Basic Food Preparation. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

CHEF 2341 Advanced Culinary Competition (3)
(This is a WECM Course Number.)
Prerequisite: CHEF 2331 or PSTR 2331 with a "C" or better. Skill development for culinary competition by offering advanced experience in salon presentations as well as hot food competition. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

CHEF 2364 Practicum (or Field Experience) - Culinary Arts/Chef Training (3)
(This is a WECM Course Number.)
Prerequisite: CHEF 1364. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This course may be repeated if topics and learning outcomes vary. (21 Ext.)

CHEM 1104 Chemical Calculations (1)
(This is a Texas Common Course Number.)
Chemical calculations are studied. This course is intended for students needing additional practice or preparation. Variable credit (one or two hours) is available. (1 Lec.)
(Coordinating Board Academic Approval Number 4005025203)

CHEM 1204 Chemical Calculations (2)
(This is a Texas Common Course Number.)
Prerequisite: Chemistry 1411. Chemical calculations are reviewed. Emphasis is on stoichiometry and chemical equilibrium. (2 Lec.)
(Coordinating Board Academic Approval Number 4005025203)

CHEM 1405 Introductory Chemistry I (4)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Mathematics 0091 or the equivalent. This course is for non-science majors. Fundamental concepts are presented in lecture and laboratory including the periodic table, atomic structure, chemical bonding, reactions, stoichiometry, states of matter, properties of metals, nonmetals and compounds, acid-base theory, oxidation-reduction and solutions. Descriptive chemistry is emphasized. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4005015103)

CHEM 1407 Introductory Chemistry II (4)
(This is a Texas Common Course Number.)
Prerequisite: Chemistry 1405 or demonstrated competence approved by the instructor. This course is for non-science majors. It surveys organic chemistry and biochemistry. The reactions, syntheses, nomenclature, uses, purposes and properties of the important classes of organic and biochemical compounds are studied.
(3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4005015103)

CHEM 1411 General Chemistry I (4)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Mathematics 0093 or the equivalent and one of the following: high school chemistry, Chemistry 1405, or the equivalent. This course is for science and science-related majors. Fundamental concepts of chemistry are presented including measurement and the metric system, the history of chemistry, the mole concept, chemical reactions and stoichiometry, energy and chemical reactions, states and properties of matter, the periodic table, chemical bonding, atomic and molecular structure, gas laws, and concentrations of solutions.
(3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4005015203)

CHEM 1412 General Chemistry II (4)
(This is a Texas Common Course Number.)
Prerequisite: Chemistry 1411. This course is for science and science-related majors. It is a continuation of Chemistry 1411. Topics include states of matter, phase diagrams and intermolecular interactions; reaction kinetics, chemical equilibrium, modern acid-base theory, buffers, chemical thermodynamics, colligative properties of solutions, electrochemistry and nuclear chemistry. Topics may further include transition-metal chemistry, an introduction to organic chemistry and qualitative inorganic analysis. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4005015203)

CHEM 2401 Quantitative Analysis (4)
(This is a Texas Common Course Number.)
Prerequisite: Chemistry 1412, Mathematics 1314 or Mathematics 1414. A survey of methods used in analytical chemistry: gravimetric and volumetric methods based on equilibria, oxidation-reduction, and acid-base theory, spectrophotometry, chromatography and electroanalytical chemistry. (2 Lec., 6 Lab.)
(Coordinating Board Academic Approval Number 4005025103)

CHEM 2402 Instrumental Analysis (4)
(This is a Texas Common Course Number.)
Prerequisite: Chemistry 2401 or demonstrated competence approved by the instructor. The role of modern electronic instrumentation in analysis is explored. Topics include infrared and ultraviolet spectroscopy, gas chromatography, potentiometric titration, electrochemistry, continuous flow analysis, scintillation counting, electrophoresis, flame photometry, and atomic absorption spectro-photometry as analytical tools. (2 Lec., 6 Lab.)
(Coordinating Board Academic Approval Number 4005025103)

CHEM 2423 Organic Chemistry I (4)
(This is a Texas Common Course Number.)
Prerequisite: Chemistry 1412. This course is for science and science-related majors. It introduces the fundamental classes of organic (carbon) compounds, and begins the study of aliphatic and aromatic compounds, including nomenclature, structure and isomerism, stereochemistry, types of reactions, common mechanisms and syntheses. Lab includes synthesis, purification by distillation, extraction, recrystallization and chromatography, and identification by physical and chemical means and may include spectroscopic identification. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4005045203)

CHEM 2425 Organic Chemistry II (4)
(This is a Texas Common Course Number.)
Prerequisite: Chemistry 2423. This course is for science and science-related majors. It is a continuation of Chemistry 2423. Topics include properties and syntheses of aliphatic and aromatic systems of aldehydes, ketones, carboxylic acids, esters, ethers, alcohols, amines and amides. Spectroscopy is included. Further topics may include polyfunctional and heterocyclic compounds, amino acids, proteins, lipids, and carbohydrates. Laboratory includes spectroscopy and qualitative organic analysis, and further work in synthesis. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4005045203

CHIN 1311 Introduction to Chinese (3)
(This is a Texas Common Course Number.)
CHIN 1311 is an introduction to the regular Chinese course sequence; it is not a substitute for CHIN 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in CHIN 1411. This course is cross-listed as Chinese 1411. The student may register for either Chinese 1311 or Chinese 1411, but may receive credit for only one of the two.
(3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1603015113)

CHIN 1411 Beginning Chinese I (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. This course is cross-listed as Chinese 1311. The student may register for either Chinese 1411 or Chinese 1311, but may receive credit for only one of the two. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603015113)

CHIN 1412 Beginning Chinese II (4)
(This is a Texas Common Course Number.)
Prerequisite: Chinese 1411 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Chinese 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic expressions and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603015113)

CHIN 2311 Intermediate Chinese I (3)
(This is a Texas Common Course Number.)
Prerequisite: Chinese 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1603015213)

CHIN 2312 Intermediate Chinese II (3)
(This is a Texas Common Course Number.)
Prerequisite: Chinese 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Chinese 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture. (3 Lec.)
(Coordinating Board Academic Approval Number 1603015213)

CJLE 2420 Texas Peace Officer Procedures (4)
(This is a WECM Course Number.)
This course is a study of the techniques and procedures used by police officers on patrol. Includes controlled substance identification, handling abnormal persons, traffic collision investigation, note taking and report writing, vehicle operation, traffic direction, crowd control, and jail operations. (3 Lec., 4 Lab.)

CJLE 2421 Texas Peace Officer Law (4)
(This is a WECM Course Number.)
This course is a study of laws that are directly related to police field work. Topics include traffic, intoxicated driver, Penal Code, elements of crimes, the Family Code, Alcoholic Beverage Code, and civil liability.
(3 Lec., 4 Lab.)

CJLE 2522 Texas Peace Officer Skills (5)
(This is a WECM Course Number.)
This course includes the demonstration and practice of the skills expected of a police officer. Topics include patrol, traffic stops, use of force, mechanics of arrest, firearms safety and emergency medical care.
(4 Lec., 4 Lab.)

CJSA 1382 Cooperative Education - Criminal Justice Studies (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through the paid work experience. The course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

CJSA 1482 Cooperative Education - Criminal Justice Studies (4)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through the paid work experience. The course may be repeated if topics and learning outcomes vary. (1 Lec. 20 Ext.)

CJSA 2382 Cooperative Education - Criminal Justice Studies (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through the paid work experience. The course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

CJSA 2482 Cooperative Education - Criminal Justice Studies (4)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through the paid work experience. The course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

CMSW 1327 Treatment Modalities with Special Populations (3)
(This is a WECM Course Number.)
Introduces the most commonly used and accepted treatment methods in the mental health and mental retardation field. Explores the role of the social service worker and treatment modalities utilized in the outpatient, inpatient, and day treatment areas as they apply to different special populations. (3 Lec.)

CMSW 1353 Families Intervention Strategies (3)
(This is a WECM Course Number.)
Overview of professionally recognized family intervention systems. Topics include theorists in the field and personal awareness. Family assessments and working with the family as a system, in selecting health care services. The intergenerational concepts are introduced. (3 Lec.)

CMSW 1405 Nursing Home Activity Director (4)
(This is a WECM Course Number.)
Preparation for the role of Nursing Home Activity Director. Development in appropriate skills, theory, psychology, and record keeping to meet Texas Department of Health requirements. Topics include program planning, working in groups, developing an activities department, and therapeutic techniques. This course is cross-listed as CMSW 1505. The student may register for either CMSW 1405 or CMSW 1505, but may receive credit for only one of the two. (4 Lec., 1 Lab.)

CMSW 1505 Nursing Home Activity Director (5)
(This is a WECM Course Number.)
Prerequisite: CMSW 1405. Preparation for the role of Nursing Home Activity Director. Development in appropriate skills, theory, psychology, and record keeping to meet Texas Department of Health requirements. Topics include program planning, working in groups, developing an activities department, and therapeutic techniques. The course focuses on how to apply management science principles to the delivery of activities. This course is cross-listed as CMSW 1405. The student may register for either CMSW 1505 or CMSW 1405, but may receive credit for only one of the two. (5 Lec.)

CNBT 1170 Basic Construction Safety (1)
(This is a WECM Local Need Course.)
This course covers basic job site construction safety in commercial and industrial construction. The OSHA 10 safety course outline is followed along with a study of hazardous materials on the job site. Lab required.
(1 Lec.)

CNBT 1201 Introduction to Construction (2)
(This is a WECM Course Number.)
An overview of the construction industry including: organizational structures and systems; safety regulations and agencies; construction documents; office and field organizations; and the various construction crafts and trades. Required. This course is cross-listed as CNBT 1301. The student may register for either CNBT 1201 or CNBT 1301, but may receive credit for only one of the two. (1 Lec., 3 Lab.)

CNBT 1301 Introduction to Construction (3)
(This is a WECM Course Number.)
An overview of the construction industry including: organizational structures and systems; safety regulations and agencies; construction documents; office and field organizations; and the various construction crafts and trades. This course is cross-listed as CNBT 1201. The student may register for either CNBT 1301 or CNBT 1201, but may receive credit for only one of the two.
(3 Lec.)

CNBT 1302 Mechanical, Plumbing, and Electrical Systems In Construction (3)
(This is a WECM Course Number.)
A presentation of the basic mechanical, plumbing, and electrical components in construction and their relationship to the overall building.
(3 Lec., 1 Lab./3 Lec., 3 Lab.)

CNBT 1305 Residential and Light Commercial Blueprint Reading (3)
(This is a WECM Course Number.)
Blueprint reading covering the theory of projection, architectural and engineering symbols, relationship of views, and measuring with emphasis on residential and light commercial construction. Lab required. (3 Lec.)

CNBT 1307 Commercial and Industrial Blueprint Reading (3)
(This is a WECM Course Number.)
Blueprint reading covering the theory of projection, architectural and engineering symbols, relationship of views, and measuring with emphasis on commercial and industrial construction. (3 Lec./2 Lec., 3 Lab.)

CNBT 1311 Construction Methods and Materials (3)
(This is a WECM Course Number.)
An introduction to construction materials and methods and their applications. (2 Lec., 2 Lab.)

CNBT 1321 Job Site Layout and Development (3)
(This is a WECM Course Number.)
Study of the general principles of job site layout and development used by heavy equipment operators in the construction industry. Topics include plan reading, survey techniques, external considerations, and trade conventions. Lab required. (2 Lec., 3 Lab.)

CNBT 1342 Building Codes and Inspections (3)
(This is a WECM Course Number.)
An examination of the building codes and standards applicable to building construction and inspection processes. (3 Lec.)

CNBT 1344 Construction Materials Testing (3)
(This is a WECM Course Number.)
Skill development in laboratory testing and field inspection procedures associated with construction materials. (2 Lec., 2 Lab.)

CNBT 1346 Construction Estimating I (3)
(This is a WECM Course Number.)
Fundamentals of estimating materials and labor costs in construction. (2 Lec., 2 Lab.)

CNBT 1375 Field Engineering I (3)
(This is a WECM Course Number.)
This course overviews the duties and responsibilities of a field engineering for commercial and industrial building construction. The use of surveying equipment, sketches and proper field notes taking, methods of staking and layout of building site, locating center lines of piers and installation of batter boards. Lab required.
(2 Lec., 3 Lab.)

CNBT 1391 Special Topics in Construction/Building Technology/Technician (3)
(This is a WECM Course Number.)
This course continues the study of construction materials, methods, and equipment using the Construction Specifications Institute (CSI) Masterformat. Topics covered include finishes, specialties, equipment, furnishing, special construction with an introduction to conveying, mechanical, electrical systems. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 2 Lab.)

CNBT 1392 Special Topics in Construction/Building Technology/Technician (3)
(This is a WECM Course Number.)
This course will concentrate on the organization and preparation of written construction documents. Emphasis will be placed on further developing concepts covered in Principles of Purchasing (BMGT 1313), as well as studying the development and application of master specifications, preliminary project descriptions, outline specifications, and both full, and abbreviated construction documents. Computer applications and automated editing procedures will also be demonstrated and applied. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

CNBT 1393 Special Topics in Construction/Building Technology/Technician (3)
(This is a WECM course number)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 2 Lab.)

CNBT 1411 Construction Methods and Materials (4)
(This is a WECM Course Number.)
An introduction to construction materials and methods and their applications. (3 Lec., 3 Lab.)

CNBT 1449 Concrete-Commercial and Industrial (4)
(This is a WECM Course Number.)
In-depth coverage of the various techniques used in concrete utilization in commercial and industrial construction. Lab required. (2 Lec., 3 Lab.)

CNBT 2304 Construction Materials, Methods, and Equipment II (3)
(This is a WECM Course Number.)
A continuation of the study of the nature, origin and properties of building materials, methods and equipment for their integrated use in completing construction projects. A study of selecting and specifying materials with consideration for economy, quality and performance in the construction of modern buildings. (3 Lec.)

CNBT 2315 Legal Responsibilities and Specifications for Contractors (3)
(This is a WECM Course Number.)
A study of the legal aspects of written construction specifications. Topics include tax, insurance, and lien requirements in their contractual form, as well as their implementation, modification, and administration. An overview of the legal ramifications resulting from the non-compliance or misinterpretation by the contracting parties. (2 Lec., 2 Lab.)

CNBT 2332 Project Scheduling (3)
(This is a WECM Course Number.)
A study of conventional scheduling using critical-path-method; precedence and arrow networks; gnatt charts; monthly reports; and crashing time schedule.
(2 Lec., 2 Lab.)

CNBT 2335 Computer-Aided Construction Scheduling (3)
(This is a WECM Course Number.)
Advanced construction scheduling utilizing computer scheduling software to perform various scheduling procedures. (2 Lec., 3 Lab.)

CNBT 2340 Mechanical, Electrical, and Plumbing Systems for Buildings II (3)
(This is a WECM Course Number.)
An in-depth study of the process used in the design, selection of equipment, and methods used in the installation of mechanical, plumbing, and electrical systems in commercial buildings. Topics include heating and cooling systems, duct work, mechanical and electrical control systems, lighting requirements, and the design of water supply and sanitary sewer systems. (2 Lec., 2 Lab.)

CNBT 2342 Construction Management I (3)
(This is a WECM Course Number.)
Human relations management skills in motivation on the job site. Topics include written and oral communications, leadership and motivation, problem solving, and decision making. (2 Lec., 3 Lab.)

CNBT 2344 Construction Management II (3)
(This is a WECM Course Number.)
A management course in contract documents, safety, planning, scheduling, production control, and law and labor. Topics include contracts, planning, cost and production peripheral documents, and cost and work analysis. (2 Lec., 3 Lab.)

CNBT 2346 Construction Management III (3)
(This is a WECM Course Number.)
An advanced course in construction safety, project management, scheduling, material handling, layout, payment scheduling, and inspections. Lab required. (2 Lec., 3 Lab.)

CNBT 2371 Estimating for General/Specialty Commercial Contractors (3)
(This is a WECM Local Need Course.)
This course provides a real world approach to commercial estimating of general and specialty commercial contractors. Individuals are led through methods of quantity take-off, project cost estimates and the decision-making process involved in making a bid. (2 Lec., 2 Lab.)

CNBT 2373 Introduction to Construction Management (3)
(This is a WECM Course Number.)
This course is designed to provide an integrated look at the practice of construction management. The course material will cover various tools used by the construction manager. It include bidding, estimating and scheduling, contract and project documentation, change order management, accident prevention and loss control, and productivity improvement. (3 Lec.)

CNBT 2375 Field Engineering II (3)
(This is a WECM Local Need Course.)
This course continues the study of field engineering for commercial and industrial building construction. Methods used in estimating materials, development of Quantity logs and pier logs, use of blueprints and field notes, parking lots, retaining systems and basic curves. Lab required. (2 Lec., 3 Lab.)

CNBT 2377 Building and Contracting (3)
(This is a WECM Local Need Course.)
This course covers the basic process of organizing and operating a building or contracting business. Topics covered include establishing goals, organization, directing, staffing, coordinating and controlling, and budgeting to operate and make a profit in a construction business. Lab required. (3 Lec.)

CNBT 2378 Estimating Commercial Mechanical Construction (3)
(This is a WECM Local Need Course.)
This course covers the process of estimating electrical requirements for the construction of buildings. This course will use the CSI division 16 Electrical as the basis for instruction. The course will expose the individual to an environment similar to an estimating department of a commercial electrical contractor. (2 Lec., 2 Lab.)

CNBT 2379 Estimating Commercial Mechanical Construction (3)
(This is a WECM Local Need Course.)
This course covers the process of estimating electrical requirements for the construction of buildings. This course will use the CSI division 15 Electrical as the basis for instruction. The course will expose the individual to an environment similar to an estimating department of a commercial electrical contractor. (2 Lec., 2 Lab.)

CNBT 2380 Cooperative Education - Construction/Building Technology/Technician (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. (1 Lec., 20 Lab.)

CNBT 2437 Construction Estimating II (4)
(This is a WECM Course Number.)
Advanced estimating concepts using computer software programs for the construction and crafts. (2 Lec., 3 Lab.)

CNSE 1321 Job Site Layout and Development (3)
(This is a WECM Course Number.)
Study of the general principles of job site layout and development used by heavy equipment operators in the construction industry. Topics include plan reading, survey techniques, external considerations, and trade

conventions. Lab required. (2 Lec., 3 Lab.)

COMM 1336 Television Production I (3)
(This is a Texas Common Course Number.)
Prerequisite: Journalism 1307 or demonstrated competence approved by the instructor. This course introduces the student to station organization, studio operation, and the use of studio equipment. Topics include continuity, camera operation, sound, lighting, and videotape recording. This course is cross-listed as DRAM 1336. The student may register for either COMM 1336 or DRAM 1336, but may receive credit for only one of the two courses. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1002025206)

COMM 1337 Television Production II (3)
(This is a Texas Common Course Number.)
Prerequisite: Communications 1336. This course is a continuation of Communications 1336. Emphasis is on the concept and technique of production of television broadcasts in practical situations. This course is cross-listed as DRAM 1337. The student may register for either COMM 1337 or DRAM 1337, but may receive credit for only one of the two courses. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1002025206)

COSC 1300 or any higher level COSC course will meet the core curriculum and/or Associate in Arts or Associate in Sciences requirement.

COSC 1300 Computer Literacy (3)
(This is a Texas Common Course Number.)
The student will develop the ability to use computer-based technology in communicating, acquiring information and solving problems. Additionally, the student will evaluate the effects and implications of information technology on various aspects of society. COSC 1300 may not be applied towards a computer science major or minor. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 1101015107)

COSC 1309 Programming Methodology and Logic Design (3)
(This is a Texas Common Course Number.)
Introduction to problem solving in computer science. Topics include software theory, structured programming methodology, representation of algorithms using pseudocode and graphical tools, and methods for testing, evaluation, and documentation. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1102015107)

COSC 1401 Microcomputer Concepts and Applications (4)
(This is a Texas Common Course Number.)
This course introduces the use of computers in business organizations, professional activities and personal life. Topics include terminology, hardware and software, applications and systems development, networking and the use of contemporary software. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1101015207)

COSC 1430 Programming I (4)
(This is a Texas Common Course Number.)
Prerequisite: Computer Science 1315 or Computer Science 1415 or equivalent. Introduction to computer programming in an emerging or alternative programming language. Fundamentals of structured design, development, testing, implementation, and documentation are emphasized. Topics include language syntax, control structures, and program execution logic. This course may be repeated if topics and learning outcomes vary. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1102015207)

COSC 1436 Programming Fundamentals I (4)
(This is a Texas Common Course Number.)
Introduces the fundamentals concepts of structured programming. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1102015507)

COSC 1437 Programming Fundamentals II (4)
(This is a Texas Common Course Number.)
Prerequisite: Computer Science 1436 and college-level algebra or higher. Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering.
(3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1102015607)

COSC 2425 Computer Organization and Machine Language (4)
(This is a Texas Common Course Number.)
Prerequisite: COSC 1436 or demonstrated competence approved by the instructor. Basic computer organization; instruction cycle; digital representation of data and instructions; assembly language programming, assembler, macros, subroutines, and program linkages. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1102015407)

COSC 2430 Programming II (4)
(This is a Texas Common Course Number.)
Prerequisite: Computer Science 1430 or demonstrated competence approved by the instructor. This course is a continuation of Computer Science 1430 and covers advanced features and programming techniques of the language under study. This course may be repeated if topics and learning outcomes vary. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1102015307)

COSC 2436 Programming Fundamentals III (4)
(This is a Texas Common Course Number.)
Prerequisite: Computer Science 1437. Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1102015707)

CPMT 1305 IT Essentials I: PC Hardware and Software (3)
(This is a WECM Course Number.)
An introduction to information technology and data communication. Includes topics on personal computer hardware and software and basic networking concepts. Licensing/Certification Agency: Cisco Corporation. (2 Lec., 4 Lab.)

CPMT 1307 Electronic and Computer Skills (3)
(This is a WECM Course Number.)
A study of the information for the assembly of a microcomputer system. Emphasis on the evolution of microprocessors and microprocessor bus structures. (3 Lec.)

CPMT 1308 Fundamentals of Web Design (3)
(This is a WECM Course Number.)
An introduction to Web site production processes and design elements involving layouts, navigation and interactivity. This course will help students prepare for career opportunities as a Web designer, entry-level Graphical Designer, Web project manager, and Webmaster. Licensing/Certification Agency: Cisco Corporation. (2 Lec., 4 Lab.)

CPMT 1309 IT Essentials II: Network Operating Systems (3)
(This is a WECM Course Number.)
Prerequisite: CPMT 1305 or instructor approval. An overview of network operating systems and specifically covers the Linux Red Hat Network operating system. Students will learn how to use the Linux operating system, the K Desktop Environment (KDE) and GNU Network Object Model (GNOME). Licensing/Certification Agency: Cisco Corporation. (2 Lec., 4 Lab.)

CPMT 1403 Introduction to Computer Technology (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1403. This is a fundamental computer course that provides in-depth explanation of the procedures to utilize hardware and software. Emphasis is on terminology, acronyms, and hands-on activities. The student will define and recognize terms, expressions and phrases associated with computers and use advanced commands in various applications. (3 Lec., 3 Lab.)

CPMT 1405 IT Essentials I: PC Hardware and Software (4)
(This is a WECM Course Number.)
An introduction to information technology and data communication. Includes topics on personal computer hardware and software and basic networking concepts. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

CPMT 1408 Fundamentals of Web Design (4)
(This is a WECM Course Number.)
An introduction to Web site production processes and design elements involving layouts, navigation and interactivity. This course will help students prepare for career opportunities as a Web designer, entry-level Graphical Designer, Web project manager, and Webmaster. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

CPMT 1409 IT Essentials II: Network Operating Systems (4)
(This is a WECM Course Number.)
Prerequisite: CPMT 1405 or instructor approval. An overview of network operating systems and specifically covers the Linux Red Hat Network operating system. Students will learn how to use the Linux operating system, the K Desktop Environment (KDE) and GNU Network Object Model (GNOME). Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

CPMT 1447 Computer System Peripherals (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1403. This course is an in-depth study of principles and practices involved in computer system troubleshooting techniques, programs, and the use of specialized test equipment. The student will develop hardware and software troubleshooting techniques and perform procedures used in troubleshooting. (3 Lec., 3 Lab.)

CPMT 1449 Computer Networking Technology (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1403. This is a beginning course in computer networks with focus on networking fundamentals, terminology, hardware, software, and network architecture. A study of local/wide area networking concepts and networking installations and operations. (3 Lec., 3 Lab.)

CPMT 2232 Computer Integration (2)
(This is a WECM Course Number.)
An advanced course in integration of hardware, software, and applications. Customization of computer systems for specific applications in engineering, multi-media, or data acquisition. (2 Lec.)

CPMT 2233 Computer Integration (2)
(This is a WECM Course Number.)
An advanced course in integration of hardware, software, and applications. Customization of computer systems for specific applications in engineering, multimedia, or data acquisition. (2 Lec.)

CPMT 2334 Network Security (3)
(This is a WECM Course Number.)
Prerequisite: CCNA 4 or current CCNA certification. Focus on overall security processes with particular emphasis on hands-on skills in the following areas: security policy design and management; security technologies, products and solutions; firewall and secure router design, installation, configuration and maintenance; AAA implementation using routers and firewalls; VPN implementation using routers and firewalls. Licensing/Certification Agency: Cisco Corporation. (2 Lec., 4 Lab.)

CPMT 2434 Network Security (4)
(This is a WECM Course Number.)
Prerequisite: CCNA 4 or current CCNA certification. Focus on overall security processes with particular emphasis on hands-on skills in the following areas: security policy design and management; security technologies, products and solutions; firewall and secure router design, installation, configuration and maintenance; AAA implementation using routers and firewalls; VPN implementation using routers and firewalls. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

CPMT 2437 Microcomputer Interfacing (4)
(This is a WECM Course Number.)
Prerequisite: CETT 2435. An interfacing course exploring the concepts and terminology involved in interfacing the internal architecture of the microcomputer with commonly used external devices. (3 Lec., 3 Lab.)

CPMT 2445 Computer System Troubleshooting (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. This course covers principles and practices involved in computer system troubleshooting techniques and repair procedures including advanced diagnostic test programs and the use of specialized test equipment. The student will develop hardware and software troubleshooting techniques and perform procedures used in troubleshooting. (3 Lec., 3 Lab.)

CREX 1309 Career Exploration/Planning (3)
(This is a WECM Course Number.)
An introduction to the process of career decision-making, educational planning, and job searching. Topics include analyzing personal career interests, values, and aptitudes; surveying and researching career fields with related educational and training requirements; practicing the decision-making process; and basic job search skills such as completing applications, writing letters of application, developing and using resumes and interviewing. (3 Lec.)

CRIJ 1301 Introduction to Criminal Justice (3)
(This is a Texas Common Course Number.)
This course is a study of history and philosophy of criminal justice including ethical considerations. Topics include the definition of crime, the nature and impact of crime, an overview of the criminal justice system, law enforcement, court system, prosecution and defense, trial process, and corrections. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045124)

CRIJ 1306 Court Systems and Practices (3)
(This is a Texas Common Course Number.)
The judiciary in the criminal justice system is explained. The structure of the American Court System is defined. Prosecutional right to counsel is explained. Other areas covered are pretrial release, grand juries, adjudication process, and types of rules of evidence and sentencing. (3 Lec.)
(Coordinating Board Academic Approval Number 2201015424)

CRIJ 1307 Crime in America (3)
(This is a Texas Common Course Number.)
American crime problems are studied in the historical perspective. Social and public policy factors affecting crime are discussed. The impact of crime and crime trends are shown along with the social characteristics of specific crimes. The prevention of crime is emphasized. (3 Lec.)
(Coordinating Board Academic Approval Number 4504015225)

CRIJ 1310 Fundamentals of Criminal Law (3)
(This is a Texas Common Course Number.)
A study of the nature of criminal law is presented. The philosophical and historical development of criminal law is covered. Major definitions and concepts are given. The classification of crime is covered. The elements of crimes and penalties are discussed using Texas statutes as illustrations. Criminal responsibility is defined. (3 Lec.)
(Coordinating Board Academic Approval Number 2201015324)

CRIJ 1313 Juvenile Justice System (3)
(This is a Texas Common Course Number.)
A study of the juvenile justice process. Topics include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045224)

CRIJ 2301 Community Resources in Corrections (3)
(This is a Texas Common Course Number.)
An overview of diversionary practices and treatment programs available to offenders in a local context. Topics include selected recognized models and future trends in community treatment. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045324)

CRIJ 2313 Correctional Systems and Practices (3)
(This is a Texas Common Course Number.)
A study of the role of corrections in the criminal justice system. Topics include organization and theory of correctional systems, institutional operations, management, alternatives to institutionalization, treatments and rehabilitation, and current and future issues. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045424)

CRIJ 2314 Criminal Investigation (3)
(This is a Texas Common Course Number.)
Prerequisite: CRIJ 1301. Study of investigative theory, the collection an preservation of evidence, sources of information, concepts of interviewing and interrogation, the use of forensic sciences, and trial preparation. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045524)

CRIJ 2323 Legal Aspects of Law Enforcement (3)
(This is a Texas Common Course Number.)
This course covers police authority, responsibilities, and constitutional constraints. Topics include laws of arrest, search and seizure, and police liability. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045624)

CRIJ 2328 Police System and Practices (3)
(This is a Texas Common Course Number.)
Exploration of the profession of police officer. Topics include organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045724)

CRPT 1311 Conventional Roof Systems (3)
(This is a WECM Course Number.)
Study of the principles of design and construction of a conventional roof system incorporating gable, hip, and intersections. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1315 Conventional Wall Systems (3)
(This is a WECM Course Number.)
Instruction in conventional wall systems with emphasis on wood frame construction. Topics include identification of components; construction of a wall system; safe work practices; and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1319 Engineered Roof Systems (3)
(This is a WECM Course Number.)
Skill development in the identification and erection of engineered roof systems and components. Topics include trussed, timber-framed and steel-component roof structures with emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1325 Forms and Foundations I (3)
(This is a WECM Course Number.)
Instruction in the construction of basic form and foundation systems including related safety, tools, equipment, and building layout. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1329 Introduction to Carpentry (3)
(This is a WECM Course Number.)
An introduction to the carpentry trade including safety, tools, equipment, terminology, and methods. Lab required. (2 Lec., 3 Lab.)

CRPT 1341 Conventional Exterior Finish Systems (3)
(This is a WECM Course Number.)
Skill development in the installation of exterior finish systems and components including the placement and installation of cornice, windows, doors, siding, and flashing. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1345 Conventional Interior Finish Systems (3)
(This is a WECM Course Number.)
Instruction in the installation of interior finish systems and components including the placement and installation of doors and trim and floor, wall, and ceiling finishes. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1349 Forms and Foundations II (3)
(This is a WECM Course Number.)
Skill development in the construction of advanced forms and foundation systems including related safety, tools, equipment, and building layout. Advanced forms and foundation systems may include patented and engineered form systems. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2331 Advanced Roof Systems (3)
(This is a WECM Course Number.)
Skill development in the layout and construction of advanced architectural roof styles and features including the construction of multi-pitched roofs, dormers, crichets, cupolas, and other roof structures. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2339 Specialty Exterior Finish Systems (3)
(This is a WECM Course Number.)
Skill development in the installation of specialty exterior finish systems and components including the placement and installation of cornice, windows, doors, siding, and flashing. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2341 Specialty Interior Finish Systems (3)
(This is a WECM Course Number.)
Skill development in the installation of specialty interior finish systems and components including specialty floor, wall, and ceiling finishes. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2343 Specialty Wall Systems (3)
(This is a WECM Course Number.)
Instruction in wall systems with emphasis on metal frame construction. Topics include the identification of components and the construction of a wall system with emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2347 Stairs (3)
(This is a WECM Course Number.)
Instruction in the construction and installation of stairs. Topics include stair types and parts, wood and metal stairs, and the layout and installation of job and factory built stairs. Lab required. (2 Lec., 3 Lab.)

CULA 2364 Practicum (or Field Experience) - Culinary Arts/Chef Training (3)
(This is a WECM Course Number.)
Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates to workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. (21 Ext.)

CUST 2370 Cultural Studies (3)
(This is a Unique Need Course.)
This interdisciplinary and cross-cultural course studies human thought and relationships by considering a significant theme. Themes may vary each semester. The course promotes ethical and critical reasoning. (3 Lec.)
(Coordinating Board Academic Approval Number 2401037212)

NOTE: HPRS 1204, 1291, 1202, 2300, 2231, 2201 are all health occupations core curriculum courses. These courses are listed and described in a separate section of the college catalog: Health Occupations Core Curriculum.

CVTT 1110 Cardiac Catheterization I (1)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A study of the anatomy, physiology, and structural relationships of the human heart and vascular system. Focus on cardiac anatomy, electrocardiology, cardiac hemodynamics, and the innervation of the heart. (1 Lec.)

CVTT 1153 Catheterization Lab Fundamentals II (1)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A continuation of Catheterization Lab Fundamentals I with emphasis on X-ray technology and interventional procedures in the cardiac cath lab. Focus on the beginning cath lab clinical experience. (1 Lec.)

CVTT 1304 Cardiovascular Physiology (3)
(This is a WECM Course Number.)
Prerequisite: Admission to the Invasive Cardiovascular Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. A study of the anatomy, physiology, and structural relationships of the human heart and vascular system. Focus on cardiac anatomy, electrocardiology, cardiac hemodynamics, and the innervation of the heart. (3 Lec.)

CVTT 1313 Catheterization Lab Fundamentals I (3)
(This is a WECM Course Number.)
Prerequisite: Admission to the Invasive Cardiovascular Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. Introduction to the diagnostic procedures used in the cath lab. Prior didactic instruction in cardiac physiology and medical instrumentation applied to cath lab procedures including patient preparation and monitoring, angiographic equipment set-up, and the coronary angiography procedure itself. (2 Lec., 2 Lab.)

CVTT 1324 Cardiovascular Physiology II (3)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A continuation of Cardiovascular Physiology with emphasis on cardiac disease states including methods of hemodynamic data collection and implications in relation to cardiac diseases. (3 Lec.)

CVTT 1350 Cardiac Catheterization II (3)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A continuation of Cardiac Catheterization I. An intensive study of advanced cardiovascular diagnostic and therapeutic procedures including percutaneous transluminal coronary angioplasty and electrophysiology studies. (3 Lec.)

CVTT 1360 Clinical- Cardiovascular Technology/Technologist (3)
(This is a WECM Course Number.)
Prerequisite: Admission to the Invasive Cardiovascular Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (15 Ext.)

CVTT 1471 Peripheral Vascular Studies, Radiologic Principles, and RCIS Board Review (4)
(This is a WECM Local Need Course.)
Prerequisite: A grade of "C" or better in all previous CVTT and support courses. Students study the anatomy of the peripheral vascular system and the diagnostic and interventional procedures performed in the Cardiac Catheterization Laboratory. Students review the principles of radiation safety, biological effects of ionizing radiation, darkroom and cine film principles, and digital imaging. The course also covers an intensive review of all invasive cardiovascular technology principles to assist the student in successful preparation for the RCIS credential examination. (3 Lec., 3 Lab.)

CVTT 2350 Cardiac Catheterization III (3)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A continuation of Cardiac Catheterization II with emphasis on areas of opportunity outside the cath lab including non-invasive cardiology, cardiac surgical procedures, and hospital administration as related to the cath lab. Assistance for the student in role transition from student to cath lab employee.
(3 Lec.)

CVTT 2560 Clinical- Cardiovascular Technology/Technologist (5)
(This is a WECM Course Number.)
Prerequisite: Admission to the Invasive Cardiovascular Technology program. A grade of "C" or better in CVTT 1360. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
(25 Ext.)

CVTT 2563 Clinical – Cardiovascular Technology/Technician (5)
(This is a WECM Course Number.)
Prerequisite: Admission to the Invasive Cardiovascular Technology program. A grade of "C" or better in CVTT 2560. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
(25 Ext.)

DAAC 1304 Pharmacology of Addiction (3)
(This is a WECM Course Number.)
Psychological, physiological, and sociological effects of mood altering substances and behaviors and their implications for the addiction process are discussed. Emphasis on pharmacological effects of tolerance, dependency/withdrawal, cross addiction, and drug addiction. (3 Lec.)

DAAC 1307 Addicted Family Intervention (3)
(This is a WECM Course Number.)
The student will discuss and explain the family as a dynamic system; explain the effects of addiction on the dynamics of a family system; and describe and differentiate between various family treatment processes and their applicability to traditional and nontraditional family systems. The student will discuss the impact of mood altering substances and behaviors as they relate to the family from a multicultural and transgenerational perspective; and discuss the role of the family in the addictive and recovery process. (3 Lec.)

DAAC 1311 Counseling Theories (3)
(This is a WECM Course Number.)
An introduction to major theories of various treatment modalities including Reality Therapy, Psycho-dynamic, grief therapy, Client-centered therapy, Rational-Emotive Therapy, Cognitive-behavioral approaches such as life skills training, behavior modification, and the introduction to experimental therapies as they relate to detoxification, residential, outpatient, and extended treatment. Ethical issues will be reviewed. (3 Lec.)

DAAC 1319 Introduction to Alcohol and Other Drug Addictions (3)
(This is a WECM Course Number.)
Causes and consequences of addiction as they relate to the individual, family, community, and society are discussed. Response alternatives regarding intervention, treatment, education, and prevention are reviewed. Competencies and requirements for licensure in Texas are explained. Addiction issues related to diverse populations are presented. (3 Lec.)

DAAC 1341 Counseling Alcohol and Other Drug Addictions (3)
(This is a WECM Course Number.)
This course will focus on special skills and techniques in the application of counseling skills for the Alcohol and Other Drug (AOD) client. Design and utilization of treatment planning using a treatment team approach will be introduced. Confidentiality and ethical issues will be reviewed and practiced. (3 Lec.)

DAAC 1343 Current Issues (3)
(This is a WECM Course Number.)
A study of issues that impact addiction counseling. Special populations, dual diagnosis, ethics, gambling, and infectious diseases associated with addiction counseling will be investigated. This course may be repeated for credit. (3 Lec.)

DAAC 2366 Practicum (or Field Experience)-Alcohol/Drug Abuse Counseling (3)
(This is a WECM Course Number.)
Prerequisite: DAAC 1304, 1307,1311, 1341, 1343 and SCWK 2311, and SCWK 1305. An intermediate or advanced type of health professions work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. Direct supervision is provided by the clinical professional, generally a clinical preceptor. A health practicum may be a paid or unpaid learning experience. Roundtable seminar mandatory. (1 Lec., 20 Ext.)

DANC 1101 Composition I (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. Development of basic principles and theories involved in composition are studied. Emphasis is placed on movement principles, group and structural forms. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015526)

DANC 1102 Composition II (1)
(This is a Texas Common Course Number.)
Prerequisite: Dance 1101 and demonstrated competence approved by the instructor. This course is a continuation of Dance 1101. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015526)

DANC 1110 Tap I (1)
(This course is considered as a PHED activity course.)
This course explores basic tap techniques. Emphasis on technique development and familiarity with traditional tap rhythms and steps. This course may be repeated for credit. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1111 Tap II (1)
(This course is considered as a PHED activity course.)
Prerequisite: Dance 2111 or demonstrated competence approved by instructor. This course continues and further develops an exploration of Dance 1110. This course may be repeated for credit. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1112 Coaching and Repertoire (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. Variations (male and female) and pas de deux from standard ballet repertoire are studied and notated. The dancer is given individual coaching, with special attention given to the correction of problems. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015326)

DANC 1113 Improvisation (1)
(This is a Texas Common Course Number.)
Prerequisite: Dance 1248, Dance 1342, or Dance 1346. This course consists of creative problem-solving utilizing basic elements of design. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015326)

DANC 1141 Ballet Technique (1)
(This is a Texas Common Course Number.)
For the serious ballet dancer who wishes to take additional days of ballet dance appropriate for Ballet Level II, III, and IV. This course may be repeated for credit. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1149 Folklorico I (1)
(This is a Texas Common Course Number.)
A study of latin dance forms. This course may be repeated for credit. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1150 Folklorico II (1)
(This is a Texas Common Course Number.)
A continuation of Folklorico I. This course may be repeated for credit. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1151 Rehearsal and Performance I (1)
(This is a Texas Common Course Number.)
This course supplements beginning dance technique classes. Basic concepts of approaching work on the concert stage: stage directions, stage areas, and the craft involved in rehearsing and performing are emphasized. This course may be repeated for credit. (4 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1152 Rehearsal and Performance II (1)
(This is a Texas Common Course Number.)
Prerequisite: Dance 1151 or demonstrated competence approved by the instructor. This course supplements intermediate dance technique classes. It is a continuation of Dance 1151 with emphasis on more advanced concepts as they apply to actual rehearsals and performances. This course may be repeated for credit. (4 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1212 Dance Practicum I (2)
(This is a Texas Common Course Number.)
A practicum and production in dance. The production portion will be a culmination experience that applies concepts to the practicum of dance as a performing art. This course may be repeated for credit. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015326)

DANC 1213 Dance Practicum II (2)
(This is a Texas Common Course Number.)
A continuation of Level I with a deeper exploration of more complex concepts and dance lighting awareness. This course may be repeated for credit. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015326)

DANC 1247 Jazz I (2)
(This is a Texas Common Course Number.)
The basic skills of jazz dance are introduced. Emphasis is on technique and development, rhythm awareness, jazz styles, and rhythmic combinations of movement. This course may be repeated for credit. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1248 Jazz II (2)
(This is a Texas Common Course Number.)
Prerequisite: Dance 1247 or demonstrated competence approved by the instructor. Work on skills and style in jazz dance is continued. Technical skills, combinations of steps into dance patterns, and exploration of composition in jazz form are emphasized. This course may be repeated for credit. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1341 Ballet I (3)
(This is a Texas Common Course Number.)
This course explores basic ballet structure and terminology. Included are posture, balance, coordination, rhythm, and flow of physical energy through the art form. Instruction in beginning adagio, petit allegro, grand allegro, inside and outside turns and various jumps are studied. This course may be repeated for credit.
(2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1342 Ballet II (3)
(This is a Texas Common Course Number.)
Prerequisite: Dance 1341. This course is a continuation of Dance 1341. Emphasis is on body directions and stamina. More complex combinations using advanced patterning will be studied. This course may be repeated for credit. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1345 Modern I (3)
(This is a Texas Common Course Number.)
This course explores basic modern techniques. Emphasis is on technique development, and familiarity with contemporary meters and rhythms. An awareness of major influences on concert dance is developed. This course may be repeated for credit. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 1346 Modern II (3)
(This is a Texas Common Course Number.)
Prerequisite: Dance 1345. This course continues and further develops an exploration of Dance 1345.
(2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 2102 Body Conditioning (1)
(This course is considered as a PHED activity course.)
Stretching and toning at the dancer's instrument. This course may be repeated for credit. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

DANC 2103 Hip Hop I (1)
(This course is considered as a PHED activity course.)
This course explores basic hip hop techniques. Emphasis is on technique development and familiarity with contemporary meters and rhythms. This course may be repeated for credit. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

DANC 2104 Hip Hop II (1)
(This course is considered as a PHED activity course.)
Prerequisite: Dance 2103 or demonstrated competence approved by instructor. This course continues and further develops an exploration of Dance 2103. This course may be repeated for credit. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

DANC 2105 Street Dance (1)
(This course is considered as a PHED activity course.)
Choreographic Hip-Hop and jazz-fusion. This course may be repeated for credit. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

DANC 2106 Video Dance (1)
(This course is considered as a PHED activity course.)
A study of techniques, styles and vocabulary of dancing for music videos, television and commercial work.
(1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

DANC 2212 Musical Comedy Dance I (2)
(This is a Texas Common Course Number.)
A study of musical comedy dance patterns, steps and styles. This course may be repeated for credit.
(1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015326)

DANC 2213 Musical Comedy Dance II (2)
(This is a Texas Common Course Number.)
A continuation of Musical Comedy Dance I. This course may be repeated for credit. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015326)

DANC 2247 Jazz III (2)
(This is a Texas Common Course Number.)
Prerequisite: Dance 1248. This course consists of the development of proper performance framing. Complex jazz rhythms, turns, jumps, and intricate elements of choreography are introduced. This course may be repeated for credit. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 2248 Jazz IV (2)
(This is a Texas Common Course Number.)
Prerequisite: Dance 2247. This course is a further exploration of Dance 2247. This course may be repeated for credit. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 2301 Ballet Independent Study (3)
(This is a Texas Common Course Number.)
Prerequisite: Successful completion of Ballet II and consent of instructor. Individualized format for giving students the opportunity to participate in ballet courses which allows flexibility of both schedule and intensity. Must be completed in two consecutive semesters (including summer). This course may be repeated for credit. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 2303 Dance Appreciation (3)
(This is a Texas Common Course Number.)
The cultural, historical and aesthetic qualities of dance are presented through lectures, films, videos, demonstrations and dance productions. Primitive, classical and contemporary dance forms are included.
(3 Lec.)
(Coordinating Board Academic Approval Number 5003015426)

DANC 2325 Anatomy and Kinesiology for Dance (3)
(This is a Texas Common Course Number.)
An interrelationship of the physiological processes and anatomy of the human body with a respect to movement.
(3 Lec.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 2341 Ballet III (3)
(This is a Texas Common Course Number.)
Prerequisite: Dance 1342. The development of ballet techniques is continued. More complicated exercises at the barre and center floor are included. Emphasis is on long series of movements, adagio and jumps. Precision of movement is stressed. This course may be repeated for credit. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 2342 Ballet IV (3)
(This is a Texas Common Course Number.)
Prerequisite: Dance 2341. Individual proficiency, artistry and technical virtuosity are developed. This course may be repeated for credit. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 2345 Modern III (3)
(This is a Texas Common Course Number.)
Prerequisite: Dance 1346. This course consists of the development of complex falls, combinations, phrasing, and dramatic emphasis. This course may be repeated for credit. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DANC 2346 Modern IV (3)
(This is a Texas Common Course Number.)
Prerequisite: Dance 2345. This course is a further exploration of Dance 2345. This course may be repeated for credit. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015226)

DCLS 0100 College Learning Skills (1)
This course is for students who wish to extend their learning skills for academic or career programs. Individualized study and practice are provided in reading, study skills, and composition. This course may be repeated for a maximum of three credits. Students may enroll in up to three different sections of CLS during one semester. This course does not count as Texas Success Initiative (TSI) remediation. (1 Lec.)

DCOM 0095 Communication Skills (3)
This course focuses on strengthening language communications. Topics include grammar, paragraph structure, reading skills, and oral communication. Emphasis is on individual testing and needs. This course should not be used for Texas Success Initiative (TSI) remediation. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085178)

DCOM 0120 Communication Skills (3)
This course is for students with significant communication problems. It is organized around skill development, and students may enroll at any time (not just at the beginning of a semester) upon the referral of an instructor. Emphasis is on individual needs and personalized programs. Special attention is given to oral language. Contacts are made with other departments to provide other ways of learning for the students. This course should not be used for Texas Success Initiative (TSI) remediation. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3201085178)

DEMR 1229 Preventative Maintenance (2)
(This is a WECM Course Number.)
An introductory course designed to provide the student with basic knowledge of proper servicing practices. Content includes record keeping and condition of major systems. (1 Lec., 3 Lab.)

DEMR 1317 Basic Brake Systems (3)
(This is a WECM Course Number.)
An introduction to the basic principles of brake systems of diesel powered equipment. Emphasis on maintenance, repairs, and troubleshooting. (1 Lec., 7 Lab.)

DEMR 1327 Tractor Trailer Service and Repair (3)
(This is a WECM Course Number.)
An introduction to and familiarization with components and systems related to tractor trailer service. Emphasis on records required by the Department of Transportation. (1 Lec., 7 Lab.)

DEMR 1410 Diesel Engine Testing and Repair I (4)
(This is a WECM Course Number.)
An introduction to testing and repairing diesel engines including related systems specialized tools.
(2 Lec., 6 Lab.)

DEMR 1411 Diesel Engine Testing and Repair II (4)
(This is a WECM Course Number.)
Coverage of testing and repairing diesel engines including related systems specialized tools.
(2 Lec., 6 Lab.)

DEMR 1416 Basic Hydraulics (4)
(This is a WECM Course Number.)
Fundamentals of hydraulics including components and related systems. (2 Lec., 6 Lab.)

DEMR 1421 Power Train I (4)
(This is a WECM Course Number.)
Introduction to the fundamentals, repair, and theory of power trains including clutches, transmissions, drive shafts, and differentials. Emphasis on inspection and repair. (2 Lec., 7 Lab.)

DEMR 1447 Power Train II (4)
(This is a WECM Course Number.)
Extended applications of mechanics and theory of power trains. Emphasis on disassembly, inspection, and repair of power train components. (2 Lec., 6 Lab.)

DEMR 2331 Advanced Brake Systems (3)
(This is a WECM Course Number.)
An advanced brake system course designed for diesel powered equipment. Advanced concepts and schematics including anti-lock, air, pneumatic, and hydraulic brake systems and related components.
(2 Lec., 4 Lab.)

DEMR 2334 Advanced Diesel Tune-Up and Troubleshooting (3)
(This is a WECM Course Number.)
Concepts and skills required for tune-up and troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach. (1 Lec., 7 Lab.)

DEMR 2335 Advanced Hydraulics (3)
(This is a WECM Course Number.)
Advanced study of hydraulic systems and components including diagnostics and testing of hydraulic systems.
(1 Lec., 6 Lab.)

DEMR 2348 Failure Analysis (3)
(This is a WECM Course Number.)
An advanced course designed for analysis of typical part failures on equipment. (2 Lec., 3 Lab.)

DEMR 2432 Electronic Controls (4)
(This is a WECM Course Number.)
Advanced skills in diagnostic and programming techniques of electronic control systems. (2 Lec., 7 Lab.)

DEMR 2542 Automatic Power Shift and Hydrostatic Transmissions I (5)
(This is a WECM Course Number.)
A study of the operation, maintenance, and repair of automatic shift hydrostatic transmissions.
(3 Lec., 6 Lab.)

DFTG 1208 Basic Computer-Aided Drafting (2)
(This is a WECM Course Number.)
An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. Required.
(1 Lec., 3 Lab.)

DFTG 1215 Architectural Blueprint Reading (2)
(This is a WECM Course Number.)
A study of the fundamentals of blueprint reading for the construction industry. (1 Lec., 3 Lab.)

DFTG 1224 Technical Reading and Sketching (2)
(This is a WECM Course Number.)
An introduction to reading and interpreting the "working drawings" for manufactured products and associated tooling. Use of sketching techniques to create pictorial and multiple-view drawings of manufactured parts.
(1 Lec., 2 Lab.)

DFTG 1225 Blueprint Reading and Sketching (2)
(This is a WECM Course Number.)
An introduction to reading and interpreting the "working drawings" for manufactured products and associated tooling. Use of sketching techniques to create pictorial and multiple-view drawings of manufactured parts.
(1 Lec., 3 Lab.)

DFTG 1232 Mechanical Drafting (2)
(This is a WECM Course Number.)
Detail drawings with proper dimensioning and tolerances, use of sectioning techniques, common fasteners, pictorial drawings, including bill of materials. Required. (1 Lec., 3 Lab.)

DFTG 1271 CADD Operations (2)
(This is a WECM Local Need Course.)
A course in hardware selection, setup, and use of a CAD station. Emphasis is placed on control of the operating system, file management, and keyboarding. Topics address: software installation, hardware installation and configuration, such as mouse, tablet, printers, plotters, graphics adapters, and other configurable items such as communication ports, and serial ports. An introduction to word processing and spreadsheets is included.
(1 Lec., 2 Lab.)

DFTG 1302 Introduction to Technical Animation and Rendering (3)
(This is a WECM course number).
Prerequisite: DFTG 1409. Basic terminology and concepts associated with the development of computer modules used in technical computer animation. Topics include basic animation principles, model creation, light sources, camera positioning, rendering, importing and modification of external files. (2 Lec., 4 Lab.)

DFTG 1305 Technical Drafting (3)
(This is a WECM Course Number.)
Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes. This course is cross-listed as DFTG 1405. The student may register for either DFTG 1305 or DFTG 1405, but may receive credit for only one of the two.
(2 Lec., 4 Lab.)

DFTG 1309 Basic Computer-Aided Drafting (3)
(This is a WECM Course Number.)
An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinate systems, and plot/print to scale. This course is cross-listed as DFTG 1409. The student may register for either DFTG 1309 or DFTG 1409, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

DFTG 1313 Drafting for Specific Occupations (3)
(This is a WECM Course Number.)
Discussion of theory and practice with drafting methods and the terminology required for non-drafting majors to prepare working drawings in their occupational fields.
(3 Lec.)

DFTG 1329 Electro-Mechanical Drafting (3)
(This is a WECM Course Number.)
A basic course including layout and design of electro-mechanical equipment from engineering notes and sketches. Emphasis on drawing of electronic equipment control panels, interior hardware, exterior enclosures, detailed and assembly drawings with a parts list, and flat pattern layouts. (2 Lec, 4 Lab.)

DFTG 1333 Mechanical Drafting (3)
(This is a WECM Course Number.)
An intermediate course covering detail drawings with proper dimensioning and tolerances, use of sectioning techniques, common fasteners, isometrics and oblique drawings, including bill of materials.
(2 Lec., 4 Lab./2 Lec., 3 Lab.)

DFTG 1341 Intermediate Technical Animation and Rendering (3)
(This is a WECM course number).
Prerequisite: DFTG 1302. Procedures in the manipulation and control of lights, cameras, materials, texturing and rendering techniques used in technical animation; topics include introductory keyframing and lens effects principles. (2 Lec., 4 Lab.)

DFTG 1344 Pipe Drafting (3)
(This is a WECM Course Number.)
A study of pipe fittings, symbols, specifications and their applications to a piping process system. This application will be demonstrated through the creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics. (2 Lec., 4 Lab.)

DFTG 1348 Topographical Drafting (3)
(This is a WECM Course Number.)
A course in map drafting. Emphasis is given to plotting of surveyors field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses.
(2 Lec., 4 Lab.)

DFTG 1358 Electrical/Electronics Drafting (3)
(This is a WECM Course Number.)
A study of the principles of layout of electrical and electronic drawings, stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams.
(2 Lec., 4 Lab.)

DFTG 1372 Manufacturing Fundamentals (3)
(This is a WECM Local Need Course.)
A course in manufacturing fundamentals and production methods including NC-CNC concepts. Topics on interpreting and describing information required to produce a CNC program will be covered. An overview of the functions and role of CAD and its relationship to computer-aided manufacturing are studied.
(2 Lec., 4 Lab.)

DFTG 1373 CAD/Graphic Processes (3)
(This is a WECM Local Need Course.)
A course in creating, printing, and plotting graphics in CAD drawings. Skill development in importing text and raster graphics into CAD drawings, importing CAD vector graphics into desktop documents, scanning and editing raster graphics into CAD drawings, and publishing documents. Projects in coordinating text and graphics within a desktop publishing program will include printing black and white, and color publications.
(2 Lec., 4 Lab.)

DFTG 1391 Special Topics in Drafting (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

DFTG 1392 Special Topics in Architectural Drafting and Architectural CAD/CADD (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

DFTG 1394 Special Topics in Electrical/Electronics Drafting and Electrical/Electronics CAD/CADD (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

DFTG 1395 Special Topics in Mechanical Drafting (3)
(This is a WECM course number .)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

DFTG 1405 Technical Drafting (4)
(This is a WECM Course Number.)
Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes. This course is cross-listed as DFTG 1305. The student may register for either DFTG 1405 or DFTG 1305, but may receive credit for only one of the two.
(2 Lec., 4 Lab./2 Lec., 6 Lab.)

DFTG 1409 Basic Computer-Aided Drafting (4)
(This is a WECM Course Number.)
An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating and scaling objects, adding text and dimensions, using layers coordinating systems; as well as input and output devices. This course is cross-listed as DFTG 1309. The student may register for either DFTG 1409 or DFTG 1309, but may receive credit for only one of the two. (2 Lec., 6 Lab.)

DFTG 1417 Architectural Drafting - Residential (4)
(This is a WECM Course Number.)
Architectural drafting procedures, practices and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods. (2 Lec., 6 Lab.)

DFTG 1421 Architectural Illustration (4)
(This is a WECM Course Number.)
Architectural drawing and sketching, including freehand drawing, perspectives, delineation in various media and development of students' graphical expression, including an introduction to various reproduction methods.
(2 Lec., 6 Lab.)

DFTG 1491 Special Topics in Drafting and Design Technology/Technician, General (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

DFTG 2234 Industrial Drafting Applications (2)
(This is a WECM Course Number.)
An advanced synthesis of industrial drafting practices with emphasis on research, design, and project techniques. Required. This course is cross-listed as DFTG 2334. The student may register for either DFTG 2234 or DFTG 2334, but may receive credit for only one of the two. (1 Lec., 3 Lab.)

DFTG 2304 Printed Circuit Board Design (3)
(This is a WECM Course Number.)
An intermediate course including single-sided and double-sided printed circuit board design, emphasizing the drawings, standards, and processes required to layout printed circuit board and manufacturing documentation. (2 Lec., 4 Lab.)

DFTG 2310 Structural Drafting (3)
(This is a WECM Course Number.)
Discussion of detail drawings of structural shapes for fabrication with emphasis on framed and seated connectors and beam and column detailing. Designed to meet the standards of America Institute of Steel Construction, including units on concrete detailing conforming to America Concrete Institute standards. (2 Lec., 4 Lab.)

DFTG 2312 Technical Illustration (3)
(This is a WECM Course Number.)
Prerequisite: DFTG 1309 or DFTG 1409. Topics include pictorial drawing including isometrics, obliques, perspectives, charts, and graphs; shading and transfer lettering; and use of different media. (2 Lec., 4 Lab.)

DFTG 2328 Architectural Drafting - Commercial (3)
(This is a WECM course number.)
Architectural drafting procedures, practices, and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on construction methods. This course is cross-listed as DFTG 2428. The student may register for either DFTG 2328 or DFTG 2428, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

DFTG 2334 Industrial Drafting Applications (3)
(This is a WECM Course Number.)
An advanced synthesis of industrial drafting practices with emphasis on research, design, and project techniques. This course is cross-listed as DFTG 2234. The student may register for either DFTG 2334 or DFTG 2234, but may receive credit for only one of the two. (2 Lec., 3 Lab.)

DFTG 2336 Computer-Aided Drafting Programming (3)
(This is a WECM Course Number.)
Emphasis on the productivity of CAD software through development of computer-aided drafting programs with emphasis on database design, access techniques, and structure methods with particular application in engineering graphics. (2 Lec., 4 Lab.)

DFTG 2337 Advanced Technical Animation and Rendering (3)
(This is a WECM Course Number.)
Prerequisite: DFTG 1341. The implementation and orchestration of advanced technical three dimensional animation techniques such as hierarchical linking, forward and inverse kinematics, character development, and particle dynamics. Course projects reflect current practices in the architectural, engineering, or construction disciplines. (2 Lec., 4 Lab.)

DFTG 2340 Solid Modeling/Design (3)
(This is a WECM Course Number.)
A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. This course is cross-listed as DFTG 2440. The student may register for either DFTG 2340 or DFTG 2440, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

DFTG 2344 Strength of Materials (3)
(This is a WECM Course Number.)
The study of internal effects of forces acting upon elastic bodies and the resulting changes in form and dimensions, including units on stress, shear, bending moments, and simple beam design. (2 Lec., 4 Lab.)

DFTG 2350 Geometric Dimensioning and Tolerancing (3)
(This is a WECM Course Number.)
Geometric dimensioning and tolerancing, according to standards, application of various geometric dimensions and tolerances to production drawings. (2 Lec., 4 Lab.)

DFTG 2352 Mechanical and Electrical Systems (3)
(This is a WECM Course Number.)
The properties of building materials (assemblies), specifications, codes, vendor references and uses of mechanical, plumbing, conveying, and electrical systems as related to architecture for residential and commercial construction. (2 Lec., 2 Lab.)

DFTG 2356 Advanced Printed Circuit Board Design (3)
(This is a WECM Course Number.)
An advanced course including the layout of surface mounted components and integrated circuit modular design, emphasizing the design and drawing layouts required to produce surface mounted components and integrated circuit modular printed circuit boards.
(2 Lec., 4 Lab.)

DFTG 2374 Integrated Circuit Design (3)
(This is a WECM Local Need Course.)
Skill development in the layout of integrated circuits using current computer hardware and software. Instruction in layout technology and laboratory exercises to enable students to layout simple digital integrated circuits from schematic diagrams and design rules.
(2 Lec., 4 Lab.)

DFTG 2375 Advanced Integrated Circuit Design (3)
(This is a WECM Local Need Course.)
Prerequisite: DFTG 2374. Skill development in the layout of complex integrated circuits using current computer hardware and software. Instruction in layout technology and laboratory exercises to enable students to layout complex analog integrated circuits from schematic diagrams and design rules. (2 Lec., 4 Lab.)

DFTG 2380 Cooperative Education-Drafting (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

DFTG 2381 Cooperative Education-Drafting (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Lab.)

DFTG 2402 Machine Drafting (4)
(This is a WECM Course Number.)
Production of detail and assembly drawings of machines, threads, gears, cams, tolerances and limit dimensioning, surface finishes, and precision drawings. (2 Lec., 6 Lab.)

DFTG 2419 Intermediate Computer-Aided Drafting (4)
(This is a WECM Course Number.)
Prerequisite: Basic Computer-Aided Drafting or the approval of the instructor. The fundamentals of computer aided drafting using an alternative computer aided drafting program. Emphasis is placed on drawing set-up; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects; adding text and dimensions; using layers and coordinating systems; as well as using input and output devices. (2 Lec., 6 Lab.)

DFTG 2428 Architectural Drafting – Commercial (4)
(This is a WECM Course Number.)
Prerequisite: Basic Architectural Drafting Skills or the approval of the instructor. Architectural drafting procedures, practices, and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. This course is cross-listed as DFTG 2328. The student may register for either DFTG 2428 or DFTG 2328, but may receive credit for only one of the two. (2 Lec., 6 Lab.)

DFTG 2431 Advanced Technologies in Architectural Design and Drafting (4)
(This is a WECM Course Number.)
Prerequisite: DFTG 1417. Use of architectural specific software to execute the elements required in designing standard architectural exhibits utilizing custom features to create walls, windows and specific design requirements for construction in residential/commercial and industrial architecture.
(2 Lec., 6 Lab.)

DFTG 2432 Advanced Computer-Aided Drafting (4)
(This is a WECM Course Number.)
Exploration of the use of system customization for drawing production enhancement and the principles of data manipulation. Presentation of advanced applications, such as three-dimensional objects creation and linking graphic entities to external non-graphic data. (2 Lec., 6 Lab.)

DFTG 2435 Advanced Technologies in Mechanical Design and Drafting (4)
(This is a WECM Course Number.)
Prerequisite: DFTG 1409. Use parametric based mechanical design software for mechanical assembly design and drafting. (2 Lec., 6 Lab.)

DFTG 2440 Solid Modeling/Design (4)
(This is a WECM Course Number.)
A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. This course is cross-listed as DFTG 2340. The student may register for either DFTG 2440 or DFTG 2340, but may receive credit for only one of the two.
(2 Lec., 6 Lab.)

DLEA 0094 Learning Skills Improvement (1)
Learning skills are strengthened. Emphasis is on individual needs and personalized programs. This course may be repeated if topics and learning outcomes vary. This course should not be used for Texas Success Initiative (TSI) remediation. (2 Lab.)
(Coordinating Board Academic Approval Number 3201015212)

Developmental Mathematics courses offer a review of mathematical skills. Developmental Mathematics 0099 or Developmental Mathematics 0093 satisfies prerequisites for Mathematics 1314, 1324, 1332, 1333, 1414 and 2342. Developmental Mathematics 0097 or Developmental Mathematics 0091 satisfies prerequisites for TECM 1341.

DMAT 0060 Basic Mathematics I (1)
This course is designed to give an understanding of fundamental operations. Selected topics include whole numbers, decimals, and ratio and proportions. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0061 Basic Mathematics II (1)
This course is designed to give an understanding of fractions. Selected topics include primes, factors, least common multiples, percents, and basic operations with fractions. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0062 Pre Business (1)
This course is designed to introduce students to business mathematics. Selected topics include discounts and commissions, interest, metric and English measuring systems, areas, and volumes. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0063 Pre Algebra (1)
This course is designed to introduce students to the language of algebra with such topics as integers, metrics, equations, and properties of counting numbers. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0064 Mathematics for Nursing I (1)
This course is designed to develop an understanding of the measurements and terminology in medicine and calculations involving conversions of applicable systems of measurement. It is designed primarily for students in all nursing programs. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0065 Mathematics for Nursing II (1)
Prerequisite: Developmental Mathematics 0064. This course includes medical calculations used in problems dealing with solutions and dosages. It is designed primarily for students in the nursing programs. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0066 Concepts in Basic Mathematics (3)
Prerequisite: An appropriate assessment test score. This course is designed to develop the skills and understanding to perform the fundamental operations on whole numbers, fractions and decimals. Topics include the base ten system, rounding, prime numbers, factors, least common multiples and conversions between decimals and fractions. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0070 Elementary Algebra I (1)
Prerequisite: Developmental Mathematics 0090, Developmental Mathematics 0063, or equivalent. This course is an introduction to algebra and includes selected topics such as basic principles and operations of sets, counting numbers, and integers. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0071 Elementary Algebra II (1)
Prerequisite: Developmental Mathematics 0070 or equivalent. This course includes selected topics such as rational numbers, algebraic polynomials, factoring, and algebraic fractions. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0072 Elementary Algebra III (1)
Prerequisite: Developmental Mathematics 0071 or equivalent. This course includes selected topics such as fractional and quadratic equations, quadratic equations with irrational solutions, and systems of equations involving two variables. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0073 Introduction to Geometry (1)
This course introduces principles of geometry. Axioms, theorems, axiom systems, models of such systems, and methods of proof are stressed. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0080 Intermediate Algebra I (1)
Prerequisite: Developmental Mathematics 0072, Developmental Mathematics 0091 or equivalent. This course includes selected topics such as systems of rational numbers, real numbers, and complex numbers. (1 Lec.)

(Coordinating Board Academic Approval Number 3201045219)

DMAT 0081 Intermediate Algebra II (1)
Prerequisite: Developmental Mathematics 0080 or equivalent. This course includes selected topics such as sets, relations, functions, inequalities, and absolute values. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045219)

DMAT 0082 Intermediate Algebra III (1)
Prerequisite: Developmental Mathematics 0081 or equivalent. This course includes selected topics such as graphing, exponents, and factoring. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045219)

DMAT 0090 Pre Algebra Mathematics (3)
Prerequisite: An appropriate assessment test score. This course is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals, and percentages and to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. This is the first three-hour course in the developmental mathematics sequence. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0091 Elementary Algebra (3)
Prerequisite: Developmental Mathematics 0090 or an appropriate assessment test score. This is a course in introductory algebra which includes operations on real numbers, polynomials, special products and factoring, rational expressions, and linear equations and inequalities. Also covered are graphs, systems of linear equations, exponents, roots, radicals, and quadratic equations. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0093 Intermediate Algebra (3)
Prerequisite: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 0091. This course includes further development of the terminology of sets, operations on sets, properties of real numbers, polynomials, rational expressions, linear equations and inequalities, the straight line, systems of linear equations, exponents, roots, and radicals. Also covered are products and factoring, quadratic equations and inequalities, absolute value equations and inequalities, relations, functions, and graphs. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045219)

DMAT 0096 Essential Math (3)
This course is designed primarily for students who need to review basic mathematical processes. Students will develop an understanding of fundamental operations using fractions, decimals, and percentages to strengthen basic skills in mathematics. This is a first course in the developmental mathematics sequence. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0097 Algebra Fundamentals I (3)
Prerequisite: Developmental Mathematics 0096 or 0090 or an appropriate assessment test score. This is a course in introductory algebra which includes operations on real numbers, polynomials, special products and factoring, and linear equations. Also covered are graphs, systems of linear equations and simple exponents. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0098 Algebra Fundamentals II (3)
Prerequisite: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 0097 or Developmental Mathematics 0091. This course is a course in introductory algebra which includes rational expressions, inequalities and quadratic equations. Also included are properties of real numbers, the straight line, absolute value equations and advanced factoring. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0099 Algebra Fundamentals III (3)
Prerequisite: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 0098. This is a course in intermediate algebra which further develops rational expressions, roots, exponents and radicals. Also covered are quadratic inequalities, relations functions and graphs and system of non-linear equations. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045219)

DMAT 0100 Review of Basic Mathematical Concepts (1)
Prerequisite: Developmental Mathematics 0093 or Developmental Mathematics 0098. This course is for students who have not passed the mathematics section of the Texas Success Initiative (TSI). Topics covered will include: real numbers; graphs, charts and tables; solving linear and quadratic equations; algebraic expressions; solving problems involving geometric concept and applied reasoning skills. This course cannot be used as a prerequisite for any college-level mathematics course. This course may be repeated for a maximum of 3 credits. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0200 Review of Fundamental Mathematical Concepts (2)
Prerequisite: Developmental Mathematics 0093 or Developmental Mathematics 0099 or consent of instructor. This is a review course for students who have completed and passed the recommended developmental mathematics sequence of courses. Emphasis is on individual needs. This course cannot be used as a prerequisite for any college-level mathematics course. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0300 Review of Algebraic and Geometric Concepts (3)
Prerequisite: Developmental Mathematics 0093 or Developmental Mathematics 0099. This is a review course for students who have completed and passed the recommended developmental mathematics sequence of courses. Topics include test-taking strategies and practice as well as Texas Success Initiative (TSI) related mathematical concepts. This course cannot be used as a prerequisite for any college-level mathematics course. (3 Lec.)
(Coordinating Board Academic Approval Number 3201045119)

DMAT 0400 Review of Fundamental Algebraic Concepts (4)
Prerequisite: Developmental Mathematics 0093 or Developmental Mathematics 0099. This is a review course for students who have completed and passed the recommended developmental mathematics sequence of courses. Topics include basic operations of real numbers; analysis and interpretation of graphs and tables; solutions and graphs of linear, absolute value and quadratic equations and inequalities; factoring; exponent; principles of geometry; inductive reasoning; and functions. This course cannot be used as a prerequisite for any college-level mathematics course. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3201045119)

NOTE: HPRS 1204, 1291, 1202, 2300, 2231, 2201 are all health occupations core curriculum courses. These courses are listed and described in a separate section of the college catalog: Health Occupations Core Curriculum.

DMSO 1351 Sonographic Cross Sectional Anatomy (3)
(This is a WECM Course Number.)
Prerequisite: Minimum grade of "C" or better in all previous courses. This course focuses on a detailed study of the anatomy of the abdomen and pelvis including anatomical relationships of organs such as liver, gallbladder, spleen, pancreas, and vascular structures and body planes and quadrants. (3 Lec.)

DMSO 1355 Sonographic Pathophysiology (3)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous sonography courses. A study of the pathology and pathophysiology of the abdominal structures visualized with ultrasound examination including the urinary and reproductive systems and superficial parts. (3 Lec.)

DMSO 1366 Practicum (or Field Experience)-Diagnostic Medical Sonography (3)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous sonography courses. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (24 Ext.)

DMSO 1405 Sonography of Abdominopelvic Cavity (4)
(This is a WECM Course Number.)
Prerequisite: Admission into the sonography program. Detailed study of normal and pathological abdominal and pelvic structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. (3 Lec., 2 Lab.)

DMSO 2101 Ultrasound Instrumentation (1)
(This is a WECM Course Number.)
Prerequisite: A grade of "C " or better in all previous courses. This course focuses on the basic pulse-echo ultrasound system including components and function of the scanner, display system, scan converter, and hard copy units. Emphasis on Doppler production and display and safety and performance issues. (1 Lec.)

DMSO 2170 Ultrasound Advanced Topics (1)
(This is a WECM Local Need Course.)
Prerequisite: Grade of "C" or better in all previous program courses. This course will address technological and professional advances in the field of ultrasound. Topics will include professional development and ultrasound ergonomics. Advances in equipment and the use of contrast in ultrasound will be covered. (4 Lab.)

DMSO 2253 Sonography of Superficial Structures (2)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous sonography courses. Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. (2 Lec.)

DMSO 2262 Clinical-Diagnostic Medical Sonography (2)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous sonography courses. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (11 Ext.)

DMSO 2263 Clinical-Diagnostic Medical Sonography (2)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous sonography courses. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (11 Ext.)

DMSO 2343 Advanced Ultrasound Physics (3)
(This is a WECM Course Number.)
Prerequisite: Admission to the sonography programs. Advanced course emphasizing the theory and practice of ultrasound principles including advances in ultrasound technology. Topics include the properties of ultrasound, interaction of ultrasound with tissues, transducers, artifacts, Doppler, safety and quality assurance.
(2 Lec., 2 Lab.)

DMSO 2345 Advanced Sonography Practices (3)
(This is a WECM course.)
Prerequisite: Grade of "C" or better in all previous sonography courses. Advanced sonographic procedures and special topics. Review of previously covered material is included. Vascular methodology, case studies, and film critique are discussed. (3 Lec.)

DMSO 2366 Practicum (or Field Experience)-Diagnostic Medical Sonography (3)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous sonography courses. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
(24 Ext.)

DMSO 2367 Practicum (or Field Experience)-Diagnostic Medical Sonography (3)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous sonography courses. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
(30 Ext.)

DMSO 2405 Sonography of Obstetrics/Gynecology (4)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous courses. Detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. (3 Lec., 2 Lab.)

DRAM 1120 Theater Practicum I (1)
(This is a Texas Common Course Number.)
Practicum in theater with emphasis on technique and procedures with experience gained in play productions. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5005065326)

DRAM 1121 Demonstration Lab (1)
(This is a Texas Common Course Number.)
Scenes studied in various theatre classes are demonstrated to show contrast and different styles. This course may be repeated for credit. (1 Lab.)
(Coordinating Board Academic Approval Number 5005065326)

DRAM 1142 Introduction to Costume (1)
(This is a Texas Common Course Number.)
Principles and techniques of costume design and construction for theatrical productions. (3 Lab.)
(Coordinating Board Academic Approval Number 5005025326)

DRAM 1161 Musical Theater I (1)
(This is a Texas Common Course Number.)
Study and performance of works from the musical theater repertoire. (3 Lab.)
(Coordinating Board Academic Approval Number 5009036126)

DRAM 1162 Musical Theater II (1)
(This is a Texas Common Course Number.)
Study and performance of works from the musical theater repertoire. (3 Lab.)
(Coordinating Board Academic Approval Number 5009036126)

DRAM 1220 Theater Practicum I (2)
(This is a Texas Common Course Number.)
Practicum in theater with emphasis on technique and procedures with experience gained in play productions. This course may be repeated for credit. (6 Lab.)
(Coordinating Board Academic Approval Number 5005065326)

DRAM 1221 Theater Practicum II (2)
(This is a Texas Common Course Number.)
Practicum in theater with emphasis on technique and procedures with experience gained in play productions. This course may be repeated for credit. (6 Lab.)
(Coordinating Board Academic Approval Number 5005065326)

DRAM 1242 Introduction to Costume (2)
(This is a Texas Common Course Number.)
Principles and techniques of costume design and construction for theatrical productions. (6 Lab.)
(Coordinating Board Academic Approval Number 5005025326)

DRAM 1310 Introduction to the Theater (3)
(This is a Texas Common Course Number.)
The various aspects of theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artists, and technicians. (3 Lec.)
(Coordinating Board Academic Approval Number 5005015126)

DRAM 1322 Movement for the Stage (3)
(This is a Texas Common Course Number.)
Movement is studied as both a pure form and as it is used in all theatrical styles, and in the development of characterization. (2 Lec. 3 Lab.)
(Coordinating Board Academic Approval Number 5005035326)

DRAM 1323 Theater Workshop (3)
(This is a Texas Common Course Number.)
A course in theatre with emphasis on performance techniques in musical and repertory theatre with practical performance experience. This course may be repeated for credit. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005065326)

DRAM 1330 Stagecraft I (3)
(This is a Texas Common Course Number.)
The technical aspects of play production are studied. Topics include shop procedures, the planning and fabrication of scenic elements, and backstage operations. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025126)

DRAM 1336 Television Production I (3)
(The Texas Common Course Number is COMM 1336.)
Station organization, studio operation, and the use of studio equipment are introduced. Topics include continuity, camera, sound, lights, and videotape recording. This course is cross-listed as COMM 1336. The student may register for either DRAM 1336 or COMM 1336, but may receive credit for only one of the two courses. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1002025206)

DRAM 1337 Television Production II (3)
(The Texas Common Course Number is COMM 1337.)
Prerequisite: Drama 1336. This course is a continuation of Drama 1336. Emphasis is on the concept and technique of production in practical situations. This course is cross-listed as COMM 1337. The student may register for either DRAM 1337 or COMM 1337, but may receive credit for only one of the two courses.
(2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1002025206)

DRAM 1341 Make-Up for the Stage (3)
(This is a Texas Common Course Number.)
The craft of make-up is explored. Both theory and practice are included. (3 Lec.)
(Coordinating Board Academic Approval Number 5005025226)

DRAM 1351 Acting I (3)
(This is a Texas Common Course Number.)
The theory of acting and various exercises are presented. Body control, voice, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005065126)

DRAM 1352 Acting II (3)
(This is a Texas Common Course Number.)
Prerequisite: Drama 1351 or demonstrated competence approved by the instructor. This course is a continuation of Drama 1351. Emphasis is on characterization and ensemble acting. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005065126)

DRAM 2120 Theater Practicum III (1)
(This is a Texas Common Course Number.)
Practicum in theater with emphasis on technique and procedures with experience gained in play productions. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5005065326)

DRAM 2121 Theater Practicum IV (1)
(This is a Texas Common Course Number.)
Practicum in theater with emphasis on technique and procedures with experience gained in play productions. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5005065326)

DRAM 2189 Academic Cooperative (1)
(This is a Texas Common Course Number.)
An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of drama. (3 Lab.)
(Coordinating Board Academic Approval Number 2401035212)

DRAM 2220 Theater Practicum III (2)
(This is a Texas Common Course Number.)
Practicum in theater with emphasis on technique and procedures with experience gained in play productions. This course may be repeated for credit. (6 Lab.)
(Coordinating Board Academic Approval Number 5005065326)

DRAM 2289 Academic Cooperative I (2)
An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of drama. (6 Lab.)
(Coordinating Board Academic Approval Number 2401035212)

DRAM 2324 Broadcast Communications I (3)
(The Texas Common Course Number is COMM 2324.)
Basic techniques of television and video performance are introduced. (3 Lec.)
(Coordinating Board Academic Approval Number 0907015306)

DRAM 2325 Broadcast Communications II (3)
(The Texas Common Course Number is COMM 2325.)
Prerequisite: Drama 2324 or demonstrated competence approved by the instructor. This course is a continuation of Drama 2324. Emphasis is on radio and television as mass media and practical applications in both radio and television. (3 Lec.)
(Coordinating Board Academic Approval Number 0907015306)

DRAM 2331 Stagecraft II (3)
(This is a Texas Common Course Number.)
Emphasis is placed on the design process and individual projects. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025126)

DRAM 2336 Voice and Articulation (3)
(This is a Texas Common Course Number.)
Students may register for either Speech 1342 or Drama 2336 but may receive credit for only one of the two. Emphasis is on improving voice and pronunciation. (3 Lec.)
(Coordinating Board Academic Approval Number 5005035226)

DRAM 2351 Acting III (3)
(This is a Texas Common Course Number.)
Emphasis is on individual need of the performer and the various styles of production. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5005065126)

DRAM 2352 Acting IV (3)
(This is a Texas Common Course Number.)
Emphasis is on individual need of the performer and the various styles of production. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5005065126)

DRAM 2361 History of Theater I (3)
(This is a Texas Common Course Number.)
Drama is surveyed from its beginning through the 16th century. The theatre is studied in each period as a part of the total culture of the period. (3 Lec.)
(Coordinating Board Academic Approval Number 5005055126)

DRAM 2362 History of Theater II (3)
(This is a Texas Common Course Number.)
Drama is surveyed from the 17th century through the 20th century. The theatre is studied in each period as a part of the total culture of the period. (3 Lec.)
(Coordinating Board Academic Approval Number 5005055126)

DRAM 2363 History of Musical Theater I (3)
(This is a Texas Common Course Number.)
Development of Musical theater from the earliest times through the 20th century. (3 Lec.)
(Coordinating Board Academic Approval Number 5005055126)

DRAM 2366 Film Appreciation I (3)
(This is a Texas Common Course Number.)
Emphasis on the analysis of the visual and aural aspects of selected motion pictures, dramatic aspects of narrative films, and historical growth and sociological effect of film as an art. (3 Lec.)
(Coordinating Board Academic Approval Number 5006025126)

DRAM 2367 Film Appreciation II (3)
(This is a Texas Common Course Number.)
Prerequisite: DRAM 2366. Emphasis on the analysis of the visual and aural aspects of selected motion pictures, dramatic aspects of narrative films, and historical growth and sociological effect of film as an art. (3 Lec.)
(Coordinating Board Academic Approval Number 5006025126)

DRAM 2374 Lighting Design (3)
(This is a Unique Need Course.)
The design and techniques of lighting are covered. Topics include instrumentation, electricity, control and practical experience. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005029126)

Students can improve their academic success by taking the appropriate reading courses. For an assessment of which course to begin with, talk with a reading faculty member or a counselor

DREA 0090 Developmental Reading (3)
This course presents basic reading comprehension and vocabulary skills. Basic study skills are introduced. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085212)

DREA 0091 Developmental Reading (3)
This course continues the development of reading comprehension and vocabulary skills. Study skills are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085212)

DREA 0093 Developmental Reading (3)
This course offers further development of reading comprehension, vocabulary, and study skills. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085212)

DREA 0100 College Learning Skills in Reading (1)
This course offers further development of reading comprehension, vocabulary, and study skills for students who have completed the developmental reading series, but have not passed the reading portion of the Texas Success Initiative (TSI). This course may be repeated for a maximum of three credits. (1 Lec.)
(Coordinating Board Academic Approval Number 3201085212)

DREA 0200 Learning Skills Improvement in Reading (2)
This course offers further development of reading comprehension and vocabulary for students who have completed the developmental reading series, but have not passed the reading portion of the Texas Success Initiative (TSI). Emphasis is on the development of learning skills according to individual needs. This course may be repeated for a maximum of three credits.
(2 Lab.)
(Coordinating Board Academic Approval Number 3201085212)

DREA 0300 Communication Skills in Reading (3)
This course offers basic reading skill training through the use of whole language development. This course is designed for students whose assessment scores indicate special needs. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085212)

DREA 0400 Communication Skills in Reading (4)
This course is for students with significant reading problems. It is organized around reading skill development. Emphasis is on individual needs and personalized programs. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085212)

DSAE 1203 Introduction to Echocardiography Techniques (2)
(This is a WECM Course Number.)
Prerequisite: Admission to the Program. An introduction to scanning techniques and procedures with hands-on experience in a lab setting. Emphasis is placed on the sonographic explanation of the normal adult heart.
(2 Lec.)

DSAE 1260 Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician (2)
(This is a WECM Course Number.)
Prerequisite: Admission to the program. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (9 Ext.)

DSAE 2235 Advanced Echocardiography (2)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous courses. Instruction in advanced echocardiographic procedures. Topics include stress echo, related diagnostic imaging, and related noninvasive cardiac testing. (2 Lec.)

DSAE 2303 Cardiovascular Concepts (3)
(This is a WECM Course Number.)
Prerequisite: Admission to the Program. A study of anatomy, physiology, and pathophysiology of the cardiovascular system. Focuses on cardiac and vascular structural anatomy and relationships, electrical innervation, embryology, and hemodynamics of the heart and vascular system. Pathophysiology concepts, including etiology, pathology, signs, symptoms, risk factors, and treatment of cardiovascular diseases are also presented. (3 Lec.)

DSAE 2404 Echocardiographic Evaluation of Pathology I (4)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous courses. An emphasis on adult acquired cardiac pathologies. Topics include cardiovascular pathophysiology, quantitative measurements, and the application of 2-D, M-Mode, and Doppler. Recognition of the sonographic appearances of cardiovascular disease is stressed. (3 Lec., 3 Lab.)

DSAE 2437 Echocardiographic Evaluation of Pathology II (4)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous courses. A continuation of Echocardiographic Evaluation of Pathology I with emphasis on cardiac disease. A discussion of quantitative measurements and application of 2-D, M-Mode, Doppler and recognition of the sonographic appearances of cardiac disease is stressed. (3 Lec., 3 Lab.)

DSAE 2660 Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician (6)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous courses. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
(32 Ext.)

DSAE 2661 Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician (6)
(This is a WECM Course Number.)
Prerequisite: Grade of "C" or better in all previous courses. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
(32 Ext.)

Students can improve their writing skills by taking Developmental Writing. These courses are offered for three hours of credit.

DWRI 0090 Developmental Writing (3)
This course introduces the writing process. Course topics include practice in getting ideas, writing and rewriting, making improvements, and correcting mistakes. A learning lab is available to provide additional assistance. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085312)

DWRI 0091 Developmental Writing (3)
This course focuses on the writing process. Course topics include inventing, drafting, revising, and editing multi-paragraph papers. Building reading skills, using resources, developing thinking skills, and improving attitudes toward writing comprise other course topics. A learning lab is available to provide additional assistance. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085312)

DWRI 0093 Developmental Writing (3)
This course refines student writing skills in inventing, drafting, revising, and editing multi-paragraph papers. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085312)

DWRI 0100 Developmental Writing (1)
This course focuses on instruction to prepare students to meet Texas Success Initiative (TSI) requirements. This course is also for students who wish to extend their writing skills for academic or career programs. Individualized study and practice are provided. This course may be repeated for a maximum of three credits. (1 Lec.)
(Coordinating Board Academic Approval Number 3201085312)

DWRI 0200 Developmental Writing (2)
This course focuses upon writing skills improvement. Writing skills are strengthened. Emphasis is on individual needs and personalized programs. This course may be repeated for a maximum of two credits. (2 Lab.)
(Coordinating Board Academic Approval Number 3201085312)

DWRI 0300 Developmental Writing (3)
This course focuses upon strengthening writing skills. Topics include grammar, paragraph structure, and effective communication strategies. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085312)

DWRI 0400 Developmental Writing (4)
This course is for students with significant writing problems. It is organized around skill development, and students may enroll at any time (not just at the beginning of the semester) upon the referral of an instructor. Contacts are made with other departments to provide other ways of learning for the students. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3201085312)

NOTE: This course will carry a Dallas County Community College prefix of "ECOL"; however, it may also be identified by a common course number for transfer evaluation purposes. Both are listed in the course description.

ECOL 1305 People and Their Environment (3)
(The Texas Common Course Number is GEOL 1305.)
Environmental awareness and knowledge are emphasized. Topics include pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of unguided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed. (3 Lec.)
(Coordinating Board Academic Approval Number 0301025301)

ECON 1303 Economics of Contemporary Social Issues (3)
(This is a Texas Common Course Number.)
This course is an application of the basic economic concepts to the study of social issues and issues of public policy. Topics such as the environment, health care, welfare reform, poverty, job security and economic growth are discussed. This course may also serve as preparation for Economics 2301 and Economics 2302, but will not replace either of these courses where they are required in a specific degree plan. (3 Lec.)
(Coordinating Board Academic Approval Number 1904025209)

ECON 2301 Principles of Economics I (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading. An introduction to principles of macroeconomics is presented. Economic principles are studied within the framework of classical, Keynesian, monetarist and alternative models. Emphasis is given to national income determination, money and banking, and the role of monetary and fiscal policy in economic stabilization and growth. Other topics include international trade and finance. (3 Lec.)
(Coordinating Board Academic Approval Number 4506015125)

ECON 2302 Principles of Economics II (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading. The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is given to microeconomic applications of international trade and finance as well as other contemporary microeconomic problems. (3 Lec.)
(Coordinating Board Academic Approval Number 4506015125)

ECON 2311 Economics of Global Issues (3)
(This is a Texas Common Course Number.)
This course examines the history and theory of international trade and global economic development. Economic, social, cultural, and political issues which impact the global economy and basic human welfare are studied. This course is cross-listed as Geography 2312. The student may register for either Economics 2311 or Geography 2312, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015225)

EDTC 1164 Practicum (or Field Experience)-Teacher Assistant/Aide (1)
(This is a WECM Course Number.)
Prerequisite: The completion of two EDTC courses and Instructor's approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (10 Lab.)

EDTC 1165 Practicum (or Field Experience)-Teacher Assistant/Aide (1)
(This is a WECM course number.)
Prerequisite: The completion of two EDTC courses and Instructor's approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (10 Lab.)

EDTC 1194 Special Topics in Teacher Assistant/Aide (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

EDTC 1294 Special Topics in Teacher Assistant/Aide (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

EDTC 1301 Instructional Practices: Educational Processes (3)
(This is a WECM Course Number.)
A study of the role and responsibility of the instructional teacher assistant with emphasis on development of professionalism and effective communication strategies with adults. Topics include the various code of ethics governing the educational field, the issue of confidentiality, learners' rights and responsibilities, and challenges facing schools. (3 Lec.)

EDTC 1307 Teaching Reading in the Elementary School (3)
(This is a WECM Course Number.)
Fundamental concepts and principles of reading instruction. Topics include readiness, beginning reading instruction, how literacy emerges, classroom learning environments, word-attach skills, study skills, comprehension, other aspects of the reading program, and examination of varied materials and techniques for teaching reading. (3 Lec.)

EDTC 1321 Bilingual Education (3)
(This is a WECM Course Number.)
A course in the core techniques of bilingual education. Topics include awareness of cultural diversity, teaching techniques, material development, and historical and philosophical concepts of bilingual/bicultural education. (3 Lec.)

EDTC 1325 Principles and Practices of Multicultural Education (3)
(This is a WECM Course Number.)
Examination of cultural variations found in our society and reflected in our pluralistic classrooms. Topics include culturally influenced behavior, major cultures, cultural diversity, and the process of intercultural communication and teaching, including differences in lifestyles, communication styles, learning styles, and various sources of stress for diverse cultural groups. (3 Lec.)

EDTC 1341 Computer Instruction for Educators (3)
(This is a WECM Course Number.)
A course in specialized computer utilization for educators. Topics include the integration of educational computer terminology, systems operations, software, and multimedia in the contemporary classroom environment. (2 Lec., 2 Lab.)

EDTC 1364 Practicum (or Field Experience)-Teacher Assistant/Aide (3)
(This is a WECM Course Number.)
Prerequisite: The completion of two EDTC courses and Instructor's approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (21 Lab.)

EDTC 1365 Practicum (or Field Experience)-Teacher Assistant/Aide (3)
(This is a WECM Course Number.)
Prerequisite: The completion of two EDTC courses and Instructor's approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (21 Lab.)

EDTC 1391 Special Topics in English Teacher Education (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

EDTC 1394 Special Topics in Teacher Assistant/Aide (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

EDUC 1301 Introduction to Education (3)
(This is a Texas Common Course Number.)
A study of the role and responsibilities of teachers and school organizations, including an enriched integrated pre-service course and content experience that: 1) provides active recruitment and support of undergraduates interested in a teaching career; 2) provides students with opportunities to participate in early field experiences; 3) provides students with support from college and school faculty in small cohort groups, introducing and analyzing the culture of schooling and classrooms. (3 Lec.)
(Coordinating Board Academic Approval Number 1301015109)

EDUC 1325 Principles and Practices of Multicultural Education (3)
(This is a Texas Common Course Number.)
An examination of cultural diversity found in society and reflected in the classroom. Topics will include the study of major cultures and their influence on lifestyle, behavior, learning, intercultural communication and teaching, as well as psychosocial stressors encountered by diverse cultural groups. (3 Lec.)
(Coordinating Board Academic Approval Number 1301015109)

EDUC 2301 Introduction to Special Education (3)
(This is a Texas Common Course Number.)
An introduction to special education including characteristics, problems, and needs of the exceptional learner. Public and private services available to the handicapped citizen. Field trips may be required.
(3 Lec.)
(Coordinating Board Academic Approval Number 1310015109)

EECT 1104 Electronic Soldering (1)
(This is a WECM Course Number.)
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be primarily on terminal and printed circuit board through-hole soldering. This course is cross-listed as EECT 1204. The student may register for either EECT 1104 or EECT 1204, but may receive credit for only one of the two. (2 Lab.)

EECT 1191 Special Topics in Electrical, Electronic And Communications Engineering Technology/Technician (1)
(This is a WECM Course Number.)
Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec.)

EECT 1204 Electronic Soldering (2)
(This is a WECM Course Number.)
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be on surface-mount soldering techniques. This course is cross-listed as EECT 1104. The student may register for either EECT 1204 or EECT 1104, but may receive credit for only one of the two. (1 Lec., 2 Lab.)

EECT 1291 Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician (2)
(This is a WECM Course Number.)
Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 1 Lab.)

EECT 1300 Technical Customer Service (3)
(This is a WECM Course Number.)
General principles of customer service within a technical environment. Topics include internal/external customer relationships, time-management, best practices, and verbal and non-verbal communications skills. (3 Lec.)

EECT 1346 Telecommunications Trafficking Engineering (3)
(This is a WECM Course Number.)
Prerequisite: EECT 1403. A study of telecommunications traffic management including blocking avoidance schemes, data collection and analysis and reporting techniques. (3 Lec.)

EECT 1391 Special Topics In Electrical, Electronic and Communications Engineering Technology/Technician (3)
(This is a WECM Course Number.)
Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 2 Lab.)

EECT 1403 Introduction to Telecommunications (4)
(This is a WECM Course Number.)
An overview of the telecommunications industry. Topics include the history of the telecommunications industry, terminology, rules and regulations and industry standards and protocols. This course is cross-listed as EECT 1303. The student may register for either EECT 1403 or EECT 1303, but may receive credit for only one of the two. (3 Lec., 3 Lab.)

EECT 1440 Telecommunications Transmission Media (4)
(This is a WECM Course Number.)
Fundamentals of telecommunications media, including installation, maintenance, and troubleshooting. Topics address media characteristics and connectorization.
(3 Lec., 4 Lab.)

EECT 1442 Telecommunications Outside Plant (4)
(This is a WECM Course Number.)
Prerequisite: EECT 1403. A study of outside plant facilities with emphasis on cabling layout design, splicing, bonding, grounding and facility protection systems. Safety practices and procedures are included. (3 Lec., 3 Lab.)

EECT 1444 Telecommunications Broadband Systems (4)
(This is a WECM Course Number.)
Prerequisite: EECT 1403. A survey of telecommunications broadband transmissions systems including protocols, testing, applications and safety practices. (3 Lec., 3 Lab.)

EECT 1491 Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician (4)
(This is a WECM Course Number.)
Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec., 3 Lab.)

EECT 2380 Cooperative Education - Electrical, Electronic and Communications Engineering Technology/Technician (3)
(This is a WECM course number.
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

EECT 2381 Cooperative Education - Electrical, Electronic and Communications Engineering Technology/Technician (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

EECT 2430 Telecommunications Switching (4)
(This is a WECM Course Number.)
Prerequisite: EECT 1403. The operation of telecommunications switching equipment and related software. Topics include installation, testing, maintenance, and troubleshooting. (3 Lec., 3 Lab.)

EECT 2432 Telecommunications Signaling (4)
(This is a WECM Course Number.)
Prerequisite: EECT 1403. The study of signaling schemes in telecommunications. Topics include circuits and systems necessary to implement signaling protocols, conversions and formats. Also included is the study of the history of signaling schemes. (3 Lec., 3 Lab.)

EECT 2433 Telephone Systems (4)
(This is a WECM Course Number.)
A study of installation and maintenance systems including telephone set, public switched networks, local exchanges, networks, two and four wire systems, tip and ringing requirements, and digital transmission techniques. (3 Lec., 3 Lab.)

EECT 2435 Telecommunications (4)
(This is a WECM Course Number.)
Prerequisite: CETT 2439. A study of modern telecommunications systems incorporating microwave, satellite, optical, and wire/cable-based communications systems. Instruction in installation, testing, and maintenance of communications systems components. (3 Lec., 3 Lab.)

EECT 2437 Wireless Telephony Systems (4)
(This is a WECM Course Number.)
Prerequisite: EECT 1401. Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment and access protocol. (3 Lec., 3 Lab.)

EECT 2439 Communications Circuits (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. This course is a study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. Discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers. The student will describe the operation of communications receivers and transmitters; measure and troubleshoot communications systems; and describe the use of microwave receivers used in down-links in communications and the geographical regional transponder relationships used to communicate by cell phone. (3 Lec., 3 Lab.)

EECT 2440 Telecommunications Central Office Equipment (4)
(This is a WECM Course Number.)
Prerequisite: EECT 1403. An examination of the theory, operation and maintenance of central office telecommunications equipment. This course is designed to make the student familiar with the installation of telecommunications switching equipment, interpretation of technical documents, and standard practices and procedures including safety procedures. (3 Lec., 3 Lab.)

EEIR 1291 Special Topics in Electrical and Electronics Equipment Installer and Repair (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

EEIR 1307 Introductory Security Systems (3)
(This is a WECM Course Number.)
A study of the maintenance, troubleshooting, and repair of security systems. Emphasis on the installation of security systems with supervision. Lab required. (2 Lec., 2 Lab.)

EEIR 1311 Introductory Television Systems (3)
(This is a WECM Course Number.)
A study of the television receiver system blocks emphasizing the identification of the fundamental waveforms and including the examination of the audio circuit. (3 Lec.)

ELMT 2239 Advanced Programmable Logic Controllers (2)
(This is a WECM Course Number.)
Advanced applications of programmable logic controllers as used in industrial environments including concepts of programming, industrial applications, troubleshooting ladder logic, and interfacing to equipment. (1 Lec., 3 Lab.)

ELMT 2433 Industrial Electronics (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. This course is a study of devices, circuits, and systems primarily used in automated manufacturing and/or process control including computer controls and interfacing between mechanical, electrical, electronic, and computer equipment. Presentation of programming schemes. The student will describe how electronic input and output circuits are used to control automated manufacturing and/or process systems; identify basic elements used for input, output, timing, and control; define how programmable electronic systems use input data to alter output responses; troubleshoot a representative system; and demonstrate how system operation can be altered with software programming. (3 Lec., 3 Lab.)

ELPT 1215 Electrical Calculations I (2)
(This is a WECM Course Number.)
Introduction to mathematical applications utilized to solve problems in the electrical field. Topics include fractions, decimals, percentages, simple equations, ratio and proportion, unit conversions, and applied geometry. (2 Lec., 1 Lab.)

ELPT 1221 Introduction to Electrical Safety and Tools (2)
(This is a WECM Course Number.)
A comprehensive overview of safety rules and regulations and the selection, inspection, use, and maintenance of common tools for electricians. Lab required. This course is cross-listed as ELPT 1321. The student may register for either ELPT 1221 or ELPT 1321, but may receive credit for only one of the two. (2 Lec., 1 Lab.)

ELPT 1311 Basic Electrical Theory (3)
(This is a WECM Course Number.)
An overview of the theory and practice of electrical circuits including calculations as applied to alternating and direct current. Laboratory required. This course is cross-listed as ELPT 1411. The student may register for either ELPT 1311 or ELPT 1411, but may receive credit for only one of the two. (2 Lec., 3 Lab./1 Lec., 3 Lab.)

ELPT 1319 Fundamentals of Electricity I (3)
(This is a WECM Course Number.)
An introduction to basic direct current (DC) theory including electron theory and direct current applications. Lab required. (2 Lec., 3 Lab.)

ELPT 1320 Fundamentals of Electricity II (3)
(This is a WECM Course Number.)
An introduction to alternating current (AC) including Ohm's Law. Topics include AC voltage, frequency, mechanical and electrical degrees, waveforms, resistors, capacitors, and inductors. Lab required. (2 Lec., 3 Lab.)

ELPT 1321 Introduction to Electrical Safety and Tools (3)
(This is a WECM Course Number.)
A comprehensive overview of safety rules and regulations and the selection, inspection, use, and maintenance of common tools for electricians. Lab required. This course is cross-listed as ELPT 1221. The student may register for either ELPT 1321 or ELPT 1221, but may receive credit for only one of the two. (2 Lec., 3 Lab.)

ELPT 1325 National Electrical Code I (3)
(This is a WECM Course Number.)
An introductory study of the National Electric Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis on wiring design, protection, methods, and materials; equipment for general use; and basic calculations. Lab required. (2 Lec., 2 Lab.)

ELPT 1329 Residential Wiring (3)
(This is a WECM Course Number.)
Instruction in wiring methods used for single family, two family, and multi-family dwellings. Lab required.
(2 Lec., 4 Lab.)

ELPT 1345 Commercial Wiring (3)
(This is a WECM Course Number.)
Instruction in commercial wiring methods. Lab required.
(2 Lec., 3 Lab. / 2 Lec., 4 Lab.)

ELPT 1349 Electrical Blueprint Reading (3)
(This is a WECM course.)
An overview of electrical blueprint reading. Topics include symbols, specifications, panel and lighting schedules, and riser diagrams. Lab required.
(2 Lec., 3 Lab.)

ELPT 1351 Electrical Machines (3)
(This is a WECM Course Number.)
General principles and fundamentals of direct current (DC) motors, single-phase and polyphase alternating current (AC) motors, generators, and alternators. Emphasis on their construction, characteristics, efficiencies, starting, and speed control. Lab required.
(3 Lec.)

ELPT 1357 Industrial Wiring (3)
(This is a WECM Course Number.)
Instruction in wiring methods used for industrial installations. Lab required. (2 Lec., 3 Lab./1 Lec., 2 Lab.)

ELPT 1411 Basic Electrical Theory (4)
(This is a WECM Course Number.)
An overview of the theory and practice of electrical circuits including calculations as applied to alternating and direct current. Lab required. This course is cross-listed as ELPT 1311. The student may register for either ELPT 1411 or ELPT 1311, but may receive credit for only one of the two. (3 Lec., 3 Lab.)

ELPT 1441 Motor Control (4)
(This is a WECM Course Number.)
Study of the operating principles of solid-state controls along with their practical applications. Topics include braking, jogging, plugging, and safety interlocks. Lab required. (3 Lec., 3 Lab.)

ELPT 2437 Electrical Planning and Estimating (4)
(This is a WECM Course Number.)
Instruction in preparation of estimates for residential, commercial, and industrial wiring systems. Skills development in a variety of electrical techniques. Lab required. (3 Lec., 3 Lab.)

ELPT 2443 Electrical Systems Design (4)
(This is a WECM Course Number.)
Skill development in the electrical design of a commercial or industrial project including building layout, types of equipment, placement, sizing of electrical equipment, and all electrical calculations according to the requirements of the National Electrical Code (NEC). Lab required. (3 Lec., 2 Lab.)

ELTN 1341 Basic Motor Controls (3)
(This is a WECM Course Number.)
Instruction in motor control fundamentals and control wiring in accordance with the National Electrical Code (NEC). Skill development in troubleshooting, maintenance, and repair of various control circuits. Lab required. (2 Lec., 3 Lab.)

ELTN 1343 Electrical Troubleshootng (3)
(This is a WECM Course Number.)
Instruction in the maintenance, theory of operation, troubleshooting, and repair of circuits of various residential, commercial, and industrial electrical systems. Lab required. (2 Lec., 3 Lab.)

ELTN 1380 Cooperative Education - Electrician (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lab required.
(1 Lec., 20 Ext.)

ELTN 1381 Cooperative Education - Electrician (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lab required.
(1 Lec., 20 Ext.)

ELTN 1470 Electrical Construction I (4)
(This is a WECM Local Need Course.)
This course sets the basics for the study of electricity as used in the electrical construction industry. The structure of matter, the electron theory, and magnetism lead into the study of the sources and effects of electricity. Electrical Math is the foundation for the calculation and study of the various laws of electrical circuits as these laws are applied to the performance of pressure, flow and resistance in series and parallel circuits used in the electrical construction industry. This course also covers an orientation of apprenticeship in the electrical construction industry, including safety, OSHA regulations and requirements for the electrical construction industry. Basic electrician's tools and electrical materials, wire (including types, sizes, and insulations) and various wiring methods are also covered. An introduction to the NEC as to terminology, definitions, and applications is covered followed by the uses and limitations of the NEC wiring methods.
(3 Lec. 3 Lab.)

ELTN 1471 Electrical Construction II (4)
(This is a WECM Local Need Course.)
Electrical sources, such as batteries and generators are studied in this course. Starting with the principles of generation and progressing through direct current generators, alternating current generators, and into the basics of direct current motors. There is also included a simple introduction to alternating current circuits and systems in the course. This course also covers an orientation as to the Apprenticeship Committee's operations and the sponsoring organizations. On-the-job safety is covered. The basics of blueprints and progressing into residential blueprints and the NEC concerning residential installations are covered. An exposure is given to grounding, fuses, overcurrent protection, and lighting for a deeper study later.
(3 Lec. 3 Lab.)

ELTN 1472 Electrical Construction III (4)
(This is a WECM Local Need Course.)
This course will cover alternating current circuits, terminology, characteristics and components. AC circuits components will include inductance, inductive reactance, capacitance, capacitive reactance, impedance, and power factor. Also including AC circuit calculations. Various types of sketching and drawing are covered in this lesson before going on to the study of small commercial blueprints and installations. Special construction situations are covered in motor drives, rigging, fastening devices, safety, electrical shock, and safety for electrical shock. The electrical testing part of the course will cover rectifiers, DC meters, and AC meters. Information on parliamentary procedures and conducting a meeting are also covered. (3 Lec. 3 Lab.)

ELTN 1473 Electrical Construction IV (4)
(This is a WECM Local Need Course.)
This course picks up where course ELPT 1472 ended with power factor and starts on power factor problems and corrections. Series parallel LCR circuit calculations and uses are covered. Also, lighting types, uses, principles of operation, and applications of the NEC to lighting installations is studied. This course also teaches electrical construction precision conduit bending as installed in an electrical installation. An introduction to motor controls, refrigeration, and air conditioning is presented in preparation for future motor controls. The Assembly of the NEC is a study of the way the NEC is put together, how to make NEC interpretations with job situations and applications. (3 Lec. 3 Lab.)

ELTN 1474 Electrical Construction V (4)
(This is a WECM Local Need Course.)
The apprentice will receive from this course an understanding of the transformers as installed by the construction electricians. The theory of operation, types, polarity, construction, uses, and various transformer connections will be covered. Electrical distribution systems are also covered. This course also consists of the apprentice using a complete set of blueprints of a multi-storied building along with the specifications for the particular installation. Electrical controls, including fire alarms and motor controls will be covered. Motor controls start from the basic equipment and circuits and progress into the more complicated and specialized control circuits. (3 Lec. 3 Lab.)

ELTN 1475 Electrical Construction VI (4)
(This is a WECM Local Need Course.)
This course covers the motors an electrical construction electrician will install. Some of the topics are: principles of operation, various types of single and three phase motors, along with the NEC for motors. An informational lesson of construction economics is included. The NEC hazardous locations are a part of this course. This course follows up course ELPT 1474 as it covers motor control wiring, diagrams, schematic diagram reading, control circuit development, analysis, and trouble shooting, with specialized applications of control circuits. Also wiring and piping layouts for control circuits are covered. (3 Lec. 3 Lab.)

ELTN 1476 Electrical Construction VII (4)
(This is a WECM Local Need Course.)
This course begins the study of electronics including the electron theory of vacuum tubes, rectifiers, power supplies, and amplifiers. Semiconductors, transistors, and transistor circuits are also covered. This course is a continuing study of the blueprints and specifications started in course ELPT 1474 with special consideration given to the study of the electrical installation. The metric system is covered. Electrical constructions installations of instrumentation equipment is covered. Instrumentation covers the recognition, applications, and characteristics of temperature, pressure, and flow controls and equipment. On-the-job relationships and leadership are presented along with OSHA safety in preparation for the apprentice to take over as a journeyman. Nuclear energy and nuclear energy safety are studied also. (3 Lec. 3 Lab.)

ELTN 1477 Electrical Construction VIII (4)
(This is a WECM Local Need Course.)
This course takes up where course ELPT 1476 ended. Static control elements, logic circuits and their application in the electrical construction industry are studied. NEC calculations involving raceway fills, box sizes with various conductors, code tables, and transformer loads are part of the course. This course consists of an in-depth study of the NEC. It will include recent changes in the NEC, electrical material limitations, electrical installation support requirements, exceptions to the Code, and special applications and situations. This course prepares the student for the journeyman examination as required by most cities. (3 Lec. 3 Lab.)

ELTN 1478 Electrical Construction IX (4)
(This is a WECM Local Need Course.)
This course will stress high voltage cables including testing, safety, insulation and fault location. Also included will be the study of basic air conditioning systems operation, wiring, and trouble shooting. In addition, the National Electrical Code will be studied including calculations for electrical branch circuits, and motors. It will also include the study of transformers relative to their operation, diagrams, calculations, and connections. (3 Lec. 3 Lab.)

ELTN 1479 Electrical Construction X (4)
(This is a WECM Local Need Course.)
This course is devoted to programmable controllers. Topics include the basic hardware, processors, numbering systems, ladder diagrams, relays, timers, programming, and troubleshooting. The course will also cover fire alarm systems. Diagrams, wiring connections, operation, and troubleshooting of each type of system will be included. (3 Lec. 3 Lab.)

EMSP 1160 Clinical - Emergency Medical Technology/Technician (EMT Paramedic) (1)
(This is a WECM Course Number.)
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (3 Ext.)

EMSP 1161 Clinical – Emergency Medical Services (1)
(This is a WECM Course Number.)
Prerequisite: Successful completion of EMSP 1338, EMSP 1355 and EMSP 1160. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course expands on previous clinical with special emphasis on medical and special population patients in the Emergency Department, Labor and Delivery, and Pediatrics. (3 Ext.)

EMSP 1338 Introduction to Advanced Practice (3)
(This is a WECM Course Number.)
Prerequisite: (1) Completion of Texas Department of Health approved Emergency Medical Technician course, or certification by Texas Department of Health or National Registry of EMTs as Emergency Medical Technicians, (2) Current CPR certification, (3) Demonstrated competency in math, reading and anatomy and physiology. An exploration of the foundations necessary for mastery of the advanced topics of clinical practice out of the hospital. This course is cross-listed as EMSP 1438. The student may register for either EMSP 1338 or EMSP 1438, but may receive credit for only one of the two. (2 Lec., 2 Lab.)

EMSP 1355 Trauma Management (3)
(This is a WECM Course Number.)
Prerequisite: (1) Completion of Texas Department of Health approved Emergency Medical Technician course, or certification by Texas Department of Health or National Registry of EMTs as Emergency Medical Technicians, (2) Current CPR certification, (3) Demonstrated competency in math, reading and anatomy and physiology. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries. (2 Lec., 2 Lab.)

EMSP 1356 Patient Assessment and Airway Management (3)
(This is a WECM Course Number.)
Prerequisite: (1) EMSP 1438 (2) Current BCLS (CPR) certification. This course provides a detailed study of the knowledge and skills required to reach competence in performing patient assessment and airway management. (2 Lec., 2 Lab.)

EMSP 1438 Introduction to Advanced Practice (4)
(This is a WECM Course Number.)
Prerequisite: (1) Completion of Texas Department of Health approved Emergency Medical Technician course, or certification by the Texas Department of Health or National Registry of EMT's as an Emergency Medical Technician, (2) Current BCLS (CPR) certification preferred. An exploration of the foundations necessary for mastery of the advanced topics of clinical practice out of the hospital. This course is cross-listed as EMSP 1338. The student may register for either EMSP 1438 or EMSP 1338, but may receive credit for only one of the two. (3 Lec., 2 Lab.)

EMSP 1501 Emergency Medical Technician-Basic (5)
(This is a WECM Course Number.)
Introduction to the level of Emergency Medical Technician (EMT)-Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services. (2 Lec., 9 Lab.)

EMSP 2143 Assessment Based Management (1)
(This is a WECM Course Number.)
Prerequisite: Successful completion of EMSP 2544, 2188, 2534 and 2430. The capstone course of the EMSP program. Designed to provide for teaching and evaluating comprehensive, assessment-based patient care management. (2 Lab.)

EMSP 2260 Clinical--Emergency Medical Technology/Technician (EMT Paramedic) (2)
(This is a WECM Course Number.)
Prerequisite: (1) Successful completion of EMSP 1438, 1355, 1356, and 2444 or 2544, and (2) current Texas EMT-B certification. A basic, intermediate, or advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience. (6 Ext.)

EMSP 2261 Clinical – Emergency Medical Technology/Technician (EMT Paramedic) (2)
(This is a WECM Course Number.)
Prerequisite: EMSP 2260. A basic, intermediate, or advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience. (6 Ext.)

EMSP 2332 Mass Disaster Response (3)
(This is a WECM Course Number.)
Lectures and discussions that prepares EMS professionals for the first response to nuclear, biological, or chemical terrorist attack. Topics discussed are nuclear, biological, and chemical agents, their dissemination, traige, and treatment of mass casualty terrorist attacks. (2 Lec., 2 Lab.)

EMSP 2338 EMS Operations (3)
(This is a WECM Course Number.)
Prerequisite: Successful completion of Paramedic 1338, 1355, 2544 and 2187. A detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency. (2 Lec., 2 Lab.)

EMSP 2362 Clinical – Emergency Medical Services (3)
(This is a WECM Course Number.)
Prerequisite: Successful completion of EMSP 2534, EMSP 2430, EMSP 2544 and EMSP 1161. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course assists the student in refining assessment and management skills and prepares for the transition to the pre-hospital setting. (9 Ext.)

EMSP 2430 Special Populations (4)
(This is a WECM course number.)
Prerequisite: Successful completion of Paramedic 1338, 1355, and 2187. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients in nontraditional populations. (3 Lec., 2 Lab.)

EMSP 2434 Medical Emergencies (4)
(This is a WECM Course Number.)
Prerequisite: Successful completion of EMSP 1438, 1355, 1356, and 2544. This course provides a detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies. This course is cross-listed as EMSP 2534. The student may register for either EMSP 2434 or EMSP 2534, but may receive credit for only one of the two. (3 Lec., 2 Lab.)

EMSP 2444 Cardiology (4)
(This is a WECM Course Number.)
Prerequisite: Successful completion of EMSP 1338 or 1438, and EMSP 1355. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. (3 Lec., 2 Lab.)

EMSP 2463 Clinical – Emergency Medical Technology/Technician (EMT Paramedic) (4)
(This is a WECM Course Number.)
Prerequisite: Successful completion of EMSP 2143. A basic, intermediate, or advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience. (12 Ext.)

EMSP 2534 Medical Emergencies (5)
(This is a WECM Course Number.)
Prerequisite: Successful completion of Paramedic 1338, 1355, and 2187. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies. This course is cross-listed as EMSP 2434. The student may register for either EMSP 2534 or EMSP 2434, but may receive credit for only one of the two.
(4 Lec., 2 Lab.)

EMSP 2544 Cardiology (5)
(This is a WECM Course Number.)
Prerequisite: (1) Completion of Texas Department of Health approved Emergency Medical Technician course, or certification by Texas Department of Health or National Registry of EMTs as Emergency Medical Technicians, (2) Current CPR certification, (3) Demonstrated competency in math, reading and anatomy and physiology. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. (5 Lec.)

EMSP 2563 Clinical – Emergency Medical Services (5)
(This is a WECM Course Number.)
Prerequisite: Student must be currently certified in the State of Texas as an Emergency Medical Technician; must have passed the Final Paramedic Capstone Examination from Assessment Based Management (EMSP 2143); and must have successfully completed EMSP 2262. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course transitions the student to functioning in a team leader role on an emergency ambulance. (15 Ext.)

(Also see Developmental Reading and Developmental Writing.) Additional instruction in writing and reading is available through the Learning Skills Center.

ENGL 1111 Creative Writing (1)
(This is a Texas Common Course Number.)
This course is an imaginative writing workshop. It may include fiction, non-fiction, poetry, or drama. (1 Lec.)
(Coordinating Board Academic Approval Number 2305015112)

ENGL 1301 Composition I (3)
(This is a Texas Common Course Number.)
Prerequisite: One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards. This course focuses on student writing. It emphasizes reading and analytical thinking and introduces research skills. Students practice writing for a variety of audiences and purposes. (3 Lec.)
(Coordinating Board Academic Approval Number 2304015112)

ENGL 1302 Composition II (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301 and have met Texas Success Initiative (TSI) standard in Reading and Writing. In this course students refine the writing, research, and reading skills introduced in English 1301. A related goal is the development of critical thinking skills. Writing assignments emphasize argumentation and persuasion. Students will also write a formal research paper. (3 Lec.)
(Coordinating Board Academic Approval Number 2304015112)

ENGL 2307 Creative Writing (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. The writing of fiction is the focus of this course. Included are the short story, poetry, and short drama. (3 Lec.)
(Coordinating Board Academic Approval Number 2305015112)

ENGL 2308 Creative Writing (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. Advanced experience in the techniques of imaginative writing. May include fiction, non-fiction, poetry, or drama. (3 Lec.)
(Coordinating Board Academic Approval Number 2305015112)

ENGL 2311 Technical Writing (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions. (3 Lec.)
(Coordinating Board Academic Approval Number 2311015112)

English In The Sophomore Year
English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333, 2342, and 2343 are independent units of three credit hours each. Any one of these courses will satisfy DCCCD degree requirements in sophomore English.

ENGL 2321 British Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes selections in British Literature organized by movements, schools, periods, or themes. For repeatability purposes, students who take English 2321 should not also take English 2322 or 2323. (3 Lec.)
(Coordinating Board Academic Approval Number 2308015112)

ENGL 2322 British Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes significant works of British and Commonwealth writers from their beginnings through the 18th century. For repeatability purposes, students who take English 2321 should not also take English 2322 or 2323. (3 Lec.)
(Coordinating Board Academic Approval Number 2308015112)

ENGL 2323 British Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes significant works of British and Commonwealth writers from the 19th century to the present. For repeatability purposes, students who take English 2321 should not also take English 2322 or 2323. (3 Lec.)
(Coordinating Board Academic Approval Number 2308015112)

ENGL 2326 American Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes selections in American Literature organized by movements, schools, periods, or themes. For repeatability purposes, students who take English 2326 should not also take English 2327 or 2328. (3 Lec.)
(Coordinating Board Academic Approval Number 2307015112)

ENGL 2327 American Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes significant works of American writers from their beginnings to the 19th century. For repeatability purposes, students who take English 2326 should not also take English 2327 or 2328. (3 Lec.)
(Coordinating Board Academic Approval Number 2307015112)

ENGL 2328 American Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes significant works of American writers from the 19th century to the present. For repeatability purposes, students who take English 2326 should not also take English 2327 or 2328. (3 Lec.)
(Coordinating Board Academic Approval Number 2307015112)

ENGL 2331 World Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes selections in World Literature organized by movements, schools, periods, or themes. For repeatability purposes, students who take English 2331 should not also take English 2332 or 2333. (3 Lec.)
(Coordinating Board Academic Approval Number 1601045213)

ENGL 2332 World Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes significant works representing a variety of cultures from the ancient world to approximately 1600 C.E. For repeatability purposes, students who take English 2331 should not also take English 2332 or 2333. (3 Lec.)
(Coordinating Board Academic Approval Number 1601045213)

ENGL 2333 World Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes significant works representing a variety of cultures from approximately 1600 C.E. to the present. For repeatability purposes, students who take English 2331 should not also take English 2332 or 2333. (3 Lec.)
(Coordinating Board Academic Approval Number 1601045213)

ENGL 2342 Studies in Literature (3)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes selections in literature organized by genre, period, or geographical region. Course descriptions are available each semester prior to registration. This course may be repeated for credit.
(3 Lec.)
(Coordinating Board Academic Approval Number 1601045113)

ENGL 2343 Studies in Literature (3)
Prerequisite: English 1301, English 1302 and have met Texas Success Initiative (TSI) standards in Reading and Writing. This course includes selections in literature organized by theme, interdisciplinary content or major author. Course descriptions are available each semester prior to registration. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 1601045113)

ENGR 1172 Introduction to Experimental Techniques (1)
(This is a unique need course.)
Prerequisite: MATH 2412 or the equivalent. Electrical Engineering fundamentals laboratory that stresses laboratory procedures; learning use of common laboratory equipment such as power supplies, multimeters, signal generators, and oscilloscopes; making measurements; familiarization with simple DC resistor circuits; Ohm's law; analyzing AC signals, including frequency, period, amplitude, and rms value; inductors, capacitors and DC transients; measuring phase shift in an AC circuit due to an inductor or capacitor; and basics of laboratory report writing.
(3 Lab.)
(Coordinating Board Academic Approval Number 1410019110)

ENGR 1201 Introduction to Engineering (2)
(This is a Texas Common Course Number.)
Introduction to engineering as a discipline and a profession. Includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefit of society. (2 Lec.)
(Coordinating Board Academic Approval Number 1401015110)

ENGR 1304 Engineering Graphics I (3)
(This is a Texas Common Course Number.)
Introduction to spatial relationships, multiview projection and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 1513015102)

ENGR 1305 Engineering Graphics II (3)
(This is a Texas Common Course Number.)
Introduction to spatial relationships, multiview projection and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 1513015102)

ENGR 1307 Plane Surveying (3)
(This is a Texas Common Course Number.)
Use and care of instruments, note keeping, distance measurements, traverse surveying, areas, angles and elevations, legal principles, elementary map making, plane table and transit methods of topographic map production, field problems related to highway surveying, circular and vertical curves, earthwork, volumes and cost estimates, and triangulation and base lines.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 1511025111)

ENGR 2110 Introduction to Digital Systems Laboratory (1)
(This is a unique need course.)
Prerequisite: COSC 1415. Corequisite: ENGR 2310. Laboratory to accompany ENGR 2310. The purpose of this laboratory is to give students an intuitive understanding of digital circuits and systems. Laboratory exercises include construction of simple digital logic circuits using prototyping kits and board-level assembly of a personal computer. (3 Lab.)
(Coordinating Board Academic Approval Number 1503039111)

ENGR 2300 Applied Linear Algebra (3)
(This is a unique need course.)
Prerequisite: MATH 2315. Matrices, vectors, determinants, linear systems of equations, Gauss-Jordan elimination, vector spaces, basis, eigenvalues, eigenvectors, numerical methods in linear algebra using MATLAB, computer arithmetic, Gaussian elimination, LU factorization, iterative solutions to linear systems, iterative methods for estimating eigenvalues, singular value decomposition, QR factorization. (3 Lec.)
(Coordinating Board Academic Approval Number 1410019210)

ENGR 2301 Engineering Mechanics I - Statics (3)
(This is a Texas Common Course Number.)
Prerequisite: PHYS 2425. Corequisite: MATH 2414. Calculus-based study of composition and resolution of forces, equilibrium of force systems, friction, centroids, and moments of inertia. (3 Lec.)
(Coordinating Board Academic Approval Number 1411015210)

ENGR 2302 Engineering Mechanics II - Dynamics (3)
(This is a Texas Common Course Number.)
Prerequisite: ENGR 2301. Corequisite: MATH 2315. Calculus-based study of dynamics of rigid bodies, force-mass-acceleration, work-energy, and impulse-momentum computation. (3 Lec.)
(Coordinating Board Academic Approval Number 1411015310)

ENGR 2305 Circuits I for Electrical Engineering (3)
(This is a Texas Common Course Number.)
Prerequisite: MATH 2414. Corequisite: MATH 2315. Principles of electrical circuits and systems. DC, transient, and sinusoidal steady-state analysis. This course must have three lecture hours per week and could include one hour per week of a lab. (3 Lec.)
(Coordinating Board Academic Approval Number 1410015110)

ENGR 2310 Introduction to Digital Systems (3)
(This is a unique need course.)
Prerequisite: COSC 1415. Corequisite: ENGR 2110. Introduction to hardware structures and assembly-language concepts that form the basis of the design of modern computer systems. Internal data representation and arithmetic operations in a computer. Basic logic circuits. MIPS assembly language. Overview of PC architecture. (3 Lec.)
(Coordinating Board Academic Approval Number 1503039211)

ENGR 2332 Mechanics of Materials (3)
(This is a Texas Common Course Number.)
Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses.
(3 Lec.)
(Coordinating Board Academic Approval Number 1411015110)

ENGT 1401 Circuits I for Engineering Technology (4)
(This is a Texas Common Course Number.)
Prerequisite: MATH 1314, MATH 1414 or the equivalent. Fundamental concepts of electrical science including potential, current and power in DC circuits. Fundamental laws and relationships applied to the analysis of circuits and networks: capacitance, inductance and magnetism; and single-frequency concepts; use of calculators and computer software in design and analysis of circuits. Standard instrumentation used in test and measurement of DC circuits and systems will be introduced. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1503035111)

ENGT 1402 Circuits II for Engineering Technology (4)
(This is a Texas Common Course Number.)
Prerequisite: ENGT 1401 and either MATH 1316 or MATH 2412. Complex AC circuit including transient analysis. Network theorems are applied to the solution of AC circuits. Resonance, filters, AC power and three-phase circuits are covered in detail. Continued application of calculators and computer design and analysis of circuits. Standard instrumentation used in testing AC circuits and systems and measurement of AC circuits and systems will be introduced. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1503035211)

ENGT 1407 Digital Fundamentals (4)
(This is a Texas Common Course Number.)
Prerequisite: MATH 1314, MATH 1414 or the equivalent. Analysis, design, and simulation of combinational and sequential systems using: classical Boolean algebra techniques, laboratory hardware experiments and computer simulation. Introduction to programmable logic devices (PLDs) and application-specific integrated circuits using software tool to the design and analysis of digital logic circuits and systems. Standard instrumentation used in testing digital circuits and systems will be introduced. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1503035311)

ENTC 1191 Special Topics in Engineering Technology/Technician, General (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec.)

ENTC 1291 Special Topics in Engineering Technology/Technician, General (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec.)

ENTC 1301 Robotics I (3)
(This is a WECM Course Number.)
Prerequisite: Credit or concurrent enrollment in MATH 1414 or the equivalent. An introduction to Robots/Automation. Topics include history, terminology, classification of robots, basic components, control systems, AC and hydraulic servomechanisms, programming, sensors, types of drive, end-of-arm tooling, end effectors, safety and design procedures.
(2 Lec., 3 Lab.)

ENTC 1323 Strength of Materials (3)
(This is a WECM course number.
Study of the relationship between externally applied forces and internally induced stresses and the resulting deformations in structural members. (2 Lec., 2 Lab.)

ENTC 1343 Statics (3)
(This is a WECM Course Number.)
A study of the composition and resolution of forces and the equilibrium of forces acting on structures. Includes the concepts of friction, moments, couples, centroids, and moment of inertia. (2 Lec., 2 Lab.)

ENTC 1380 Cooperative Education - Engineering Technology, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

ENTC 1391 Special Topics in Engineering Technology/Technician, General (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

ENTC 1491 Special Topics in Engineering Technology/Technician, General (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ENTC 2301 Robotics II (3)
(This is a WECM Course Number.)
Prerequisite: ENTC 1301. The study of industrial robots, programming languages, and software integrated to develop work cells and complete robotic systems. Topics include automation basics, interfacing, safety, and design procedures. (2 Lec., 3 Lab.)

ENTC 2380 Cooperative Education - Engineering Technology, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. (1 Lec., 20 Ext.)

ENTC 2435 Computer Integrated Manufacturing (4)
(This is a WECM Course Number.)
Prerequisite: ENTC 2301. Concepts of CIM are introduced. Emphasis on using computers to automate a total manufacturing system. Hands-on experiences integrating CAD/CAM, robotics, fluid power, CNC machines, vision systems, recognition equipment, PLCs and conveyor systems. (3 Lec., 3 Lab.)

EPCT 1307 Introduction to Environmental Safety and Health (3)
This is a WECM course numbe r.
An historic overview of environmental safety and health. Emphasis is on the use of occupational safety and health codes. (2 Lec., 3 Lab.)

EPCT 1327 Water Treatment and Operations (3)
(This is a WECM Course Number.)
Study of conventional water treatment plants including administration and management. Emphasis on the operation of motors, pumps, and disinfection in small water plants. (2 Lec., 3 Lab.)

The English for Speakers of Other Languages ESOL credit curriculum is designed to develop a student's pre-academic language proficiency in the areas of listening, speaking, reading, and writing. The plan of study consists of sixteen courses divided into four proficiency levels and four skill areas (Listening-Speaking, Reading, Writing, and Grammar). The credit curriculum is designed to interface both with other ESOL programs and with developmental studies or college level programs on each campus. A student enters this program by taking an English placement test and then by being advised by a specially trained ESOL academic advisor.

ESOL 0031 - ESOL 0034 (Listening/Speaking)
These courses prepare students to communicate orally in both public and academic environments. Emphasis is placed on developing language functions, pronunciation, and listening skills, and improving social and intercultural communication skills. Activities range from one-on-one conversation and brief descriptions to formal oral presentations and debates.

ESOL 0041 - ESOL 0044 (Reading)
These courses engage students in reading material from daily experience and prepare them for college reading tasks. Each course instructs students in reading skills, vocabulary development, critical thinking skills, and the use of resources.

ESOL 0051 - ESOL 0054 (Writing)
These courses are designed to help students increase fluency and build confidence in writing. The courses focus on writing as a process. Through inventing, drafting, and revising, students write for specific audiences and purposes.

ESOL 0061 - ESOL 0064 (Grammar)
These courses are designed to complement the ESOL 0051-0054 writing series. They provide instruction and practice with discrete grammar points necessary for effective writing.

El programa de credito academico de Ingles Como Segundo Idioma ESOL esta diseñado para desarrollar el dominio del idioma pre-academico del estudiante en las areas de escuchar, hablar, leer y escribir. El plan de estudio consiste en dieciseis cursos divididos en cuatro niveles de dominio y cuatro areas de habilidades (Escuchar/Hablar, Lectura, Escritura y Gramatica). El programa de credito academico esta disenado para complementar otros programas de ESOL y con los estudios de desarrollo o programas de nivel universitario de cada campus. El estudiante comienza este programa al tomar un examen de clasificacion y despues de una entrevista individual con un asesor academico entrenado especialmente en ESOL.

ESOL 0031 - ESOL 0034 (Escuchar y Conversar)
Estos cursos preparan al alumno para comunicarse con confianza en situaciones sociales y academicas. Se desarollan las varias funciones del lenguaje, se mejora la pronunciacion y comprension auditiva y se practica la comunicacion academica y transcultural. Las actividades didacticas incluyen describir lugares y objetos, proyectos en grupo, presentaciones orales y debates formales.

ESOL 0041 - ESOL 0044 (Lectura)
Estos cursos permiten a los estudiantes el acceso a material de lectura de la vida diaria y los prepara para tareas de lectura academica. Cada curso instruye a los estudiantes en habilidades de lectura, desarrollo de vocabulario, pensar en forma critica y el uso de los varios recursos disponibles en la institucion.

ESOL 0051 - ESOL 0054 (Escritura)
Estos cursos estan diseñados con el objeto de ayudar los alumnos a obtener fluidez y confianza en escritura. Los cursos se enfocan en el proceso de escritura. A traves de crear, planear y revisar, los estudiantes produciran escritos para diferentes audiencias y con diversos propositos.

ESOL 0061 - ESOL 0064 (Gramatica)
Estos cursos estan disenados para complementar la serie de Escritura 0051-0054. Dichos cursos proveen instruccion y ejercicios practicos, asi como puntos esenciales de gramatica necesarios para la efectiva comunicacion escrita.

ESOL 0031 ESL Listening/Speaking (3)
This course focuses on developing basic social and pre-academic listening and speaking skills. It includes skills such as describing, giving directions, and learning to understand explanations. Conversation conventions will be practiced as well as non-verbal communication skills. (Pronunciation is introduced through the study of basic phonetic segments and intonation patterns.) (3 Lec.)
(Coordinating Board Academic Approval Number 3201085578)

ESOL 0032 ESL Listening/Speaking (3)
This course develops intermediate social and pre-academic listening and speaking skills through situational activities. Students will express ideas and opinions in small groups and learn to understand and react appropriately. Intercultural communication will be incorporated. (Pronunciation skills will be practiced through identifying phonetic correctness and applying concepts of stress and intonation.) (3 Lec.)
(Coordinating Board Academic Approval Number 3201085578)

ESOL 0033 ESL Speaking (3)
This course develops public/academic oral language skills through active participation in group projects and presentations. Rhetorical skills such as narration and description will be practiced, and improving cross-cultural communication skills will be emphasized. (Pronunciation skills, including stress and intonation, will be refined with focused effort on areas of need through monitoring of oral production.) (3 Lec.)
(Coordinating Board Academic Approval Number 3201085578)

ESOL 0034 ESL Academic Speaking (3)
This course stresses academic speaking skills. Students learn formal presentation techniques as they defend a point of view and participate in seminars, panels, and debates. Formal rhetorical skills such as cause/effect, process, and summary will be practiced. The course will emphasize the value of cultural diversity. (Pronunciation skills, including stress and intonation, will continue to be refined with focused effort on areas of need through monitoring of oral production.) (3 Lec.)
(Coordinating Board Academic Approval Number 3201085578)

ESOL 0041 ESL Reading (3)
This course focuses on language development through reading activities. It includes reading comprehension, vocabulary building, study skills techniques, and intercultural sharing. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085678)

ESOL 0042 ESL Reading (3)
This course continues language development through reading comprehension and vocabulary building. It introduces paragraph organization, idiom study, and adapting reading rate for different purposes. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085678)

ESOL 0043 ESL Reading (3)
This course includes specific reading comprehension skills, reading efficiency strategies, critical thinking skills, vocabulary expansion, and the use of campus resources such as labs and libraries. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085678)

ESOL 0044 ESL Reading (3)
This course is designed to build on skills taught in previous reading classes but with a more academic emphasis. Students are taught reading skills and critical thinking skills as they relate to academic topics and to literature. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085678)

ESOL 0045 Developmental Reading for Non-Native Speakers (1)
This course provides individualized instruction in order to fulfill the Texas Success Initiative (TSI) remediation requirement for reading. The content will include a review of reading comprehension, vocabulary development and critical thinking skills. This course is only open to students whose first language is not English. (1 Lec.)
(Coordinating Board Academic Approval Number 3201085478)

ESOL 0051 ESL Writing (3)
This course stresses the creation of sentences and groups of sentences. It also introduces basic spelling rules and vocabulary development. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085778)

ESOL 0052 ESL Writing (3)
This course introduces the development of controlled and guided paragraphs using a variety of organizational structures and stresses logic patterns of English. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085778)

ESOL 0053 ESL Writing (3)
This course stresses the process of paragraph writing and the characteristics of effective paragraph structure. It also introduces modes of discourse such as description, cause-effect, and comparison-contrast. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085778)

ESOL 0054 ESL Writing (3)
This course emphasizes modes of discourse in expository writing for academic purposes. Particular attention is given to improving unity, coherence, transition, and style as students progress to multi-paragraph compositions. Paraphrasing and summarizing are also introduced. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085778)

ESOL 0055 ESL Writing (1)
This course provides individualized instruction in order to fulfill the Texas Success Initiative (TSI) remediation requirement for writing. Content will include a review of single and multi-paragraph compositions, sentence structure, and edited American usage. This course is open only to students whose first language is not English. (1 Lec.)
(Coordinating Board Academic Approval Number 3201085478)

ESOL 0061 ESL Grammar (3)
This course introduces the basic aspects of English grammar needed to write simple and compound sentences. It includes the study of basic verb tenses, parts of speech, subject-verb agreement, and question formation. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085778)

ESOL 0062 ESL Grammar (3)
This course reviews basic elements of English grammar introduced in ESOL 0061 and introduces grammar points necessary for writing controlled paragraphs. It includes further study of verb tenses, parts of speech, and question formation and introduces two-word verbs, modals, gerunds, and infinitives. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085778)

ESOL 0063 ESL Grammar (3)
This course reviews grammar points studied in ESOL 0061 and ESOL 0062 and introduces elements necessary for students to write effective one-paragraph essays. It continues the study of verb tenses, parts of speech, and modals and introduces adverb, adjective, and noun clauses. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085778)

ESOL 0064 ESL Grammar (3)
This course reviews grammar points studied in ESOL 0061, ESOL 0062, and ESOL 0063 and analyzes complex elements of those points. In addition, it introduces passive voice and conditional sentences. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085778)

FARS 1470 Beginning Farsi I (4)
(This is a Unique Need Course.)
This course is an introductory course intended for students with little or no knowledge in the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number is to be assigned.)

FARS 1471 Beginning Farsi II (4)
(This is a Unique Need Course.)
Prerequisite: Farsi 1470 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Farsi 1470. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number is to be assigned.)

FDNS 1309 Nutrition in the Community (3)
(This is a WECM Course Number.)
Prerequisite: RSTO 1317 or NUTR 1322. A study of the nutritional status of populations at the national, state, and local community levels. Socioeconomic cultural, and psychological influences on eating behavior, national and state health objectives, marketing strategies for objective implementation and community nutrition programs serving risk-group populations. Basic teaching/counseling methods for the nutrition education of small groups and individual clients/patients.
(3 Lec., 1 Lab.)

FDNS 1391 Special Topics in Foods and Nutrition Studies, General (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 1 Lab.)

FIRT 1303 Fire and Arson Investigation I (3)
(This is a WECM Course Number.)
In-depth study of basic fire and arson investigation practices. Emphasis on fire behavior principles related to fire cause and origin determination. (3 Lec.)

FIRT 1305 Public Education Programs (3)
(This is a WECM Course Number.)
Preparation of firefighters and fire officers to develop public fire safety awareness. Emphasis is on implementation of fire and public safety programs in an effort to reduce the loss of life. Methods such as industrial safety demonstration, extinguishment techniques, public relations, and news media relations are also emphasized. (3 Lec.)

FIRT 1309 Fire Administration I (3)
(This is a WECM Course Number.)
Introduction to the organization and management of a fire department and the relationship of government agencies to the fire services. Emphasis is on fire service leadership from the perspective of the company officer. Social organizations, communications, decision-making are also studied. (3 Lec.)

FLMC 1331 Computers in Video Production I (3)
(This is a WECM Course Number.)
Introduction to the applications of computers to video production. Topics include the design of PC computer graphic workstations and development of a rationale for selecting software, hardware, and peripherals.
(2 Lec., 4 Lab.)

FMKT 1401 Floral Design (4)
(This is a WECM Course Number.)
Principles of floral art with an emphasis in commercial design. Topics include basic design styles and color harmonies; identification, use, and the care and processing of cut flowers and foliages; mechanical aids and containers; personal flowers; holiday designs; and plant identification and care. (2 Lec., 6 Lab.)

FMKT 2331 Advanced Floral Design (3)
(This is a WECM Course Number.)
Prerequisite: FMKT 1401, or approval from instructor. An in-depth coverage of advanced floral design practices for the retail floral industry. Topics include contemporary floral arrangement styles and trends. (2 Lec., 3 Lab.)

FREN 1311 Introduction to French (3)
(This is a Texas Common Course Number.)
FREN 1311 is an introduction to the regular French course sequence; it is not a substitute for FREN 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in FREN 1411. This course is cross-listed as French 1411. The student may register for either French 1311 or French 1411, but may receive credit for only one of the two.
(3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1609015113)

FREN 1411 Beginning French I (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. This course is cross-listed as French 1311. The student may register for either French 1411 or French 1311, but may receive credit for only one of the two. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609015113)

FREN 1412 Beginning French II (4)
(This is a Texas Common Course Number.)
Prerequisite: French 1411 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in French 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609015113)

FREN 2303 Introduction to French Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: French 2312 or demonstrated competence approved by the instructor. This course is an introduction to French literature. It includes readings in French literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015313)

FREN 2304 Introduction to French Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: French 2312 or demonstrated competence approved by the instructor. This course is a continuation of French 2303. It includes readings in French literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015313)

FREN 2306 French Conversation (3)
(This is a Texas Common Course Number.)
Prerequisite: French 1411 and 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to strengthen and improve oral skills in the language. Oral activities focus on current events, cultural, historical and social issues. Audio-visual media are used to explore French life and society. This course is intended to complement French 2311. This course may be repeated for credit. Topics vary from semester to semester. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015413)

FREN 2311 Intermediate French I (3)
(This is a Texas Common Course Number.)
Prerequisite: French 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015213)

FREN 2312 Intermediate French II (3)
(This is a Texas Common Course Number.)
Prerequisite: French 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of French 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture. (3 Lec.)
(Coordinating Board Academic Approval Number 1609015213)

FSHD 1217 Apparel Computer Systems (2)
(This is a WECM Course Number.)
Prerequisite: FSHN 1418 and concurrent enrollment in FSHN 1449 or consent of instructor. An introduction to apparel computer systems used in wholesale and retail fashion businesses. Applications demonstrated include computer-aided garment and textile design, fashion illustration, pattern making, pattern grading, marker making, newsletters, brochures, advertisements, and catalogs. (1 Lec., 2 Lab.)

FSHD 1218 Apparel Computer Systems (2)
(This is a WECM Course Number.)
Prerequisite: FSHD 1217 and concurrent enrollment in FSHN 2432 or consent of instructor. A continuation of FSHD 1217. An introduction to apparel computer systems used in wholesale and retail fashion businesses. Applications demonstrated include computer-aided garment and textile design, fashion illustration, pattern-making, pattern grading, marker making, newsletters, brochures, advertisements, and catalogs. This course is cross-listed as FSHD 1318. The student may register for either FSHD 1218 or FSHD 1318, but may receive credit for only one of the two.
(1 Lec., 2 Lab.)

FSHD 1233 Fashion Study Tour (2)
(This is a WECM course.)
A course which combines the study of fashion with travel. Exploration of fashion, art, architecture, textiles, costume, business, and cultural activities in major art and fashion cities. Examination of the most current work in the industry from a global perspective. (2 Lec.)

FSHD 1302 Introduction to Fashion (3)
(This is a WECM Course Number.)
Survey of the world of fashion businesses. Introduction to the creation and merchandising of fashion through the study of fashion vocabulary, the fashion process, fashion publications, and career opportunities. (3 Lec.)

FSHD 1308 Fashion Trends (3)
(This is a WECM Course Number.)
A study of the effects of eastern and western cultures on the development of fashion. Examination of the relationship of social, psychological, economic, demographic, and lifestyle trends to fashion trends.
(3 Lec.)

FSHD 1318 Apparel Computer Systems (3)
(This is a WECM Course Number.)
An introduction to apparel computer systems used in wholesale and retail fashion businesses. Applications demonstrated include computer-aided garment and textile design, fashion illustration, pattern-making, pattern grading, marker making, newsletters, brochures, advertisements, and catalogs. This course is cross-listed as FSHD 1318. The student may register for either FSHD 1218 or FSHD 1318, but may receive credit for only one of the two. (2 Lec., 2 Lab.)

FSHD 1322 Fashion Sketching (3)
(This is a WECM Course Number.)
Fundamentals of quick sketching to communicate design ideas. Instruction in drawing the male and female fashion figure. Emphasis on simple methods for making quick sketches to illustrate style information.
(2 Lec., 4 Lab.)

FSHD 1324 Ready-to-Wear Construction (3)
(This is a WECM Course Number.)
Fundamentals of mass production of apparel focusing on the operation of industrial sewing and pressing equipment. Survey of materials selection and construction techniques used at all price levels of mass produced apparel. Introduction to industry seam allowances. Identification of differences between ready-to-wear and couture construction. (2 Lec., 4 Lab.)

FSHD 1391 Special Topics in Fashion Design and Illustration (3)
(This is a WECM Course Number.)
Prerequisite: Sophomore standing or demonstrated competence approved by instructor, FSHN 1418, FSHD 1324. The principles of good design for mass produced apparel are studied, especially as they apply to structural and decorative design. Careful attention is given to fabric selection and design. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

FSHD 2205 Draping (2)
(This is a WECM Course Number.)
Prerequisite: FSHN 1417. A study of three dimensional fashion design conceptualization by draping in muslin or fashion fabric directly on the dress form. Skill development in observing grain of fabric, identifying drapable fabrics, and creating design suitable for draping. Presentation of major fashion designers' draping techniques. (1 Lec., 2 Lab.)

FSHD 2241 Pattern Grading (2)
(This is a WECM Course Number.)
Prerequisite: FSHN 1417. Instruction in sizing patterns larger and smaller for the mass production of the apparel. A study of 1", 1½", and 2" and S-M-L-XL grade rules and their applications. Skill development in grading basic and fashion patterns with the ruler, the grading machine, and the computer. (1 Lec., 2 Lab.)

FSHD 2343 Fashion Collection Design (3)
(This is a WECM Course Number.)
Prerequisite: Sophomore standing or demonstrated competence approved by instructor. Advanced concepts in designing a collection of marketable apparel. Instruction in developing a design work board for specific target market and selecting the most marketable ideas for the collection. Emphasis on resource development, fabric selection, estimating wholesale costs, and initial pattern and garment production. (2 Lec., 2 Lab.)

FSHD 2344 Fashion Collection Production (3)
(This is a WECM Course Number.)
Prerequisite: FSHD 2343 and FSHD 1391. A continuation of the Fashion Collection Design course (FSHD 2343). Emphasis on production, costing, and marketing a cohesive collection of fashion apparel. Instruction in completing production patterns for all collection garments. (2 Lec., 4 Lab.)

FSHN 1123 Introduction to Mass Production (1)
(This is a WECM Course Number.)
An introduction to mass production, marketing, and merchandising in the fashion industry. (1 Lec.)

FSHN 1191 Special Topics in Fashion Merchandising (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (1 Lec.)

FSHN 1212 Apparel and Accessories Marketing Operations (2)
(This is a WECM Course Number.)
An overview of fashion trends and concepts, history, economic influences, trade vocabulary, retailing, marketing, textiles, merchandise display, and visual concepts. Topics include developing a marketing plan for apparel and accessory products and examination of job opportunities available in apparel and accessories marketing. (2 Lec.)

FSHN 1301 Textiles (3)
(This is a WECM Course Number.)
A general study of textiles with emphasis on factors that affect the hand, appearance, and performance in clothing use. Examination of the properties of natural and man-made fibers, how yarn is formed, methods of production, and the properties of a wide variety of fabrics. Application of textiles used in the apparel industry. (2 Lec., 4 Lab. / 2 Lec., 2 Lab.)

FSHN 1309 History of Costume Through the 18th Century (3)
(This is a WECM Course Number.)
Traces the development of garments from the earliest times through the 18th Century. Emphasis on customs which affect styles. (3 Lec.)

FSHN 1310 History of Costume: 18th Century to Present (3)
(This is a WECM Course Number.)
Traces the development of garments from the 18th Century to the present day. Emphasis on customs which affect styles. (3 Lec.)

FSHN 1313 Basic Color Theory and Application (3)
(This is a WECM Course Number.)
Principles of color theory including the effect of light on color and mixing color pigment in opaque media.
(2 Lec., 4 Lab.)

FSHN 1325 Basic Women's Tailoring (3)
(This is a WECM Course Number.)
Prerequisite: FSHD 1324. An introduction to tailoring women's apparel including instruction in pattern alterations; assembling women's jackets skirts, and pants; and fitting and alteration procedures. Fundamentals of sewing machine operations, fabric preparation and cutting, machine and hand sewing techniques, and pressing proficiencies. (2 Lec., 4 Lab.)

FSHN 1342 Visual Merchandising (3)
(This is a WECM Course Number.)
Skill development in the creation of showroom or retail store window/interior displays that sell merchandise. Study of the basic techniques of store planning, mannequin dressing, alternate form design, and display space conceptualization and implementation.
(2 Lec., 2 Lab.)

FSHN 1366 Practicum (or Field Experience) - Fashion Merchandising (3)
(This is a WECM Course Number.)
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (1 Lec., 20 Ext.)

FSHN 1382 Cooperative Education – Fashion Merchandising (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

FSHN 1417 Pattern Drafting I (4)
(This is a WECM Course Number.)
Prerequisite: Student must make a grade of "C" or better. Principles of drafting and draping basic collars, skirts, bodices, and sleeves. Includes cutting out garments. (2 Lec., 8 Lab.)

FSHN 1418 Pattern Drafting II (4)
(This is a WECM Course Number.)
Prerequisite: FSHN 1417 with a grade of "C" or better, FSHD 1324. The student will draft and construct various collars, skirts, necklines, and sleeves and demonstrate pattern-making skills. (2 Lec., 8 Lab.)

FSHN 1449 Intermediate Pattern Drafting (4)
(This is a WECM Course Number.)
Prerequisite: FSHN 1417 with a grade of "C" or better, FSHN 1418, FSHD 1324. Intermediate techniques for drafting and draping patterns. Emphasis on computer drafting of patterns. (2 Lec., 8 Lab.)

FSHN 2301 Fashion Promotion (3)
(This is a WECM Course Number.)
A survey of fashion direction, publicity, and fashion event coordination. Emphasis on fashion show production from idea to runway including theme development, stage/set design, choreography, music coordination, lighting, line-up, model fittings, rehearsal and press kit development. (3 Lec.)

FSHN 2303 Fashion Buying (3)
(This is a WECM Course Number.)
Fundamentals of fashion buying with instruction in planning, pricing, and purchasing retail fashion inventories. Identification of wholesale merchandise and media resources. (3 Lec.)

FSHN 2366 Practicum (or Field Experience – Fashion Merchandising (3)
(This is a WECM Course Number.)
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (1 Lec., 20 Ext.)

FSHN 2380 Cooperative Education –Apparel and Textile Manufacture (3)
(This is a WECM Course Number.)
Prerequisite: FSHN 1417 with a grade of "C" or better. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

FSHN 2382 Cooperative Education – Fashion Merchandising (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

FSHN 2432 Advanced Pattern Drafting (4)
(This is a WECM Course Number.)
Prerequisite: FSHD 1217, FSHN 1325, FSHN 1449 with a grade of "C" or better and concurrent enrollment in FSHD 1218. Advanced techniques for drafting and draping patterns. Emphasis on computer drafting of patterns. (2 Lec., 8 Lab.)

GEOG 1301 Physical Geography (3)
(This is a Texas Common Course Number.)
The physical composition of the earth is surveyed. Topics include weather, climate, topography, plant and animal life, land, and the sea. Emphasis is on the earth in space, use of maps and charts, and place geography. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015125)

GEOG 1302 Cultural Geography (3)
(This is a Texas Common Course Number.)
This course focuses on the development of regional variations of culture. Topics include the distribution of races, religions, and languages. Aspects of material culture are also included. Emphasis is on origins and diffusion. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015125)

GEOG 1303 World Regional Geography (3)
(This is a Texas Common Course Number.)
A study of major developing and developed regions with emphasis on awareness of prevailing world conditions and developments, including emerging conditions and trends, and awareness of diversity of ideas and practices to be found in those regions. Course content may include one or more regions. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015325)

GEOG 1304 Geography of Middle America (3)
(This is a Texas Common Course Number.)
This course focuses on the regional study of the physical and cultural geography of Mexico, Central America and the Caribbean. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015325)

GEOG 1305 Geography of North America (3)
(This is a Texas Common Course Number.)
This course focuses on the regional study of the physical and cultural geography of the United States and Canada. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015325)

GEOG 2312 Economic Geography (3)
(This is a Texas Common Course Number.)
The relation of humans to their environment is studied. Included is the use of natural resources. Problems of production, manufacturing, and distributing goods are explored. Primitive subsistence and commercialism are considered. This course is cross-listed as Economics 2311. The student may register for either Geography 2312 or Economics 2311, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015225)

GEOL 1401 Earth Science (4)
(This is a Texas Common Course Number.)
This course is for the non-science major. It covers the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are included. Selected principles and concepts of the applied sciences are explored. This course is cross-listed as Physical Science 1417. The student may register for either Geology 1401 or Physical Science 1417, but may receive credit for only one of the two. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015103)

GEOL 1403 Physical Geology (4)
(This is a Texas Common Course Number.)
This course is for science and non-science majors. It is a study of earth materials and processes. Included is an introduction to geochemistry, geophysics, the earth's interior, and magnetism. The earth's setting in space, minerals, rocks, structures, and geologic processes are also included. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015103)

GEOL 1404 Historical Geology (4)
(This is a Texas Common Course Number.)
This course is for science and non-science majors. It is a study of earth materials and processes within a developmental time perspective. Fossils, geologic maps, and field studies are used to interpret geologic history. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015103)

GEOL 1405 Environmental Geology (3)
(This is a Texas Common Course Number.)
The earth as a habitat: a study of the interrelationships between humans and the physical environment. Topics covered include: minerals and rocks as resources, landscape development and its effect on humans, groundwater resources, the earth's internal processes and their relation to natural disasters, soils and weathering, the atmosphere and oceans, the earth's energy system, geologic factors in urban and regional land use planning, and related current issues in environmental geosciences. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0301035301)

GEOL 1445 Oceanography (4)
(This is a Texas Common Course Number.)
This course covers the study of the physical and biological characteristics of the ocean. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015103)

GEOL 1447 Meteorology (4)
(This is a Texas Common Course Number.)
This course will cover weather phenomena and the modern methods of study and presentation of this information. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015103)

GEOL 2407 Geologic Field Methods (4)
(This is a Texas Common Course Number.)
Prerequisite: Geology 1403 and 1404. This course covers basic geologic and topographic mapping, observation of geologic structures, and examination of petrologic systems in an actual field setting. Students will spend a major portion of the course collecting data for and constructing topographic and geologic maps and geologic cross sections and columns. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015503)

GEOL 2409 Introduction to Rocks and Mineral Identification (4)
(This is a Texas Common Course Number.)
Prerequisite: Geology 1403 and 1404. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015203)

GEOL 2470 Field Geology (4)
(This is a Unique Need Course.)
Prerequisite: Eight credit hours of geology or demonstrated competence approved by the instructor. Geological features, landforms, minerals, and fossils are surveyed. Map reading and interpretation are also included. Emphasis is on the identification, classification and collection of specimens in the field. This course may be repeated for credit. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006049503)

GEOL 2471 Mineralogy (4)
Prerequisite: Geology 1403 and 1404 and Chemistry 1412. This course covers basic geochemistry; crystal chemistry; crystallography, including symmetry elements, stereographic and gnomonic projections, Miller indices, crystal systems, and forms; x-ray diffraction; optical properties of minerals; descriptive mineralogy including identification of hand specimens; and phase equilibria. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015239)

GERM 1311 Introduction to German (3)
(This is a Texas Common Course Number.)
GERM 1311 is an introduction to the regular German course sequence; it is not a substitute for GERM 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in GERM 1411. This course is cross-listed as German 1411. The student may register for either German 1311 or German 1411, but may receive credit for only one of the two.
(3 Lec., 1 Lab.)
Coordinating Board Academic Approval Number 1605015113

GERM 1411 Beginning German (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present the essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. This course is cross-listed as German 1311. The student may register for either German 1411 or German 1311, but may receive credit for only one of the two. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1605015113)

GERM 1412 Beginning German (4)
(This is a Texas Common Course Number.)
Prerequisite: German 1411 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in German 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more complicated syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1605015113)

GERM 2311 Intermediate German (3)
(This is a Texas Common Course Number.)
Prerequisite: German 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1605015213)

GERM 2312 Intermediate German (3)
(This is a Texas Common Course Number.)
Prerequisite: German 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of German 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture through contemporary literature.
(3 Lec.)
(Coordinating Board Academic Approval Number 1605015213)

GERS 1301 Introduction to Gerontology (3)
(This is a WECM Course Number.)
Overview of the social, psychological, and biological changes that accompany aging and an overview of the implications of these changes for the individual, as well as for the larger society. The student will compare and contract the different views of aging presented by the disciplines of biology, sociology, and psychology; demonstrate an understanding of the demographic changes due to aging experiences in the United States. The student will articulate the impact of an aging population on key social institutions such as the family, the economy, the political system, and the health care industry; effectively rebut key misconceptions regarding aging and the elderly; and identify potential career choices in gerontology. (3 Lec.)

GERS 1392 Special Topics in Gerontology (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business and industry trends. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

GLZG 1370 Glazing I (3)
(This is a WECM Local Need Course.)
A comprehensive overview of math and safety related to glazing, the proper use of glazing tools and equipment, types of glass used in modern buildings, and related materials used in glazing. Lab required. (2 Lec., 3 Lab.)

GLZG 1371 Glazing II (3)
(This is a WECM Local Need Course.)
This course covers basic calculating, layout, and cutting of glass, the fabrication of mirrors and glass products, types of plastics and panels, basic introduction to Aluminum fabrication and Store Front installation. Lab required. (2 Lec., 3 Lab.)

GLZG 1372 Glazing III (3)
(This is a WECM Local Need Course.)
This course studies the use of the Safety Glazing Code, contract documents, basic types and methods of installing sealant used in glazing, introduction to types and uses of insulating glass, installation of custom mirrors and methods used in re-glazing. Lab required. (2 Lec., 3 Lab.)

GLZG 2370 Glazing IV (3)
(This is a WECM Local Need Course.)
This course covers types and components of windows, advanced glass fabrication methods and installation, aluminum fabrication of entrances, and related types of entrance frames and hardware used types and installation of tubes and shower enclosures. Lab required. (2 Lec., 3 Lab.)

GLZG 2371 Glazing V (3)
(This is a WECM Local Need Course.)
The course covers use of blueprints and shop drawings used in glazing, methods of sketching, taking measurements, and basic takeoffs process, types and uses mechanical fasteners, and basic rigging and hoisting of glazing materials and construction of work platforms on the job. Lab required. (2 Lec., 3 Lab.)

GLZG 2372 Glazing VI (3)
(This is a WECM Local Need Course.)
This course covers types and methods of installing skylights, sloped glazing, metal curtain walls, types and uses of finishes and coatings for aluminum and glass and trouble shooting entrances and hardware. Lab required. (2 Lec., 3 Lab.)

GOVT 2301 American Government (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading. This course is an introduction to the study of political science. Topics include the origin and development of constitutional democracy (United States and Texas), federalism and intergovernmental relations, local governmental relations, local government, parties, politics, and political behavior. (To ensure transferability, students should plan to take both Government 2301 and 2302 within the DCCCD.) (3 Lec.)
(Coordinating Board Academic Approval Number 4510025125)

GOVT 2302 American Government (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading. The three branches of the United States and Texas government are studied. Topics include the legislative process, the executive and bureaucratic structure, the judicial process, civil rights and liberties, and domestic policies. Other topics include foreign relations and national defense. (To ensure transferability, students should plan to take both Government 2301 and 2302 within the DCCCD.) (3 Lec.)
(Coordinating Board Academic Approval Number 4510025125)

GOVT 2371 Introduction to Comparative Politics (3)
(This is a Unique Need Course.)
A comparative examination of governments, politics, problems and policies with illustrative cases drawn from a variety of political systems. (3 Lec.)
(Coordinating Board Academic Approval Number 4509017125)

GRPH 1223 Digital Imaging I (2)
(This is a WECM Course Number.)
An introduction to digital imaging on the computer using image editing and/or image creation software. Topics include: scanning, resolution, file formats, output devices, color systems, and image-acquisitions.
(1 Lec., 2 Lab.)

GRPH 1224 Digital Imaging I (2)
(This is a WECM Course Number.)
An introduction to digital imaging on the computer using image editing and/or image creation software. Topics include: scanning, resolution, file formats, output devices, color systems, and image-acquisitions.
(1 Lec., 2 Lab.)

GRPH 1258 Object Oriented Computer Graphics (2)
(This is a WECM Course Number.)
Mastery of the tools and transformation options of an industry standard draw program to create complex illustrations and follow them through to the color output stage. Mastery in the use of basic elements of good layout and design principles and use the capabilities specific to vector (object oriented) drawing software to manipulate bot text and graphics with emphasis on the use of bezier curves. Acquisition of images via scanning and the creative use of clip art is included.
(1 Lec., 2 Lab.)

GRPH 1305 Introduction to Graphic Arts and Printing (3)
(This is a WECM Course Number.)
Graphic arts industry, including the history of printing, techniques involved in the production and distribution of printed materials, the kinds of printing industries and printing terminology and identify career opportunities in graphics and printing fields. (2 Lec., 4 Lab.)

GRPH 1309 Press Operations I (3)
(This is a WECM Course Number.)
An introduction to offset printing including knowledge and skills to operate a small offset press to print single color jobs. Emphasis on parts of the press and operation procedures, printing terminology, paper types and ink types and their uses, make ready and cleanup.
(2 Lec.,
4 Lab.)

GRPH 1357 Digital Imaging II (3)
(This is a WECM Course Number.)
Prerequisite: GRPH 1325. An in-depth investigation of digital imaging on the computer using image editing and/or image creation software. Manipulation, creation, and editing of digital images. Topics include: image capture, high-end work stations, image bit-depth, interaction with service bureaus and printing industries.
(2 Lec., 4 Lab.)

GRPH 1359 Object Oriented Computer Graphics (3)
(This is a WECM Course Number.)
Mastery of the tools and transformation options of an industry standard draw program to create complex illustrations and follow them through to the color output stage. Mastery in the use of basic elements of good layout and design principles and use the capabilities specific to vector (object oriented) drawing software to manipulate both text and graphics with emphasis on the use of bezier curves. Acquisition of images via scanning and the creative use of clip art is included.
(2 Lec., 4 Lab.)

GRPH 1391 Special Topics in Graphic and Printing Equipment Operator (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

GRPH 1395 Special Topics in Computer Typographer and Composition Equipment Operator (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

GRPH 1396 Special Topics in Desktop Publishing Equipment Operator (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

GRPH 2309 Electronic Pre-Press (3)
(This is a WECM Course Number.)
Prerequisite: Visual Communications First Year Curriculum and ARTC 1313 or GRPH 1322, or demonstrated competence approved by the instructor. Theory and techniques for pre-press preparation using industry standard software for final file output. Topics include the procedures and problems involved in computer file preparation ranging from trapping, color separations, and resolutions to printing basics and service bureaus. (2 Lec., 4 Lab.)

GRPH 2336 Prepress Techniques (3)
(This is a WECM course number)
Hands-on experience in both electronic file imaging and traditional graphics camera use. Electronic file output and troubleshooting, graphics camera knowledge, traditional film assembly, and proofing process. High-end color scanning. (2 Lec., 4 Lab.)

GRPH 2341 Electronic Publishing III (3)
(This is a WECM Course Number.)
Advanced concepts in electronic publishing using an industry standard page layout software package. In-depth color separations, trapping and advanced techniques for controlling type and graphics. Overview of color schemes, software additions (plug-ins, filters, utilities), and preparation of files for printing.
(2 Lec., 4 Lab.)

GRPH 2381 Cooperative Education – Prepress/Desktop Publishing and Digital Imaging Design (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

GRPH 2382 Cooperative Education Graphic and Printing Equipment Operator (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. (1 Lec., 15 Ext.)

HALT 1205 Horticulture Soils (2)
(This is a WECM Course Number.)
A study of the physical and properties of soil including structure and texture. Topics include the origin and development of soils, the composition of a soil horizon, and the interrelationship between soil fertility and plants. (1 Lec., 3 Lab.)

HALT 1209 Interior Plants (2)
(This is a WECM Course Number.)
Instruction in the identification and classification of the plants used in home and commercial interior landscapes. Topics include design characteristics for interiorscapes and environmental requirements of the plants. (1 Lec., 3 Lab.)

HALT 1224 Turfgrass Science and Management (2)
(This is a WECM Course Number.)
In-depth coverage of various species of warm and cool season grasses including their uses, application, adaptability, environmental tolerances, anatomy and physiological responses. (1 Lec., 3 Lab.)

HALT 1253 Landscape Computer Design (2)
(This is a WECM Course Number.)
A course in computer-aided landscape design. Emphasis on the application of design concepts and techniques using software. (1 Lec., 3 Lab.)

HALT 1296 Special Topics in Nursery Operations and Management (2)
(This is a WECM Course Number.)
Field course in horticulture to study Texas native plants in their natural environment. The class will study the different regional ecosystems such as the Trans-Pecos, High Plains, East and West Cross Timbers, Central Texas (Hill Country), Piney Woods of East Texas, the Valley, the Gulf Coast and the Post Oak Belt. Students will learn about the varied soil types, rainfall, temperature ranges, and elevation of the regions. This course may be repeated if topics and learning outcomes vary. (6 Lab.)

HALT 1303 Herbaceous Plants (3)
(This is a WECM Course Number.)
An in-depth study of herbaceous plant material. Topics include practices and procedures used in the identification, growth, propagation, maintenance, and utilization of herbaceous plants in the horticulture industry. (2 Lec., 3 Lab.)

HALT 1305 Horticultural Soils (3)
(This is a WECM Course Number.)
A study of the physical properties of soil including structure and texture. Topics include the origin and development of soils, the composition of a soil horizon, and the interrelationship between soil fertility and plants. (2 Lec., 3 Lab.)

HALT 1319 Landscape Construction (3)
(This is a WECM Course Number.)
Exploration of landscape construction materials and the methods used for installation. Topics on soil preparation, including wood, concrete, and masonry construction; and landscape lighting, including pools, spas, and general construction details. (2 Lec., 3 Lab.)

HALT 1320 Horticulture Calculations (3)
(This is a WECM Course Number.)
Skill development in and reinforcement of the formulas and calculations commonly used in the horticulture industry. Emphasis on business calculations and problem-solving skills. (3 Lec.)

HALT 1324 Turfgrass Science and Management (3)
(This is a WECM Course Number.)
In-depth coverage of various species of warm and cool season grasses including their uses, application, adaptability, environmental tolerances, anatomy, and physiological responses. (2 Lec., 3 Lab.)

HALT 1331 Woody Plant Materials (3)
(This is a WECM Course Number.)
An in-depth study of the woody plant materials used in the horticulture industry. Topics include identification, characteristics, adaptation, cultural requirements, pest and disease problems, and use in the landscape.
(2 Lec., 4 Lab.)

HALT 1333 Landscape Irrigation (3)
(This is a WECM Course Number.)
In-depth coverage of irrigation systems including equipment, design, performance, and maintenance. Topics include residential and commercial applications, troubleshooting, repair, and technological advances in irrigation systems. (2 Lec., 3 Lab.)

HALT 1351 Landscape Business Operations (3)
(This is a WECM Course Number.)
Prerequisite: Approval from professor. Instruction in the structure of the landscape business including cost estimation; organization; equipment needs; interpretation of financial reports; and material, labor and equipment management. Emphasis on the types of landscape operations, marketing, legal forms, construction law and safety. (2 Lec., 3 Lab.)

HALT 1353 Landscape Computer Design (3)
(This is a WECM Course Number.)
A course in computer-aided landscape design. Emphasis on the application of design concepts and techniques using software. (2 Lec., 3 Lab.)

HALT 1391 Special Topics in Horticulture Services Operations and Management, General (3)
(This is a WECM Course Number.)
Prerequisite: Approval from professor. Topics address recently identified current events, skills, knowledge's and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec., 5 Lab.)

HALT 1401 Principles of Horticulture (4)
(This is a WECM Course Number.)
An overview of the horticulture industry, plant science, terminology, classification, propagation, environmental responses, and careers and opportunities in the field of horticulture. (3 Lec., 3 Lab.)

HALT 1422 Landscape Design (4)
(This is a WECM Course Number.)
Prerequisite: Approval from professor. A study of the principles and elements of landscape design. Topics include client interview, site analysis, plan view, scale, plant selection, basic drawing and drafting skills and plan preparation. (2 Lec., 6 Lab.)

HALT 2201 Arboriculture (2)
(This is a WECM Course Number.)
Fundamentals of woody plant physiology and growth including techniques and procedures utilized in making sound tree care decisions related to growth and pest and disease control. Topics include design principles of planning and maintenance for city streets, parks and commercial and residential properties. (1 Lec., 3 Lab.)

HALT 2301 Arboriculture (3)
(This is a WECM Course Number.)
Fundamentals of woody plant physiology and growth including techniques and procedures utilized in making sound tree care decisions related to growth and pest and disease control. Topics include design principles of planning and maintenance for city streets, parks, and commercial and residential properties. (2 Lec., 3 Lab.)

HALT 2314 Plant Propagation (3)
(This is a WECM Course Number.)
A study of the sexual and asexual propagation of plants used in horticulture. Topics include propagation by seeds, cuttings, grafting, budding, layering, division, separation, and tissue culture; and environmental factors of propagation. (2 Lec., 3 Lab)

HALT 2320 Nursery Production and Management (3)
(This is a WECM Course Number.)
Prerequisite: Approval from professor. An overview of the procedures for establishing and operating a commercial nursery. Topics include site selection, structures, equipment, stock selection, production practices, harvesting, marketing and management practices. (2 Lec., 3 Lab.)

HALT 2323 Horticultural Pest Control (3)
(This is a WECM Course Number.)
Examination of federal, state, and local laws and regulations governing the control of horticultural pests. Topics include procedures; methods; safety requirements; integrated pest management (IPM); and chemical, natural, and biological controls.
(2 Lec., 3 Lab)

HALT 2331 Advanced Landscape Design (3)
(This is a WECM Course Number.)
Prerequisite: Approval from professor. In-depth coverage of advanced practices in landscape planning for commercial and residential landscapes. Topics include advanced design analysis, architectural elements, space articulation, and land engineering concepts.
(2 Lec., 3 Lab.)

HALT 2341 Interiorscaping (3)
(This is a WECM Course Number.)
Prerequisite: Approval from professor. Instruction in the selection, propagation, culture, and marketing of foliage plants and other tropical and subtropical plants used in interiorscapes. Topics include the principles of interiorscaping and the care of plants in indoor environments. (2 Lec., 3 Lab.)

HALT 2380 Cooperative Education-Applied Horticulture/Horticultural Operations, General (3)
(This is a WECM Course Number.)
Prerequisite: Approval from professor. Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Lab.)

HALT 2402 Greenhouse Crop Production (4)
(This is a WECM Course Number.)
Prerequisite: Approval from professor. In-depth coverage of the production of crops within the controlled environment of greenhouses. Topics include growing techniques, environment control, crop rotation, scheduling, preparation for sale and marketing.
(2 Lec., 6 Lab.)

HAMG 1191 Special Topics in Hospitality Administration and Management (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec.)

HAMG 1305 Principles of Tourism Management (3)
(This is a WECM Course Number.)
Introduction to the travel and tourism industry. Topics include marketing, travel, the market, and the shape of travel demand. (3 Lec.)

HAMG 1311 Sanitation and Safety (3)
(This is a WECM Course Number.)
The fundamentals of sanitation practices, laws, methods, and techniques of food handling for protection, safety, and accident prevention. (3 Lec.)

HAMG 1313 Front Office Procedures (3)
(This is a WECM Course Number.)
A study of the flow of activities and functions in today's lodging operation. Topics include a comparison of manual, machine assisted, and computer based methods for each front file function. (3 Lec.)

HAMG 1317 Recreational Services (3)
(This is a WECM Course Number.)
The study of guest recreation and entertainment including available space requirements, cost of operation and maintenance, layout and design, and direct and indirect benefits. (3 Lec.)

HAMG 1319 Computers in Hospitality (3)
(This is a WECM Course Number.)
An introduction to computers and their relationship as an information system to the hospitality industry. (3 Lec.)

HAMG 1321 Introduction to Hospitality Industry (3)
(This is a WECM Course Number.)
Introduction to the elements of the hospitality industry.
(3 Lec. / 3 Lec., 1 Lab.)

HAMG 1324 Hospitality Human Resources Management (3)
(This is a WECM Course Number.)
A study of the principles and procedures of managing people in the hospitality workplace. (3 Lec.)

HAMG 1340 Hospitality Legal Issues (3)
(This is a WECM Course Number.)
A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws.
(3 Lec. / 3 Lec., 1 Lab.)

HAMG 1342 Guest Room Maintenance (3)
(This is a WECM Course Number.)
Demonstrates the working relationship in the lodging industry between housekeeping and maintenance.
(3 Lec.)

HAMG 1381 Cooperative Education - Hospitality Administration and Management (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

HAMG 1391 Special Topics in Hospitality Administration and Management (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

HAMG 2301 Principles of Food and Beverage Operations (3)
(This is a WECM Course Number.)
An introduction to food, beverage, and labor cost controls with an overview of the hospitality industry from procurement to marketing. Examination of cost components including forecasting, menu planning and pricing, logistical support, production, purchasing, and quality assurance. (3 Lec.)

HAMG 2305 Hospitality Management and Leadership (3)
(This is a WECM Course Number.)
An overview of management and leadership in the hospitality industry with an emphasis on management philosophy, policy formulation, communications, motivation and team building. (3 Lec.)

HAMG 2307 Hospitality Marketing and Sales (3)
(This is a WECM Course Number.)
Identification of the core principles of marketing and their impact on the hospitality industry. (3 Lec./3 Lec., 1 Lab.)

HAMG 2337 Hospitality Facilities Management (3)
(This is a WECM Course Number.)
Identification of building systems, facilities management, security and safety procedures. (3 Lec.)

HAMG 2381 Cooperative Education-Hospitality Administration and Management (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. (1 Lec., 20 Ext.)

HART 1273 Air Conditioning Control Principles (2)
(This is a WECM Local Need Course.)
A basic study of electrical, pressure, and temperature controls including motor starting devices, operating relays, and troubleshooting safety controls and devices. Emphasis on use of wiring diagrams to analyze high and low voltage circuits. A review of Ohm's law as applied to A/C controls and circuits. Required. (1 Lec., 3 Lab.)

HART 1291 Special Topics in Heating, Air Conditioning, and Refrigeration Technologies/Technicians (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec., 2 Lab.)

HART 1292 Special Topics in Energy Management and Systems Technology/Technician (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec., 2 Lab.)

HART 1301 Basic Electricity for HVAC (3)
(This is a WECM course.)
Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation. This course is cross-listed as HART 1401. The student may register for either HART 1301 or HART 1401, but may receive credit for only one of the two. (2 Lec., 3 Lab.)

HART 1303 Air Conditioning Control Principles (3)
(This is a WECM course.)
A basic study of HVAC and refrigeration controls; troubleshooting of control components; emphasis on use of wiring diagrams to analyze high and low voltage circuits; a review of Ohm's law as applied to air conditioning controls and circuits. This course is cross-listed as HART 1403. The student may register for either HART 1303 or HART 1403, but may receive credit for only one of the two. (2 Lec.; 3 Lab.)

HART 1307 Refrigeration Principles (3)
(This is a WECM course.)
An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components and safety. This course is cross-listed as HART 1407. The student may register for either HART 1307 or HART 1407, but may receive credit for only one of the two. (2 Lec., 3 Lab.)

HART 1356 EPA Recovery Certification Preparation (3)
(This is a WECM Course Number.)
Certification training for HVAC refrigerant recovery and recycling. Instruction will provide a review of EPA guidelines for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems. (2 Lec., 2 Lab.)

HART 1368 Practicum (Or Field Experience) - Heating, Air Conditioning, And Refrigeration Technology/Technician (3)
(This is a WECM course number).
Prerequisite: CETT 1402, HART 1403, and HART 1407. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.
(21 Ext.)

HART 1380 Cooperative Education - Heating, Air Conditioning, And Refrigeration Technology/Technician (3)
(This is a WECM course number).
Prerequisite: CETT 1402, HART 1403, and HART 1407. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. (1 Lec., 20 Ext.)

HART 1391 Special Topics in Heating, Air Conditioning, and Refrigeration (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec., 4 Lab.)

HART 1401 Basic Electricity for HVAC (4)
(This is a WECM Course Number.)
Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation. This course is cross-listed as HART 1301. The student may register for either HART 1401 or HART 1301, but may receive credit for only one of the two. (3 Lec., 3 Lab.)

HART 1403 Air Conditioning Control Principles (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1402. A basic study of electrical, pressure, and temperature controls including motor starting devices, operating relays, and troubleshooting safety controls and devices. Emphasis on use of wiring diagrams to analyze high and low voltage circuits. A review of Ohms law as applied to A/C controls and circuits. This course is cross-listed as HART 1303. The student may register for either HART 1403 or HART 1303, but may receive credit for only one of the two.
(3 Lec., 3 Lab.)

HART 1407 Refrigeration Principles (4)
(This is a WECM Course Number.)
An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationship, safety, refrigeration containment, and refrigeration components. This course is cross-listed as HART 1307. The student may register for either HART 1407 or HART 1307, but may receive credit for only one of the two. This course is cross-listed as HART 1507. The student may register for either HART 1407 or HART 1507, but may receive credit for only one of the two.
(3 Lec., 3 Lab.)

HART 1411 Solar Fundamentals (4)
(This is a WECM Course Number.)
Study of heat transference, motors, pumps and other mechanical devices; solid state switches; photovoltaic plates and energy conversion; thermal dynamics; and solar energy. (3 Lec., 3 Lab.)

HART 1441 Residential Air Conditioning (4)
(This is a WECM Course Number.)
Prerequisite: HART 1403, HART 1407 or consent of instructor. A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. (3 Lec., 3 Lab.)

HART 1445 Gas and Electric Heating (4)
(This is a WECM Course Number.)
Prerequisite: HART 1403 or consent of instructor. A study of the procedures and principles used in servicing heating systems including gas fired and electric furnaces. (3 Lec., 3 Lab.)

HART 1451 Energy Management (4)
(This is a WECM Course Number.)
Basic heat transfer theory; sensible and latent heat loads; building envelope construction; insulin, lighting, and fenestration types; and conducting energy audit procedures. The course develops energy audit recommends based on local utility rates building use, and construction. Laboratory activities include developing energy audit reports, installing energy saving devices, and measuring energy consumption.
(3 Lec., 3 Lab.)

HART 1491 Special Topics in Heating, Air Conditioning, and Refrigeration Technologies/ Technicians (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 3 Lab.)

HART 1492 Special Topics in Energy Management and Systems Technology/Technician (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 3 Lab.)

HART 1494 Special Topics in Heating, Air Conditioning, and Refrigeration Mechanic and Repairer (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 3 Lab.)

HART 1507 Refrigeration Principles (5)
(This is a WECM Course Number.)
An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationships, safety, refrigeration containment, and refrigeration components. This course is cross-listed as HART 1407. The student may register for either HART 1507 or HART 1407, but may receive credit for only one of the two. (4 Lec., 2 Lab.)

HART 2270 Commercial and Industrial Heating Systems (2)
(This is a WECM Local Need Course.)
This course covers the basics of commercial and industrial heating systems. The student will study the basic theory and design of heating systems; methods of installation and the operation of heating equipment; Discuss safety requirements when working with heating equipment. (1 Lec., 3 Lab.)

HART 2271 Commercial Air Conditioning (2)
(This is a WECM Local Need Course.)
This course is the study of Air Conditioning Systems with capacities of 25 tons or less. Topics include: Safety; HAVC equipment; basic design and planning; Trade tools and equipment; diagnose and troubleshooting.
(1 Lec., 3 Lab.)

HART 2273 Industrial Air Conditioning (2)
(This is a WECM Local Need Course.)
This course studies Air Conditioning Systems 25 tons and above. Topics include safety for 25 tons and above systems; HAVC equipment; basic design and planning; trade tools and equipment; diagnose and troubleshooting. (1 Lec., 3 Lab.)

HART 2274 Commercial and Industrial Pneumatic Controls (2)
(This is a WECM Local Need Course.)
This course provides a comprehensive introduction to the design, installation and operation of pneumatic control systems used in commercial and industrial buildings. The student will study system safety and design than apply methods used during installation, start-up, testing, and balancing mechanical systems.
(1 Lec., 3 Lab.)

HART 2302 Commercial Air Conditioning System Design (3)
(This is a WECM Course Number.)
Advanced study in essential elements of commercial air conditioning contracting including duct systems design and/or material takeoff; weight estimating; equipment selection using manufacturers catalog data; job cost estimating, scheduling, preparation of shop drawings and submittals. (2 Lec.; 3 Lab.)

HART 2336 Air Conditioning Troubleshooting (3)
(This is a WECM Course Number.)
An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests. This course is cross-listed as HART 2436. The student may register for either HART 2336 or HART 2436, but may receive credit for only one of the two. (2 Lec.; 3 Lab.)

HART 2341 Commercial Air Conditioning (3)
(This is a WECM Course Number.)
A study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. (2 Lec.; 3 Lab.)

HART 2368 Practicum (or Field Experience) - Heating, Air Conditioning, And Refrigeration Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: CETT 1402, HART 1403, and HART 1407. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (21 Ext.)

HART 2380 Cooperative Education - Heating, Air Conditioning, And Refrigeration Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: CETT 1402, HART 1403, and HART 1407. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

HART 2401 Air Conditioning and Refrigeration Codes (4)
(This is a WECM Course Number.)
HVAC standards and concepts with emphasis on the understanding, and documentation of the codes and regulations required for the state mechanical contractors license and local codes. (3 Lec., 3 Lab.)

HART 2402 Commercial Air Conditioning System Design (4)
(This is a WECM Course Number.)
Advanced study in essential elements of commercial air conditioning contracting including duct systems design and/or material takeoff; weight estimating; equipment selection using manufacturers catalog data; job cost estimating, scheduling, preparation of shop drawings and submittals. (3 Lec., 3 Lab.)

HART 2431 Advanced Electricity (4)
(This is a WECM Course Number.)
Advanced electrical instruction and skill building in installation and serving of air conditioning and refrigeration equipment including detailed instruction in motors and power distribution and introduction to solid state devices. (3 Lec., 3 Lab.)

HART 2434 Advanced A/C Controls (4)
(This is a WECM Course Number.)
Methods for troubleshooting electrical control devices and control circuits including correctly wiring electrical components. (3 Lec., 3 Lab.)

HART 2436 Air Conditioning Troubleshooting (4)
(This is a WECM Course Number.)
Prerequisite: HART 1441, HART 1445, HART 2449 or consent of instructor. An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests. This course is cross-listed as HART 2336. The student may register for either HART 2436 or HART 2336, but may receive credit for only one of the two. (3 Lec., 3 Lab.)

HART 2438 Air Conditioning Installation and Startup (4)
(This is a WECM Course Number.)
A study of air conditioning system installation, refrigerant piping, condensate disposal, and air cleaning equipment with emphasis on startup and performance testing.
(3 Lec., 3 Lab.)

HART 2441 Commercial Air Conditioning (4)
(This is a WECM Course Number.)
A study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. (3 Lec., 3 Lab.)

HART 2442 Commercial Refrigeration (4)
(This is a WECM Course Number.)
Prerequisite: HART 1441, HART 1445, HART 2449 or consent of instructor. Theory of and practical application in the maintenance of commercial refrigeration, medium and low temperature applications and ice machines.
(3 Lec., 3 Lab.)

HART 2443 Industrial Air Conditioning (4)
(This is a WECM Course Number.)
A study of components, accessories, applications, and installation of air conditioning systems above 25 tons capacity. (3 Lec., 3 Lab.)

HART 2445 Residential Air Conditioning Systems Design (4)
(This is a WECM Course Number.)
Study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system.
(3 Lec., 3 Lab.)

HART 2449 Heat Pumps (4)
(This is a WECM Course Number.)
Prerequisite: HART 1403, HART 1407 or consent of instructor. A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems.
(3 Lec., 3 Lab.)

HART 2457 Specialized Commercial Refrigeration (4)
(This is a WECM Course Number.)
An advanced course covering the components, accessories, and service of specialized refrigeration units, such as ice machines, soft-serve machines, cryogenics, and cascade systems. (3 Lec., 3 Lab.)

HART 2488 Internship – Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR) (4)
(This is a WECM Course Number.)
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. (1 Lec., 15 Ext.)

HDEV 0092 Student Success (3)
In this orientation course, students are introduced to academic and personal goal-setting and learning skills that enhance their chances for educational success. Students will learn how to develop positive attitudes toward themselves, improve communication and decision-making skills, and make effective use of campus resources. This course supports students enrolling in other appropriate remediation. (3 Lec.)
(Coordinating Board Academic Approval Number 3201995178)

HDEV 0100 Educational Alternatives (1)
The learning environment is introduced. Career, personal study skills, educational planning, and skills for living are all included. Emphasis is on exploring career and educational alternatives and learning a systematic approach to decision-making. A wide range of learning alternatives is covered, and opportunity is provided to participate in personal skills seminars. This course may be repeated for credit. (1 Lec.)
(Coordinating Board Academic Approval Number 3201995178)

HDEV 0110 Assessment of Prior Learning (1)
Prerequisite: Limited to students in Technical Occupational Programs. Demonstrated competence approved by the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related non-collegiate experiences which have contributed to college-level learning, and documentation of such experiences. This course may be repeated for credit. (1 Lec.)
(Coordinating Board Academic Approval Number 3201995178)

HDEV 1372 Cognitive Processes: The Master Student Course (3)
(This is a Unique Need Course.)
This course is an overview of the processes of learning, memory, perception, language and thought. Special emphasis is placed upon the practical applications of these psychological principles for students to learn, practice and adopt in support of their success in college. Adaptation to the higher education atmosphere is also emphasized. (3 Lec.)
(Coordinating Board Academic Approval Number 4203019125)

HDEV 2315 Principles and Processes of Personal and Social Adjustment (3)
(The Texas Common Course Number is PSYC 2315.)
Designed as an Applied Psychology and Human Relations course, this course is an intensive theoretical and practical study of interpersonal communication processes. The course content surveys the major psychological principles of communication and utilizes an experiential model for the practical application of skill based competencies. Students develop an awareness and understanding of their own feelings, values, attitudes, and behaviors and also explore the processes by which these factors effect the quality of their interactions with others. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015625)

HEBR 1470 Beginning Hebrew I (4)
(This is a Unique Need Course.)
This course is an introductory course intended for students with little or no knowledge in the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number is to be assigned.)

HEBR 1471 Beginning Hebrew II (4)
(This is a Unique Need Course.)
Prerequisite: Hebrew 1470 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Hebrew 1470. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number is to be assigned.)

HEMR 1501 Tracks and Undercarriages (5)
(This is a WECM Course Number.)
Concepts in operation and maintenance of final drive truck systems and undercarriages used on truck and wheel type equipment. (3 Lec., 6 Lab.)

HIND 1470 Beginning Hindi I (4)
(This is a Unique Need Course.)
This course is an introductory course intended for students with little or no knowledge in the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number is to be assigned.)

HIND 1471 Beginning Hindi II (4)
(This is a Unique Need Course.)
Prerequisite: Hindi 1470 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Hindi 1470. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number is to be assigned.)

HIST 1301 History of the United States (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading. The history of the United States is presented, beginning with the European background and first discoveries. The pattern of exploration, settlement, and development of institutions is followed throughout the colonial period and the early national experience to 1877. (3 Lec.)
(Coordinating Board Academic Approval Number 4508025125)

HIST 1302 History of the United States (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading. The history of the United States is surveyed from the Reconstruction era to the present day. The study includes social, economic, and political aspects of American life. The development of the United States as a world power is followed. (3 Lec.)
(Coordinating Board Academic Approval Number 5401025125)

HIST 2301 History of Texas from 1500 to the Present (3)
(This is a Texas Common Course Number.)
A survey of Texas development from early Spanish colonization (1500) to the establishment of the modern urban state. The course emphasizes the variety of influences from Indian, Spanish and American cultures. The social, political and economic evolution of the state, including the multi-ethnic character of its population, is studied. (3 Lec.)
(Coordinating Board Academic Approval Number 5401025225)

HIST 2311 Western Civilization (3)
(This is a Texas Common Course Number.)
The civilization in the West from ancient times through the Enlightenment is surveyed. Topics include the Mediterranean world, including Greece and Rome, the Middle Ages, and the beginnings of modern history. Particular emphasis is on the Renaissance, Reformation, the rise of the national state, the development of parliamentary government, and the influences of European colonization. (3 Lec.)
(Coordinating Board Academic Approval Number 5401015425)

HIST 2312 Western Civilization (3)
(This is a Texas Common Course Number.)
This course is a continuation of History 2311. It follows the development of Western civilization from the Enlightenment to current times. Topics include the Age of Revolution, the beginning of industrialism, 19th century, and the social, economic, and political factors of recent world history. (3 Lec.)
(Coordinating Board Academic Approval Number 5401015425)

HIST 2321 World Civilizations (3)
(This is a common course number3.)
This course presents a survey of ancient and medieval history with emphasis on Asian, African, and European cultures. (3 Lec.)
(Coordinating Board Academic Approval Number 5401015325)

HIST 2322 World Civilizations (3)
(This is a Texas Common Course Number.)
This course is a continuation of History 2321. The modern history and cultures of Asia, Africa, Europe, and the Americas, including recent developments, are presented. (3 Lec.)
(Coordinating Board Academic Approval Number 5401015325)

HIST 2372 Advanced Historical Studies (3)
(This is a Unique Need Course.)
Prerequisite: Six hours of history. An in-depth study of minority, local, regional, national, or international topics is presented. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 5401019625)

HIST 2380 The Heritage of Mexico (3)
(This is a Texas Common Course Number.)
This course includes an introduction to the history of Mexico. The course focuses on the social, political, economic and cultural contributions of Mexican-Americans to the United States. This course is cross-listed as Anthropology 2380. The student may register for either History 2380 or Anthropology 2380, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015325)

HIST 2381 African-American History (3)
(This is a Texas Common Course Number.)
The role of African Americans in the history of the United States is studied. The slave trade and slavery in the United States are reviewed. Contributions of African Americans in the U.S. are described. Emphasis is on the political, economic, and sociological factors of African American life in the 20th century. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015325)

HITT 1160 Clinical-Health Information Technology/Technician (1)
(This is a WECM Course Number.)
Prerequisite: HITT 1401 Health Care Date Content and Structure, ENGL 1301 Composition I and HITT 1345 Health Care Delivery Systems concurrently. A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. (3 Ext.)

HITT 1161 Clinical-Health Information Technology/Technician (1)
(This is a WECM Course Number.)
Prerequisite: HITT 1441 Coding and Classification Systems and HITT 2335 Coding and Reimbursement Methodologies. A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Emphasis will be on ICD-9 and CPT clinical coding with related project to be completed. (6 Ext.)

HITT 1205 Medical Terminology (2)
(This is a WECM Course Number.)
Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties and diagnostic procedures. (2 Lec.)

HITT 1249 Pharmacology (2)
(This is a WECM Course Number.)
Prerequisite: SCIT 1407 Human Anatomy and Physiology I, SCIT 1408 Human Anatomy and Physiology II, HITT 1205 Medical Terminology and HITT 2231 Medical Terminology-Advanced. Overview of the basic concepts of the pharmacological treatment of various diseases affecting major body systems. (2 Lec.)

HITT 1253 Legal and Ethical Aspects of Health Information (2)
(This is a WECM Course Number.)
Prerequisite: HITT 1401 Health Care Date Content and Structure, HITT 1345 Health Care Delivery Systems, HITT 1160 Introductory Clinical and ENGL 1301 Composition I. Concepts of confidentiality, ethics, health care legislation, and regulations relating to the maintenance and use of health information. (2 Lec.)

HITT 1255 Health Care Statistics (2)
(This is a WECM Course Number.)
Prerequisite: HITT 1401 Health Care Date Content and Structure, HITT 1345 Health Care Delivery Systems, HITT 1160 Introductory Clinical, ENGL 1301 Composition I and MATH 1314 College Algebra. General principles of health care statistics with emphasis in hospital statistics. Skill development in computation and calculation of health data with overview of guidelines for Texas Department of Health Vital Statistics and studies. (2 Lec.)

HITT 1345 Health Care Delivery Systems (3)
(This is a WECM Course Number.)
Prerequisite: HITT 1401 Health Care Date Content and Structure, ENGL 1301 Composition I and HITT 1160 Introductory Clinical. Introduction to organization, financing, and delivery of health care services, accreditation, licensure and regulatory agencies. (3 Lec.)

HITT 1401 Health Data Content and Structure (4)
(This is a WECM Course Number.)
Prerequisite: ENGL 1301 Composition I. Introduction to systems and processes for collecting, maintaining and disseminating primary and secondary health related information. Instruction in delivery and organizational structure to include content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms and screens.
(3 Lec., 2 Lab.)

HITT 1441 Coding and Classification Systems (4)
(This is a WECM Course Number.)
Prerequisite: SCIT 1407 Human Anatomy and Physiology I, SCIT 1408 Human Anatomy and Physiology II, HITT 1205 Medical Terminology, and HITT 2231 Medical Terminology Advanced. Application of basic coding rules, principles, guidelines and conventions. (3 Lec., 3 Lab.)

HITT 2160 Clinical-Health Information Technology/Technician (1)
(This is a WECM Course Number.)
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Emphasis will be on management functions within the health care setting. Limited to the graduates only each year. (5 Ext.)

HITT 2231 Medical Terminology - Advanced (2)
(This is a WECM Course Number.)
Study of advanced terminology in various medical and surgical specialties. This course is cross-listed as HITT 2331. The student may register for either HITT 2231 or HITT 2331, but may receive credit for only one of the two. (2 Lec.)

HITT 2239 Health Information Organization and Supervision (2)
(This is a WECM Course Number.)
Principles of organization and supervision of human, fiscal and capital resources. (2 Lec.)

HITT 2331 Medical Terminology- Advanced (3)
(This is a WECM Course Number.)
Prerequisite: MDCA 1313. The student will identify, spell, and pronounce advanced medical terms; use advanced medical terms in context; construct and analyze advanced medical terms; and use medical references as resource tools. This course is cross-listed as HITT 2231. The student may register for either HITT 2331 or HITT 2231, but may receive credit for only one of the two.
(3 Lec.)

HITT 2335 Coding and Reimbursement Methodologies (3)
(This is a WECM Course Number.)
Prerequisite: HITT 1441 Coding and Classification Systems. Development of advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding perspective payment systems and methods of reimbursement. (2 Lec., 2 Lab.)

HITT 2343 Quality Assessment and Performance Improvement (3)
(This is a WECM Course Number.)
Prerequisite: HITT 1401 Health Care Date Content and Structure, HITT 1345 Health Care Delivery Systems, HITT 1160 Introductory Clinical, ENGL 1301 Composition I and MATH 1314 College Algebra. Study of the many facets of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality improvement functions, quality tools, utilization management, risk management and medical staff quality issues. (3 Lec.)

HPRS 1202 Wellness and Health Promotion (2)
(This is a WECM Course Number.)
An overview of wellness theory and its application throughout the lifespan of an individual. Focus is on attitude development, impact of cultural beliefs, and communication of wellness. Integration of common and alternative health practices and solutions to overall well-being are studied, assessed, and explored for the community. (2 Lec.)

HPRS 1204 Basic Health Professions Skills (2)
(This is a WECM Course Number.)
A study of the concepts that serve as the foundation for health profession courses, including client care and safety issues, basic client monitoring, and health documentation methods. Basic skills such as vital signs, phlebotomy, catherization, sterile and aseptic technique, pulse oximetry are taught and required to be demonstrated by the student and integrated with critical thinking skills. Medical terminology is included.
(1 Lec., 4 Lab.)

HPRS 1291 Special Topics in Health Professions and Related Sciences, Other (2)
(This is a WECM Course Number.)
Prerequisite: HPRS 1204. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course builds on previously acquired knowledge and skills. Lecture and simulated laboratory experience prepares the student to perform patient care utilizing critical thinking and advanced clinical skills. Competency must be demonstrated on effective level of practice and knowledge. Skills achieved include EKG, finger sticking, physical assessment, IV's. This course may be repeated if topics and learning outcomes vary. (1 Lec., 4 Lab.)

HPRS 2201 Pathophysiology (2)
(This is a WECM Course Number.)
Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. (2 Lec.)

HPRS 2231 General Health Professions Management (2)
(This is a WECM Course Number.)
Exploration and application of management concepts necessary for effective health profession operations. This course incorporates and integrates principles of management such as health care delivery, strategy, and resource allocation to all forms of healthcare environments. Special emphasis is placed on finance, ethics, culture and diversity, trends, and career exploration. The study of law and ethics are intertwined into all the faucets of healthcare including case studies and enactments of legal cases. (1 Lec., 2 Lab.)

HPRS 2300 Pharmacology for Health Professions (3)
(This is a WECM Course Number.)
A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosage. (3 Lec.)

HRMO 1301 Hospitality Advertising (3)
(This is a WECM Course Number.)
An overview of effective advertising and promotion techniques for hospitality managers. (3 Lec.)

HRMO 1303 Hospitality Industry Sales Promotion (3)
(This is a WECM Course Number.)
A study of the relationship of production and consumption in the hospitality industry with emphasis on the role of sales promotion. (3 Lec.)

HRPO 1391 Special Topics in Human Resource Management (3)
(This is a WECM Course Number.)
This course provides students with a global perspective of the history, development, methodology, ethical and societal issues and trends in Alternative Dispute Resolution. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

HRPO 2301 Human Resources Management (3)
(This is a WECM Course Number.)
Behavioral and legal approaches to the management of human resources in organizations. (3 Lec.)

HRPO 2307 Organizational Behavior (3)
(This is a WECM Course Number.)
The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. (3 Lec.)

HUMA 1301 Introduction to the Humanities (3)
(This is a Texas Common Course Number.)
Introduction to the Humanities focuses on the study and appreciation of the fine and performing arts and the ways in which they reflect the values of civilizations.
(3 Lec.)
(Coordinating Board Academic Approval Number 2401035112)

HUMA 1302 Advanced Humanities (3)
(This is a Texas Common Course Number.)
Prerequisite: Humanities 1301 or demonstrated competence approved by the instructor. Human value choices are presented through the context of the humanities. Universal concerns are explored, such as a person's relationship to self and to others and the search for meaning. The human as a loving, believing and hating being is also studied. Emphasis is on the human as seen by artists, playwrights, film makers, musicians, dancers, philosophers, and theologians. The commonality of human experience across cultures and the premises for value choices are also stressed.
(3 Lec.)
(Coordinating Board Academic Approval Number 2401035112)

HYDR 1445 Hydraulics and Pneumatics (4)
(This is a WECM Course Number.)
Prerequisite: Credit or concurrent enrollment in MATH 1414 or the equivalent. Fundamentals of hydraulics and types of hydraulic pumps, cylinders, valves, motors, and related systems including operations, maintenance, and system analysis. (3 Lec., 3 Lab.)

IBUS 1191 Special Topics in International Business (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Business, industrial, or service requirements in the international arena will determine specific topics or skill development offered, such as, new software packages, regulation updates, or market research information. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

IBUS 1291 Special Topics in International Business (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Business, industrial, or service requirements in the international arena will determine specific topics or skill development offered, such as, new software packages, regulation updates, or market research information. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

IBUS 1301 Principles of Imports Exports I (3)
(This is a WECM Course Number.)
A study of export management processes and procedures. Topics include governmental controls, licensing of products, documentation, commercial invoices, and traffic procedures. Application to human and public relations, management of personnel, finance, and accounting procedures. Other topics include requests for bid, payments including letters or credit, insurance, and other trade terminology. (3 Lec.)

IBUS 1302 Principles of Imports Exports II (3)
(This is a WECM Course Number.)
The practices and processes of import management operations, including government controls. Skill development in the preparation and understanding of import documents such as customs invoices, packing lists, and commercial invoices. The student will process appropriate import documentation and utilize selected regulations of daily operations. (3 Lec.)

IBUS 1305 Introduction to International Business and Trade (3)
(This is a WECM Course Number.)
The techniques for entering the international marketplace. Emphasis on the impact and dynamics of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise. (3 Lec.)

IBUS 1341 International Purchasing (3)
(This is a WECM Course Number.)
The skills needed by a buyer in international purchasing or sourcing. Topics include the advantages and the barriers of purchasing internationally, global sourcing, and purchasing processes, including issues of contract administration, location, and evaluation of foreign suppliers, total cost approach, exchange fluctuations, customs procedures, and related topics. (3 Lec.)

IBUS 1349 International Information Systems (3)
(This is a WECM Course Number.)
A course in managing information systems and technology for multinational corporations. Skill development in the use of appropriate software and the National Trade Data Base. Topics include the role of global strategic information systems as applied to problem solving and current transportation and customs software, such as the Automated Broker Interface. (3 Lec.)

IBUS 1351 Coordination in Multinational Industries (3)
(This is a WECM Course Number.)
Introduction to the essential relationship between domestic and foreign industries engaged in shared production. Topics include economic development through international co-production agreements with governments, technology transfer, labor, legal and financial management factors, and practical applications for such agreements, such as those for Mexican maquiladora operations. (3 Lec.)

IBUS 1354 International Marketing Management (3)
(This is a WECM Course Number.)
Analysis of international marketing strategies using trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international export/import marketing plan based on the student's research of a firm's direct and indirect global environment. Opportunities for international trade are identified. (3 Lec.)

IBUS 1373 Global Logistics Management (3)
(This is a WECM Local Need Course.)
Develop skills and understanding in global logistics processes, procedures, and regulations used in transportation, physical distribution, warehousing, inventory control, materials, packaging, plant and warehouse location, risk management, and networks for logistics, suppliers, and information. Utilize decision making and case resolution techniques to solve problems and to develop logistical and information networks for supply chain management appropriate for global corporations. (3 Lec.)

IBUS 1391 Special Topics in International Business (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Business, industrial, or service requirements in the international arena will determine specific topics or skill development offered, such as new software packages, regulation updates, or market research information. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

IBUS 2331 International Human Resource Management (3)
(This is a WECM Course Number.)
A study of the effects of the process of internationalization on human resource management including the requirements of local or host-country nationals, expatriates, or parent-country nations, and third-country nationals. Emphasis on Asia-Pacific, Europe, Latin America, and emerging economies. A staffing plan for an international environment including processes from recruitment to evaluation and labor regulations is prepared. (3 Lec.)

IBUS 2335 International Business Law (3)
(This is a WECM Course Number.)
A course in law as it applies to international business transactions in the global political-legal environment. Study of interrelationships among laws of different countries and the legal effects on individuals and business organizations. Topics include agency agreements, international contracts and administration, regulation of exports and imports, technology transfers, regional transactions, intellectual property, product liability, and legal organization. (3 Lec.)

IBUS 2339 International Banking and Finance (3)
(This is a WECM Course Number.)
A course in international monetary systems, financial markets, flow of capital, foreign exchange, and financial institutions. Topics include export-import payments and financing, the preparation of letters of credit, related shipping documentation, and electronic transfers. An introduction to multinational financial decisions, such as financing foreign investment or working capital is provided. (3 Lec.)

IBUS 2341 International Comparative Management (3)
(This is a WECM Course Number.)
A study of cross-cultural comparisons of management and communications processes. Emphasis on cultural and geographic distinctions and antecedents that affect individual, group and organizational behavior. Topics include sociocultural, demographic, economic, technological, and political-legal environments of cluster countries and their relationship to organizational communication and decision making in the international or multicultural environment. (3 Lec.)

IBUS 2345 Import Customs Regulations (3)
(This is a WECM Course Number.)
A study of the duties and responsibilities of the licensed customs broker or customhouse broker. Topics include processes for customs clearance including appraisement, bonded warehouse entry, examination of goods, harmonized tariffs, fees, bonding penalties, quotas, immediate delivery, consumption, liquidation, computerized systems, laws, and regulations. The student will take sample examinations in preparation for the United States Customs Brokers examination and solve complex problems involving customs regulations and processes. (3 Lec.)

IBUS 2366 Practicum-International Business (3)
(This is a WECM Course Number.)
Prerequisite: Nine credit hours in International Business and Trade. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. (20 Ext.)

IEIR 1412 Distribution Systems (4)
(This is a WECM Course Number.)
Fundamentals of distribution systems including single phase and three phase systems, grounding, ground fault protection, and the national electric code. Lab required. (3 Lec., 3 Lab.)

IFWA 1318 Nutrition for the Food Service Professional (3)
(This is a WECM Course Number.)
An introduction to nutrition including nutrients, digestion and metabolism, menu planning, recipe modification, dietary guidelines and restrictions, diet and disease, and healthy cooking techniques. (3 Lec., 1 Lab.)

IFWA 1371 Organization and Management (3)
(This is a WECM Local Need Course.)
The organizational structure of various types of group care institutions is studied. Administration, tools of management, budget, and cost analysis are emphasized. (3 Lec., 1 Lab.)

IMED 1191 Special Topics in Educational/ Institutional Media Technology/Technician (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and attitudes or behaviors pertinent to multimedia technology or occupations in the field. Focus is on concepts relevant to the professional development of the student. (1 Lec.)

IMED 1211 Storyboard (2)
(This is a WECM Course Number.)
Introduction to the techniques of storyboarding including organizing a project's content and arranging it in a visual format. (2 Lec.)

IMED 1291 Special Topics in Educational/ Institutional Media Technology/Technician (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and attitudes or behaviors pertinent to multimedia technology or occupations in the field. Focus is on concepts relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec., 2 Lab.)

IMED 1301 Introduction to Multimedia (3)
(This is a WECM Course Number.)
A survey of the theories, elements, and hardware/software components of multimedia. Topics include digital image editing, digital sound and video editing, animation, web page development, and interactive presentations. Course emphasis is on conceptualizing and producing effective multimedia presentations. (2 Lec., 4 Lab.)

IMED 1305 Multimedia Courseware Development I (3)
(This is a WECM Course Number.)
Instruction in courseware development. Topics include interactivity, branching, navigation, evaluation techniques and interface/information design using industry standard authoring software. (2 Lec., 4 Lab.)

IMED 1316 Web Page Design I (3)
(This is a WECM Course Number.)
Instruction in Internet web page design and related graphic design issues including mark-up languages, web sites, Internet access software, and interactive topics. (2 Lec., 4 Lab.)

IMED 1341 2-D Interface Design (3)
(This is a WECM Course Number.)
Prerequisite: IMED 1301. Skill development in the interface design process including selecting interfaces that are meaningful to users and relative to a project's content and delivery system. Emphasis on aesthetic issues such as iconography, screen composition, colors, and typography. (2 Lec., 4 Lab.)

IMED 1343 Digital Sound (3)
(This is a WECM Course Number.)
Prerequisite: ITSE 2413. Instruction in digitizing sound and incorporating it into multimedia titles for various delivery systems. Emphasis on compression issues, sampling, synchronizing, and resource management. (3 Lec., 1 Lab.)

IMED 1345 Interactive Multimedia I (3)
(This is a WECM Course Number.)
Exploration of the use of graphics and sound to create time-based interactive multimedia animations using industry standard authoring software. (2 Lec., 4 Lab.)

IMED 1351 Digital Video (3)
(This is a WECM Course Number.)
Prerequisite: IMED 1301 for Multimedia Program and IMED 1343 for Internet Development Technologies Program. Skill development in producing and editing video and sound for multimedia productions. Emphasis is placed on the capture, editing, and outputting of video using a desktop digital video workstation. This course is cross-listed as IMED 1451. The student may register for either IMED 1351 or IMED 1451, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

IMED 1391 Special Topics in Educational/ Institutional Media Technology/Technician (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and attitudes or behaviors pertinent to multimedia technology or occupations in the field. Focus is on concepts relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

IMED 1451 Digital Video (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1401. Skill development in producing and editing video and sound for multimedia productions. Emphasis on the capture, editing, and outputting of video using a desktop digital video workstation. This course is cross-listed as IMED 1351. The student may register for either IMED 1451 or IMED 1351, but may receive credit for only one of the two. (3 Lec., 3 Lab.)

IMED 2305 Multimedia Courseware Development II (3)
(This is a WECM Course Number.)
In-depth coverage of programming/scripting using an authoring system with emphasis on advanced development of courseware products. (2 Lec., 4 Lab.)

IMED 2311 Portfolio Development (3)
(This is a WECM Course Number.)
Emphasis on preparation and enhancement of portfolio to meet professional standards. Topics also include professional organizations, presentation skills, and job-seeking techniques. Departmental approval required for enrollment. (2 Lec., 4 Lab.)

IMED 2313 Project Analysis and Design (3)
(This is a WECM Course Number.)
Prerequisite: Completion of two semesters of multimedia coursework. Introduction to the multimedia planning process including costing, preparation, production legal issues, and guidelines for pre-production preparation. Creation of a comprehensive design document including target audience analysis, purpose and goals, objectives, content outline, flow chart, and storyboard. Emphasis is placed on content design and production management. This is the capstone class for the Level I multimedia certificates. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

IMED 2315 Web Page Design II (3)
(This is a WECM Course Number.)
Prerequisite: IMED 1316. A study of hypertext mark-up language (HTML) and interesting layout techniques for creating engaging well designed web pages. Emphasis is on identifying the target audience and producing a web site according to physical and technical limitations, cultural appearance, and legal issues. This course is cross-listed as IMED 2415. The student may register for either IMED 2315 or IMED 2415, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

IMED 2341 Advanced Digital Video (3)
(This is a WECM Course Number.)
Prerequisite: IMED 1351. Instruction in the use of advanced digital video techniques for post-production. Emphasis on generation and integration of special effects, 2-D animation, and 3-D animation for film, video, CD-ROM, and the Internet. Exploration of new and emerging compression and video streaming technologies. (2 Lec., 4 Lab.)

IMED 2345 Interactive Multimedia II (3)
(This is a WECM Course Number.)
Prerequisite: IMED 1345. Instruction in the use of scripting language to create time-based interactive multimedia projects. Topics include building a user interface, writing script, using commands and functions, testing, and debugging. (2 Lec., 4 Lab.)

IMED 2349 Internet Communications (3)
(This is a WECM Course Number.)
Prerequisite: IMED 2315. Advanced seminar in web server design and maintenance. Topics include scripting, web site planning, testing, security, production, and marketing. Topics include developments in the field of Internet communications. (2 Lec., 4 Lab.)

IMED 2351 Multimedia Programming (3)
(This is a WECM Course Number.)
Prerequisite: IMED 2305 and IMED 2345. Advanced topics in multimedia programming including the use of custom scripts for data tracking. Emphasis is on developing multimedia programs customized to the client's needs. (2 Lec., 4 Lab.)

IMED 2388 Internship-Educational/Instructional Media Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: Completion of the Level I Multimedia Certificate. An experience external to the college for an advanced student in the field of interactive media. The internship involves a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (15 Ext.)

IMED 2409 Internet Commerce (4)
(This is a WECM Course Number.)
An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Topics include database technology, creating web sites in order to collect information, performing online transactions, and generating dynamic content. (3 Lec., 3 Lab.)

IMED 2415 Web Page Design II (4)
(This is a WECM Course Number.)
A study of hypertext mark-up language (HTML) and interesting layout techniques for creating engaging well designed web pages. Emphasis on identifying the target audience and producing a web site according to physical and technical limitations, cultural appearance, and legal issues. This course is cross-listed as IMED 2315. The student may register for either IMED 2415 or IMED 2315, but may receive credit for only one of the two.
(3 Lec., 3 Lab.)

INDS 1301 Basic Elements of Design (3)
(This is a WECM Course Number.)
Prerequisite: Interior Design Program major. Students must earn a grade of C or better. A study of basic design concepts with projects in shape, line, value, texture, pattern, spatial illusion, and form.
(2 Lec., 4 Lab.)

INDS 1315 Materials, Methods, and Estimating (3)
(This is a WECM Course Number.)
Prerequisite: Interior Design Major. A study of materials and textiles, methods of construction and installation, and estimating for interior design applications. Includes a thorough overview of textiles. The student will identify appropriate materials and textiles for specific interior design applications: calculate quantities and costs of materials; and identify quality construction, installation, and craftsmanship. (2 Lec., 4 Lab.)

INDS 1319 Technical Drawing for Interior Designers (3)
(This is a WECM Course Number.)
Prerequisite: Interior Design Major, DFTG 1305. Student must earn a grade of "C" or better. An introduction to reading and preparing technical construction drawings for interior design; including plans, elevations, details, schedules, dimensions and lettering. Manual plans will be generated. (2 Lec., 4 Lab.)

INDS 1341 Color Theory and Application (3)
(This is a WECM Course Number.)
Prerequisite: Interior Design major. Student must earn a grade of "C" or better. A study of color theory and its applications to interior design. (2 Lec., 4 Lab.)

INDS 1345 Commercial Design I (3)
(This is a WECM Course Number.)
Prerequisite: INDS 1319, 1301, 1315, 2335, 2313, 2321, 2317. INDS 2315 is a prerequisite or must be taken concurrently. A study of design principles applied to furniture layout and space planning for commercial interiors. (2 Lec., 4 Lab.)

INDS 1351 History of Interiors I (3)
(This is a WECM Course Number.)
Prerequisite: ARTS 1303, 1304. Student must earn a grade of "C" or better. Historical survey of antiques and European styles and periods of architecture, interior, and furnishings. With consideration of Egypt, Greece, Italy, Spain, and France. An illustrated research notebook is required. (3 Lec., 1 Lab.)

INDS 1352 History of Interiors II (3)
(This is a WECM Course Number.)
Prerequisite: ARTS 1303, 1304. Student must earn a grade of "C" or better. Historical survey of English, American, Asian, and twentieth century styles and periods of architecture, interiors, and furnishings.
(3 Lec., 1 Lab.)

INDS 1370 Basic Computer-Aided Drafting for Interior Designers (3)
(This is a WECM Local Need Course.)
Prerequisite: INDS 1319. Student must earn a grade of "C" or better. An introduction to basic computer-aided drafting as a tool for interior design, illustration, drafting, and design development. (2 Lec., 4 Lab.)

INDS 1391 Special Topics in Interior Design (3)
(This is a WECM Course Number.)
Prerequisite: INDS 1352, and concurrent enrollment in INDS 2331 and INDS 2325. This is an introductory course to the many aspects of restoration, preservation, and adaptive reuse of structures and spaces. Emphasis is placed on the architectural interior. Legal and tax issues are discussed. Restoration projects involving actual structures are studied, along with theoretical problems. Specialized resources are included. This course may be repeated if topics and learning outcomes vary. (2 Lec., 3 Lab.)

INDS 1491 Special Topics in Interior Design (4)
(This is a WECM Course Number.)
Prerequisite: INDS 2331. The principles studied in INDS 2331 are expanded to include project management. Advanced construction documents are prepared. The design research document prepared in INDS 2331 will be developed into a capstone design experience demonstrating mastery of the interior design process from concept to completion. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 4 Lab.)

INDS 2280 Cooperative Education - Interior Design (2)
(This is a WECM Course Number.)
Prerequisite: 2nd or 3rd year Interior Design student. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

INDS 2305 Interior Design Graphics (3)
(This is a WECM Course Number.)
Prerequisite: INDS 1319, 1370. Student must earn a grade of "C" or better. Skill development in computer-generated graphics and technical drawings for interior design applications. (2 Lec., 2 Lab.)

INDS 2307 Textiles for Interior Design (3)
(This is a WECM Course Number.)
Prerequisite: Interior Design major. Student must earn a grade of "C" or better. The study of interior design textiles including, characteristics, care, codes, and applications. A project notebook is required. (3 Lec.)

INDS 2313 Residential Design I (3)
(This is a WECM Course Number.)
Prerequisite: INDS 1301, 1319 and 1341. INDS 1370 is a prerequisite, but may be taken concurrently. Student must earn a grade of "C" or better in all their prerequisites to enroll in this course. The study of residential spaces, including identification of client needs, programming, standards, space planning, drawings, and presentations. (2 Lec., 4 Lab.)

INDS 2315 Lighting for Interior Designers (3)
(This is a WECM Course Number.)
Prerequisite: INDS 2313, 2335. Student must earn a grade of "C" or better. Fundamentals of lighting design, including lamps, luminaries, lighting techniques, and applications for residential and commercial projects. (2 Lec., 4 Lab.)

INDS 2317 Rendering Techniques (3)
(This is a WECM Course Number.)
Prerequisite: INDS 2321, 1319. Student must earn a grade of "C" or better. A study of rendering techniques for formal interior design presentation, using a variety of media. (2 Lec., 4 Lab.)

INDS 2321 Presentation Drawing (3)
(This is a WECM Course Number.)
Prerequisite: Interior Design major. Student must earn a grade of "C" or better. An introduction to two- and three-dimensional presentations, including drawings with one- and two-point perspectives, plans, and elevations. (2 Lec., 4 Lab.)

INDS 2325 Professional Practices for Interior Designers (3)
(This is a WECM Course Number.)
Prerequisite: 2nd or 3rd year Interior Design major. Student must earn a grade of "C" or better. A study of business practices and procedures for interior designers, including professional ethics, project management, marketing, and legal issues. (3 Lec.,1 Lab.)

INDS 2330 Interior Design Building Systems (3)
(This is a WECM Course Number.)
Prerequisite: INDS 1319, 1370, 1301, 2313, 2315. Student must earn a grade of "C" or better. An overview of building materials, mechanical systems, and construction techniques as applied to interior design. Discussion of codes, project sequencing and the interpretation of detailed working drawings. (3 Lec.)

INDS 2331 Commercial Design II (3)
(This is a WECM Course Number.)
Prerequisite: INDS 1301, 2313, 2335, 1345. Student must earn a grade of "C" or better. Advanced concepts of specialized commercial interior design projects, including hospitality, corporate, retail, health care, institutional, or other specialized commercial design projects. In addition the student will select a project and complete a research paper; which will be completely developed into the capstone interior design project in INDS 1491. (2 Lec., 4 Lab.)

INDS 2335 Residential Design II (3)
(This is a WECM Course Number.)
Prerequisite: INDS 1301, 1319, 1341, 2313, 1370. Student must earn a grade of "C" or better. A comprehensive study of complex residential interior design problems, including advanced space planning, specifications, budgets, and presentation renderings. (2 Lec., 4 Lab.)

INEW 1470 Web Animation and Interactivity (4)
(This is a WECM Course Number.)
Prerequisite: Previous programming experience or instructor approval. This course emphasizes developing modular interactive programs using the Object-Oriented Paradigm. Students will learn basic animation techniques, basic human-computer interaction concepts, and introductory interactive programming techniques. Scripting Languages may include ActionScript, Lingo, or other comparable language. (3 Lec., 4 Lab.)

INEW 2334 Advanced Web Page Programming (3)
(This is a WECM course number).
Prerequisite: Intermediate Web page generation skills or instructor approval. Advanced applications for Web authoring. Topics may include Perl Script, Common Gateway Interface (CGI), Database Interaction, Active Server Pages, Java applets, Javascripts, tables, HTML, and/or interactive elements. This course may be repeated if topics and learning outcomes vary. This course is cross-listed as INEW 2434. The student may register for either INEW 2334 or INEW 2434, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

INEW 2371 Web Analytics (3)
(This is a WECM Local Need Course.)
This course explores the use of Web monitoring and analysis tools to improve a site functionally, evaluate product and services, promotional campaigns and to effectively personalize site content. Primary course focus will be on process, methods and software tools utilized in this new and emerging field. (3 Lec.)

INEW 2401 Macros for Applications (4)
(This is a WECM Course Number.)
A study of macros used for applications. Topics include analysis of the need for macros in various applications, macro design considerations, and macro coding and implementation. (3 Lec., 4 Lab.)

INEW 2430 Comprehensive Software Project I: Planning and Design (4)
(This is a WECM Course Number.)
A comprehensive application of skills learned in previous courses in a simulated workplace. Covers the development, testing, and documenting of a complete software and/or hardware solution. This course may be used as a capstone course for a certificate or degree. May be combined with Project II when the expected outcomes include completion of the programming life cycle. (3 Lec., 4 Lab.)

INEW 2432 Comprehensive Software Project II: Coding, Testing, and Implementation (4)
(This is a WECM Course Number.)
A comprehensive application of skills learned in previous semesters in a simulated workplace. Course covers the coding, testing, and documentation of a complete software and/or hardware solution. This course may be used as a capstone course for a certificate or degree. (3 Lec., 4 Lab.)

INEW 2434 Advanced Web Page Programming (4)
(This is a WECM Course Number.)
Prerequisite: Intermediate web generation skills or instructor approval. Advanced applications for Web authoring. Topics may include Perl Script, Common Gateway Interface (CGI), Database Interaction, Active Server Pages, Java applets, Javascripts, tables, HTML, and/or interactive elements. This course is cross-listed as INEW 2334. The student may register for either INEW 2434 or INEW 2334, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

INEW 2436 Computer Program Maintenance and Conversion (4)
(This is a WECM Course Number.)
Prerequisite: Intermediate programming skills or instructor approval. A comprehensive applications of skills learned in prior computer programming classes. Demonstration of debugging skills, program augmentation, and translation of complex programs in a supervised laboratory environment. (3 Lec., 4 Lab.)

INEW 2438 Advanced JAVA Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 2417 or instructor approval.
A continuation of advanced JAVA programming techniques such as servlets and advanced graphical functions. (3 Lec., 4 Lab.)

INEW 2440 Object Oriented Design (4)
(This is a WECM Course Number.)
Large system analysis and design concepts from the object-oriented perspective. Students will build/use case models, sequence diagrams, class diagrams and state charts. Topics will include determining what objects will be required, what members an object requires, and relationships between objects. (3 Lec., 4 Lab.)

INMT 1343 CAD-CAM (3)
(This is a WECM Course Number.)
Computer-Assisted applications in integrating engineering graphics and manufacturing. Emphasis on the conversion of a working drawing using CAD-CAM software and related input and output devices to translate into machine code. (2 Lec., 4 Lab.)

INMT 1447 Industrial Automation (4)
(This is a WECM Course Number.)
Prerequisite: CETT 1405. A study of the applications of industrial automation systems including identification of system requirements, equipment integration, motors, controllers, and sensors. Coverage of set-up, maintenance, and testing of the automated systems. (3 Lec., 3 Lab.)

INSR 1345 Commercial Liability Risk Management and Insurance (3)
(This is a WECM Course Number.)
Analysis of the major sources of liability loss exposures and examination of the insurance coverage designed to meet those exposures. Topics include premises and operations, products and completed operations, contractual and protective liability, employer liability, and surety bonds. Exploration of tort and agency law as they relate to loss exposures involving third party claimants. (3 Lec.)

INTC 1307 Electronic Test Equipment (3)
(This is a WECM Course Number.)
Prerequisite: Credit or concurrent enrollment in CETT 1405. A study of the theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments. Emphasis on accuracy and limitations of instruments and calibration techniques. (2 Lec., 3 Lab.)

ITAL 1311 Introduction to Italian (3)
(This is a Texas Common Course Number.)
ITAL 1311 is an introduction to the regular Italian course sequence; it is not a substitute for ITAL 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in ITAL 1411. This course is cross-listed as Italian 1411. The student may register for either Italian 1311 or Italian 1411, but may receive credit for only one of the two. (3 Lec., 1 Lab.)
Coordinating Board Academic Approval Number 1609025113

ITAL 1411 Beginning Italian I (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. This course is cross-listed as Italian 1311. The student may register for either Italian 1411 or Italian 1311, but may receive credit for only one of the two.
(3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609025113)

ITAL 1412 Beginning Italian II (4)
(This is a Texas Common Course Number.)
Prerequisite: Italian 1411 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Italian 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609025113)

ITAL 2311 Intermediate Italian I (3)
(This is a Texas Common Course Number.)
Prerequisite: Italian 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency and cultural knowledge though more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1609025213)

ITAL 2312 Intermediate Italian II (3)
(This is a Texas Common Course Number.)
Prerequisite: Italian 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Italian 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture. (3 Lec.)
(Coordinating Board Academic Approval Number 1609025213)

ITCC 1201 CCNA 1: Networking Basics (2)
(This is a WECM Course Number.)
Prerequisite: Advanced level of understanding of personal computers and operating systems approved by designated Information Technology personnel. A course introducing the basics of networking including network terminology, local area networks (LAN) and wide area networks (WAN). Topics include network protocols such as TCP/IP, Open System Interconnection (OSI) models, cabling and routers. Licensing/Certification Agency: Cisco Corporation. (2 Lec.)

ITCC 1205 CCNA 2: Router and Routing Basics (2)
(This is a WECM Course Number.)
Prerequisite: ITCC 1402 or ITNW 1313. An introduction to basic Cisco router configuration for local area networks. Topics include initial router configuration for TCP/IP, management of Cisco IOS and router configuration files, routing protocols, and access control lists. Licensing/Certification Agency: Cisco Corporation. (2 Lec.)

ITCC 1241 CCNA 3: Switching Basic and Intermediate Routing (2)
(This is a WECM Course Number.)
Prerequisite: ITCC 1406 or ITNW 1317. A course focusing on advanced topics including IP addressing techniques, intermediate routing protocols, CLI configuration of switches, Ethernet switching, VLANs, Spanning Tree Protocol, and VLAN Trunking Protocol. Licensing/Certification Agency: Cisco Corporation.
(2 Lec.)

ITCC 1245 CCNA 4: WAN Technologies (2)
(This is a WECM Course Number.)
Prerequisite: ITCC 1442 or ITNW 1340. This course focuses on advanced IP addressing techniques (Network Address Translation [NAT], Port Address Translation [PAT], and DHCP), WAN technology and terminology, PPP, ISDN, DDR, Frame Relay, network management and introduction to optical networking. In addition, the student will prepare for the CCNA exam. Licensing/Certification Agency: Cisco Corporation.
(2 Lec.)

ITCC 1309 Voice and Data Cabling (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Designed for students interested in the physical aspects of voice and data network cabling and installation; skills development in reading network design documentation, part list setup and purchase, pulling and mounting cable, cable management, choosing wiring closets and path installation and termination, installing jacks and cable testing. This course will help prepare students for the BICSI Registered Certified Installer, Level I exam. This course is cross-listed as ITCC 1409. The student may register for either ITCC 1309 or ITCC 1409, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

ITCC 1402 CCNA 1: Networking Basics (4)
(This is a WECM Course Number.)
Prerequisite: Advanced level of understanding of personal computers and operating systems approved by designated Information Technology personnel. A course introducing the basics of networking including network terminology, local are networks (LAN) and wide area networks (WAN). Topics include network protocols such as TCP/IP, Open System Interconnection (OSI) models, cabling and routers. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

ITCC 1406 CCNA 2: Router and Routing Basics (4)
(This is a WECM Course Number.)
Prerequisite: ITCC 1402 or ITNW 1313. An introduction to basic Cisco router configuration for local area networks. Topics include initial router configuration for TCP/IP, management of Cisco IOS and router configuration files, routing protocols, and access control lists. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

ITCC 1409 Voice and Data Cabling (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Designed for students interested in the physical aspects of voice and data network cabling and installation; skills development in reading network design documentation, part list setup and purchase, pulling and mounting cable, cable management, choosing wiring closets and path installation and termination, installing jacks and cable testing. This course will help prepare students for the BICSI Registered Certified Installer, Level I exam. This course is cross-listed as ITCC 1309. The student may register for either ITCC 1409 or ITCC 1309, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITCC 1442 CCNA 3: Switching Basic and Intermediate Routing (4)
(This is a WECM Course Number.)
Prerequisite: ITCC 1406 or ITNW 1317. A course focusing on advanced topics including IP addressing techniques, intermediate routing protocols, CLI configuration of switches, Ethernet switching, VLANs, Spanning Tree Protocol, and VLAN Trunking Protocol. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

ITCC 1446 CCNA 4: WAN Technologies (4)
(This is a WECM Course Number.)
Prerequisite: ITCC 1442 or ITNW 1340. This course focuses on advanced IP addressing techniques (Network Address Translation [NAT], Port Address Translation [PAT], and DHCP), WAN technology and terminology, PPP, ISDN, DDR, Frame Relay, network management and introduction to optical networking. In addition, the student will prepare for the CCNA exam. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

ITCC 2432 Advanced Routing: Cisco 5 (4)
(This is a WECM Course Number.)
Prerequisite: CCNA certification and successful completion of skills-based exam or successful completion of CCNA 4: WAN Technologies (ITCC 1446 or ITNW 1344). A study of advanced network deployment issues and methods used to configure CISCO routers for effective LAN and WAN traffic management. Topics include designing scalable internetworks, managing traffic, configuring OSPF in single and multiple areas, configuring EIGRP, and configuring and using interior and border gateway routing protocols. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

ITCC 2436 Remote Access: Cisco 6 (4)
(This is a WECM Course Number.)
Prerequisite: ITCC 2432 or instructor approval. Designing and building remote access networks with Cisco products. Topics include assembling and cabling WAN components, configuring network connections via asynchronous modem, ISDN, X.25, and frame relay architectures and associated protocols. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

ITCC 2440 Multilayer Switching: Cisco 7 (4)
(This is a WECM Course Number.)
Prerequisite: ITCC 2432 or instructor approval. An introduction to Cisco switches and how to use Cisco switches effectively in networks. Topics include switching concepts, virtual LANs, switch architecture (hardware and software), switch configuration, management and troubleshooting. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

ITCC 2444 Network Troubleshooting: Cisco 8 (4)
(This is a WECM Course Number.)
Prerequisite: ITCC 2440, ITCC 2432 and ITCC 2436 or instructor approval. A study of troubleshooting methods for internetworks. Topics include Cisco Troubleshooting Tools, diagnosing and correcting problems with TCP/IP, Novell, and AppleTalk networks, and with Frame Relay and ISDN network connections. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab.)

ITMC 1138 Microsoft® Certified Systems Engineer Certification Preparation I (1)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Prepares students for the MCSE Exam. Includes installation, configuration, and administration of Microsoft® Windows client operating system. Licensing/Certification Agency: Microsoft® Corporation. (3 Lab.)

ITMC 1139 Microsoft® Certified Systems Engineer Certification Preparation II (1)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. The "inner workings' of Windows Server. Focus on installation issues, network shares, and NTFS permissions for a host of shared devices including files, directories, printers, and Internet access. Includes locating, configuring, performing start and stop processes, and understanding the use of file systems in the Windows client operating system. Licensing/Certification Agency: Microsoft® Corporation. (3 Lab.)

ITMC 1344 Enterprise Development Using Microsoft.NET® (3)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor. Utilizing Microsoft.NET® framework to develop, share, and maintain objects across distributed networks including the Internet. The course will include multi-platform access to data stored on a Microsoft® Structured Query Language (SQL) server database, 3-tier, and n-tier implementation, and use of the Internet as the enterprise connectivity medium in corporate applications. Licensing/Certification Agency: Microsoft® Corporation. (2 Lec., 4 Lab.)

ITMC 1345 Enterprise Development Using Microsoft® Visual Basic.NET (3)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor. Visual Basic.NET (VB.NET) programming language for developing, distributing, and maintaining objects across distributed networks including the Internet. Includes using VB.NET to access data stored on a Microsoft® Structured Query Language (SQL) server database and allows implementation as a middleware (business rules) application. Licensing/Certification Agency: Microsoft® Corporation. (2 Lec., 4 Lab.)

ITMC 1401 Microsoft® Windows Network and Operating System Essentials (4)
(This is a WECM Course Number.)
An introduction to Microsoft® Windows network operating systems and to the fundamentals of networking technologies that they support. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 1403 Querying Microsoft® SQL Server with Transact-SQL (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. In depth coverage of the technical skills required to write basic Transact-SQL queries for Microsoft® SQL Server. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 1419 Installing and Administering Microsoft® Windows Server Operating Systems (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1401 or instructor approval. An introduction to Microsoft® Windows server operating systems in a single domain environment. Topics include basic installation, configuration tasks, and day-to-day administration tasks in a Windows based network. Licensing/Certification Agency Microsoft® Corporation. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITMC 1441 Implementing Microsoft® Windows Professional and Server (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1401 or instructor approval. In-depth coverage of the knowledge and skills necessary to install and configure Microsoft® Windows on stand-alone computers and on client computers that are part of a workgroup or domain and the skills and knowledge necessary to install and configure Windows Server to create file, print, and servers. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 1442 Implementing a Microsoft® Windows Network Infrastructure (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1441 or ITMC 1458 or instructor approval.
Skills development in installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft® Windows server family of products. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 1443 Implementing and Administering Microsoft® Directory Services (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1442 or instructor approval. Provides students with the knowledge and skills necessary to install, configure, and administer Microsoft® Windows Active Directory service. Focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 1458 Supporting Microsoft® Windows Client Network Operating Systems (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1419 or instructor approval. Skill development for customizing, configuring, supporting, and troubleshooting Windows. Licensing/Certification Agency: Microsoft® Corporation. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITMC 2126 Microsoft® Certified Systems Engineer Certification Preparation III (1)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Configuring a number of critical network services. Includes review of the most common TCP/IP interconnectivity services such as DNS, DHCP, Remote Access, Network Protocols, IP Routing, and WINS. Licensing/Certification Agency: Microsoft® Corporation. (3 Lab.)

ITMC 2127 Microsoft® Certified Systems Engineer Certification Preparation IV (1)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Implementing and administering a Windows Directory Services Infrastructure. Includes configuring a number of critical Active Directory issues. Licensing/Certification Agency: Microsoft® Corporation. (3 Lab.)

ITMC 2128 Microsoft® Certified Systems Engineer Certification Preparation V (1)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. The entire set of skills required to design a directory services infrastructure. Includes details on how to make a new or existing network successfully take advantage of Active Directory. Licensing/Certification Agency: Microsoft® Corporation. (3 Lab.)

ITMC 2129 Microsoft® Certified Systems Engineer Certification Preparation VI (1)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Creating a Networking Services Infrastructure design. Licensing/Certification Agency: Microsoft® Corporation. (3 Lab.)

ITMC 2139 Microsoft® Certified Systems Engineer Certification Preparation VII (1)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Analysis of the business requirements for computer network security. Includes designing a network security solution that meets business requirements. Licensing/Certification Agency: Microsoft® Corporation. (3 Lab.)

ITMC 2355 Deploying and Managing Microsoft® Internet Security and Acceleration Server (3)
(This is a WECM Course Number.)
Prerequisite: ITMC 1442 or instructor approval. Advanced concepts of deploying and managing Microsoft® Internet Security and Acceleration (ISA) Server in an enterprise environment. Licensing/Certification Agency: Microsoft® Corporation. This course is cross-listed as ITMC 2455. The student may register for either ITMC 2355 or ITMC 2455, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

ITMC 2401 Supporting and Maintaining a Microsoft® Windows NT Server (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Skills development in maintaining, configuring, troubleshooting, or optimizing servers, clients, users, resource access, network services, and remote access. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2402 Designing and Implementing OLAP Solutions Using Microsoft® SQL Server (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Mastery of the knowledge and skills necessary to design, implement, and deploy OLAP solutions by using Analysis Services. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2403 Administering a Microsoft® SQL Server Database (4)
(This is a WECM Course Number.)
Prerequisite: Skills equivalent to those obtained in ITMC 1403 or instructor approval. In-depth coverage of the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft® SQL Server databases. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2404 Implementing and Managing Microsoft® Exchange (4)
(This is a WECM Course Number.)
Prerequisite: Active directory course and/or experience or instructor consent. In-depth coverage of the knowledge and skills required to install and administer Microsoft® Exchange. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2405 Upgrading Microsoft® Exchange Server (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval.
Advanced concepts in upgrading Microsoft® Exchange Server. Topics include issues and procedures related to upgrading, restructuring, and providing co-existence during the deployment process. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2406 Populating a Data Warehouse with Microsoft® SQL (4)
(This is a WECM Course Number.)
Advanced concepts designing a data warehouse and populating data marts by using Data Transformation Services (DTS) in Microsoft® SQL Server. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2408 Administering Microsoft® Systems Management Server (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Mastery of the knowledge and skills required to administer Microsoft® systems management server. Licensing/Certification Agency: Microsoft® Corporation. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 4 Lab.)

ITMC 2409 Deploying and Supporting Microsoft® SMS Server (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Mastery of the knowledge and skills required to deploy and support Microsoft® systems management server.
(3 Lec., 4 Lab.)

ITMC 2430 Updating Support Skills for Microsoft® Windows (4)
(This is a WECM Course Number.)
Provides Microsoft® Windows support professionals with the knowledge and skills necessary to support newer versions of Microsoft® Windows. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2431 Designing a Microsoft® Windows Directory Services Infrastructure (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1443 or instructor approval. Advanced concepts in the knowledge and skills necessary to design a Microsoft® Windows directory services infrastructure. Strategies are presented to assist the student in identifying the information technology needs of the organization, and to designing the Active Directory structure that meets those needs. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2432 Designing a Microsoft® Windows Networking Services Infrastructure (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1443 or instructor approval. Provides experienced support professionals with the information and skills to create a networking services infrastructure design that supports the required network applications. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2433 Designing a Secure Microsoft® Windows Network (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1443 or instructor approval. Provides students with the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks by using Microsoft® Windows networking technologies. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2434 Designing a Microsoft® Windows Upgrade Strategy (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Topics cover the knowledge and skills necessary to select and design a strategy to migrate from Microsoft® Windows NT Server directory services infrastructure to a Microsoft® Windows Active Directory service by describing the planning processes and implications involved. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2435 Analyzing and Tuning Microsoft® Windows and Microsoft® BackOffice Server Performance (4)
(This is a WECM Course Number.)
Topics cover the knowledge and necessary skills to monitor, analyze, and optimize the performance of a computer running Microsoft® Windows and the latest version of Microsoft® BackOffice Server family. Licensing/ Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2436 Designing Microsoft® Exchange for the Enterprise (4)
(This is a WECM Course Number.)
Prerequisite: Active directory course and/or experience or instructor approval. Mastery of the knowledge and skills necessary to design a Microsoft® Exchange organization for an enterprise environment. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2437 Programming a Microsoft® SQL Server Database (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1441 or ITMC 1458 or instructor approval. Mastery of programming and implementing a database solution by using SQL Server. Licensing/ Certification Agency: Microsoft® Corporation.
(3 Lec., 4 Lab.).

ITMC 2438 Implementing Business Logic with MDX in Microsoft® SQL Server (4)
(This is a WECM Course Number.)
Advanced concepts and skills necessary to use multidimensional expression (MDX) to add calculated members and other dynamically calculated values to a Microsoft® SQL Server Analysis Services cube by using SQL Server Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITMC 2455 Deploying and Managing Microsoft® Internet Security and Acceleration Server (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1442 or instructor approval. Advanced concepts of deploying and managing Microsoft® Internet Security and Acceleration (ISA) Server in an enterprise environment. Licensing/Certification Agency: Microsoft® Corporation. This course is cross-listed as ITMC 2355. The student may register for either ITMC 2455 or ITMC 2355, but may receive credit for only one of the two. (3 Lec., 4 Lab.)

ITNW 1192 Special Topics in Business Systems Networking and Telecommunications (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

ITNW 1274 Managing Web Site Development Projects (2)
(This is a WECM Course Number.)
Prerequisite: Successful completion of Semester I Internet Development Technologies core curriculum or equivalent experiences approved by instructor consent. This course provides an introduction to the complexities of managing Web site development projects. Students will learn cost specification, budgeting, schedule construction, negotiation, team-building, time management and status reporting skills. Legal issues like intellectual property rights, contract agreements, ethics and confidentiality will be described. (2 Lec.)

ITNW 1280 Cooperative Education - Computer Systems Networking and Telecommunications (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

ITNW 1292 Special Topics in Business Systems Networking and Telecommunications (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

ITNW 1303 Managing a Microsoft® Windows Network Environment (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Installation and configuration tasks and network and operating system management tasks. Includes troubleshooting tasks, hardware and software installations. Configurations, upgrades, and some network and system operations in a Microsoft® Windows network environment.
(2 Lec., 4 Lab.)

ITNW 1316 Netware Administration (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. An introduction to Netware administration. This course is cross-listed as ITNW 1416. The student may register for either ITNW 1316 or ITNW 1416, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ITNW 1321 Introduction to Networking (3)
(This is a WECM Course Number.)
Introduction to the fundamentals, basic concepts, and terminology of networks. Topics include the access and use of the Internet and networking hardware and software, including current developments in networking. This course is cross-listed as ITNW 1421. The student may register for either ITNW 1321 or ITNW 1421, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

ITNW 1340 I-Net+ (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Various responsibilities and tasks required for an Internet Developer. Prepares individuals to pass the Computing Technology Industry Association (CompTIA) Net+ certification exam. Licensing/Certification Agency: Computing Technology Industry Association. (2 Lec., 4 Lab.)

ITNW 1351 Fundamentals of Wireless LANs (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Designing, planning, implementing, operating, and troubleshooting wireless LANs (WLANs). Includes WLAN design, installation, and configuration; and WLAN security issues and vendor interoperability strategies. (2 Lec., 4 Lab.)

ITNW 1353 Supporting Network Server Infrastructure (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Skills development in installing, configuring, managing, and supporting a network infrastructure. This course is cross-listed as ITNW 1453. The student may register for either ITNW 1353 or ITNW 1453, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ITNW 1358 Network+ (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Prepares individuals for a career as a Network Engineer in the Information Technology support industry. Includes the various responsibilities and tasks required for service engineer to successfully perform in a specific environment. Prepares individual to pass the Computing Technology Industry Association (CompTIA) Network+ certification exam. Licensing/Certification Agency: Computing Technology Industry Association. (2 Lec., 2 Lab.)

ITNW 1380 Cooperative Education-Business Systems Networking and Telecommunications (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. (1 Lec., 20 Ext.)

ITNW 1392 Special Topics in Business Systems Networking and Telecommunications (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

ITNW 1403 Managing a Microsoft® Windows Network Environment (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Installation and configuration tasks and network and operating system management tasks. Includes troubleshooting tasks, hardware and software installations. Configurations, upgrades, and some network and system operations in a Microsoft® Windows network environment. (3 Lec., 4 Lab.)

ITNW 1416 Netware Administration (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. An introduction to Netware administration. This course is cross-listed as ITNW 1316. The student may register for either ITNW 1416 or ITNW 1316, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITNW 1421 Introduction to Networking (4)
(This is a WECM course.)
Introduction to the fundamentals, basic concepts, and terminology of networks. Topics include the access and use of the Internet and networking hardware and software, including current developments in networking. This course is cross-listed as ITNW 1321. The student may register for either ITNW 1421 or ITNW 1321, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 3 Lab.)

ITNW 1425 Fundamentals of Networking Technologies (4)
(This is a WECM Course Number.)
Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. (3 Lec., 4 Lab.)

ITNW 1437 Introduction to the Internet (4)
(This is a WECM Course Number.)
Introduction to the Internet with emphasis on using the World Wide Web to locate, transfer, and publish information. Survey of emerging technologies on the Internet. (3 Lec., 4 Lab.)

ITNW 1440 I-Net+ (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Various responsibilities and tasks required for an Internet Developer. Prepares individuals to pass the Computing Technology Industry Association (CompTIA) Net+ certification exam. Licensing/Certification Agency: Computing Technology Industry Association.
(3 Lec., 4 Lab.)

ITNW 1446 Microsoft® Exchange Server - Concepts and Administration (4)
(This is a WECM Course Number.)
Skills development in the day-to-day management of an established Exchange Server Organization using Microsoft® Exchange Server. (3 Lec., 4 Lab.)

ITNW 1448 Implementing and Supporting Client Operating Systems (4)
(This is a WECM Course Number.)
Prerequisite: Basic networking and operating system essentials skills or instructor approval. Skills development in the management of client/desktop operating systems. (3 Lec., 4 Lab.)

ITNW 1451 Fundamentals of Wireless LANs (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Designing, planning, implementing, operating, and troubleshooting wireless LANs (WLANs). Includes WLAN design, installation, and configuration; and WLAN security issues and vendor interoperability strategies. (3 Lec., 4 Lab.)

ITNW 1453 Supporting Network Server Infrastructure (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Skills development in installing, configuring, managing, and supporting a network infrastructure. This course is cross-listed as ITNW 1353. The student may register for either ITNW 1453 or ITNW 1353, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITNW 1454 Implementing and Supporting Servers (4)
(This is a WECM Course Number.)
Prerequisite: Basic networking and client operating system essentials skills or instructor approval. A course in the development of skills necessary to implement, administer, and troubleshoot information systems that incorporate Windows-based Servers in a networked computing environment. (3 Lec., 4 Lab.)

ITNW 1456 Implementing Microsoft® Internet Explorer (4)
(This is a WECM Course Number.)
Prerequisite: Basic networking and client operating system essentials skills or instructor approval. An introduction to the architecture and features of Microsoft® Internet Explorer. Topics include set up, configuration, use, and deployment of Internet Explorer in a network environment. (3 Lec., 4 Lab.)

ITNW 1480 Cooperative Education-Business Systems Networking and Telecommunications (4)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment.
Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 30 Ext.)

ITNW 1492 Special Topics in Computer Systems Networking and Telecommunications (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 4 Lab.)

ITNW 2415 Wide Area Networks (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Introduce technologies and protocols used to move data, voice, and video across long distances. Basic concepts of how information is transported over a wide area network (WAN) from the physical layer to the application layer are also introduced. This course is cross-listed as ITNW 2315. The student may register for either ITNW 2415 or ITNW 2315, but may receive credit for only one of the two. (3 Lec., 4 Lab.)

ITNW 2421 Networking with TCP/IP (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating system. This course is cross-listed as ITNW 2321. The student may register for either ITNW 2421 or ITNW 2321, but may receive credit for only one of the two. (3 Lec., 4 Lab.)

ITNW 2435 Network Troubleshooting and Support (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research, techniques, available resources, and network management hard/software. This course is cross-listed as ITNW 2335. The student may register for either ITNW 2435 or ITNW 2335, but may receive credit for only one of the two.
(3 Lec., 4 Lab.)

ITNW 2449 Securing Intranets with Border Manager (4)
(This is a WECM Course Number.)
Prerequisite: Instructor approval. Instruction in the implementation of BorderManager including installation, configuration administration, maintenance, and implementation of access control and troubleshooting components. Licensing/Certification Agency: Novell Corporation. (3 Lec., 4 Lab.)

ITNW 2453 Supporting Proxy Services (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1442 or instructor approval.
An introduction to Network Proxy Services including installation, configuration, and troubleshooting Basic architecture, controlling Internet access, administration, configuring the cache, and methods of improving performance. (3 Lec., 4 Lab.)

ITNW 2454 Internet/Intranet Server (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Designing, installing, configuring, maintaining, and managing an Internet server. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITNW 2455 Administering Microsoft® SQL Server (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Administering SQL Server is a skills development course in the installation, configuration, administration, and troubleshooting of SQL Servers client/server database management system version. This course is cross-listed as ITNW 2355. The student may register for either ITNW 2455 or ITNW 2355, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITNW 2456 Designing Network Directory Infrastructure Servers (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Design, implement, and support network operating system, server directory infrastructure. (3 Lec., 4 Lab.)

ITNW 2457 Designing a Network Infrastructure (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Provides senior support professionals with the information and skills to create a networking services infrastructure design that supports the required network applications. This course is cross-listed as ITNW 2357. The student may register for either ITNW 2457 or ITNW 2357, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 4 Lab.)

ITNW 2458 Designing and Implementing Mail Servers (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. An in-depth study of electronic messaging using mail servers.
(3 Lec., 4 Lab.)

ITNW 2459 Web Server Support and Maintenance (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Instruction in the installation, configuration, and implementation of Internet Web servers. (3 Lec., 4 Lab.)

ITNW 2126 Advanced Topics in UNIX (1)
(This is a WECM Course Number.)
Prerequisite: ITSC 2437 or instructor approval. Operating system installation, system management, and UNIX pitfall avoidance. (4 Lab.)

ITNW 2313 Networking Hardware (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, experience or instructor approval. Maintain network hardware devices. Topics include network cables, servers, and workstations; network connectivity devices such as routers, hubs, bridges, gateways, repeaters, and uninterruptible power supplies; and other networking hardware devices. This course is cross-listed as ITNW 2413. The student may register for either ITNW 2313 or ITNW 2413, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

ITNW 2315 Wide Area Networks (3)
(This is a WECM Course Number.)
Introduce technologies and protocols used to move data, voice, and video across long distances. Basic concepts of how information is transported over a wide area network (WAN) from the physical layer to the application layer are also introduced. This course is cross-listed as ITNW 2415. The student may register for either ITNW 2315 or ITNW 2415, but may receive credit for only one of the two. (3 Lec.)

ITNW 2321 Networking with TCP/IP (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems. This course is cross-listed as ITNW 2421. The student may register for either ITNW 2321 or ITNW 2421, but may receive credit for only one of the two. (3 Lec.)

ITNW 2335 Network Troubleshooting and Support (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research techniques, available resources, and network management hard/software. This course is cross-listed as ITNW 2435. The student may register for either ITNW 2335 or ITNW 2435, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ITNW 2354 Internet/Intranet Server (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Designing, installing, configuring, maintaining, and managing an Internet server. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ITNW 2355 Administering Microsoft® SQL Server (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Administering SQL Server is a skills development course in the installation, configuration, administration, and troubleshooting of SQL Servers client/server database management system version. This course is cross-listed as ITNW 2455. The student may register for either ITNW 2355 or ITNW 2455, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ITNW 2357 Designing a Network Infrastructure (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Provides senior support professionals with the information and skills to create a networking services infrastructure design that supports the required network applications. This course is cross-listed as ITNW 2457. The student may register for either ITNW 2357 or ITNW 2457, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ITNW 2401 Administering Servers (4)
(This is a WECM Course Number.)
Post-installation and day-to-day administration tasks of various operating system servers. (3 Lec., 4 Lab.)

ITNW 2413 Networking Hardware (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Maintain network hardware devices. Topics include network cables, servers, and workstations; network connectivity devices such as routers, hubs, bridges, gateways, repeaters, and uninterruptible power supplies; and other networking hardware devices. This course is cross-listed as ITNW 2313. The student may register for either ITNW 2413 or ITNW 2313, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITNW 2476 Operating Systems Security (4)
(This is a WECM Course Number.)
Prerequisite: ITNW 2417 (Network Security).
This course deals with the general needs for securing a single computer, or a series of computers, in a network. The primary focus of the course is protecting the operating system, access to the operating system, and the data on that operating system or systems.
(3 Lec., 4 Lab.)

ITNW 2477 Security Assessments and Auditing (4)
(This is a WECM Course Number.)
Prerequisite: ITNW 2446 (Designing a Secure Network).
This course covers the procedures, concerns, policies, and practices of security assessment and auditing. The primary focus of the course is three-fold: (1) assessing the security needs in various environments; (2) auditing the current level of security in the environment under study; and (3) recommending a methodology to bring the environment into compliance with the recommended security procedures and policies. (3 Lec., 4 Lab.)

ITNW 2478 Incident Response and Handling (4)
(This is a WECM course number).
Prerequisite: ITNW 2477 (Security Assessments and Auditing). This course deals with the processes, procedures, precedents, and operations necessary to determine when a security breech has occurred; stabilize and preserve the records and data about the incident for later reporting; prepare and present the incident information to the appropriate agencies; and recover the data and systems following the incident.
(3 Lec., 4 Lab.)

ITSC 1191 Special Topics in Computer and Information Sciences, General (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

ITSC 1280 Cooperative Education-Business-Computer and Information Sciences (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment.
Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

ITSC 1281 Cooperative Education-Computer and Information Sciences (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

ITSC 1291 Special Topics in Computer and Information Sciences, General (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

ITSC 1329 Fundamentals of Solaris 8 Operating Environment (SA-118) (3)
(This is a WECM Course Number.)
Prerequisite: Basic networking and operating essentials skills or instructor approval. Designed for the student interested in Solaris certification, this course is for new users and covers how to use the basic Solaris operating environment. Topics include fundamental command-line features of the Solaris operating environment file system, file permissions, the VI text editor, command shells, and basic network use. Licensing/Certification Agency: Sun Microsystems. (2 Lec., 4 Lab.)

ITSC 1347 UNIX System Administration II (3)
(This is a WECM Course Number.)
Prerequisite: ITSC 1358 or instructor approval. Provides students with the necessary skills to administer UNIX workstations in a network environment. System security features will be presented. (2 Lec., 4 Lab.)

ITSC 1352 Solaris Operating Environment 8 Systems Administrations II (SA-288) (3)
(This is a WECM Course Number.)
Prerequisite: ITSC 1354 or instructor approval. Designed for the student interested in Solaris certification. This course covers how to install and maintain Sun systems, configure and troubleshoot the Network File System (NFS) environment, and configure the Network Information Services (NIS) environment. Licensing/Certification Agency: Sun Microsystems.
(2 Lec., 4 Lab.)

ITSC 1354 Solaris Operating Environment 8 Systems Administrations (SA-238) (3)
(This is a WECM Course Number.)
Prerequisite: ITSC 1356 or instructor approval. Designed for the student interested in Solaris certification. This course provides students with the necessary knowledge and skills to perform the essential system administration tasks in a Solaris 8 Operating Environment. Instructional topics include essential tasks of standalone installation, file system management, backup procedures, process control, user administration, and device management. Licensing/Certification Agency: Sun Microsystems. (2 Lec., 4 Lab.)

ITSC 1356 Shell Programming (SL-120) (3)
(This is a WECM Course Number.)
Prerequisite: ITSC 1429 or instructor approval. Designed for the student interested in Solaris certification. This course provides students with the knowledge to read, write, and debug C shell scripts. Students are taught how to develop simple scripts to automate frequently executed sequences of commands, and how to use conditional logic, user interaction, loops, and menus to enhance the productivity and effectiveness of the user. This course is intended for programmers who are familiar with the Solaris operating environment and who would like to read and understand various C shell scripts and write their own shell scripts to automate their day-to-day tasks. Licensing/Certification Agency: Sun Micro-systems. (2 Lec., 4 Lab.)

ITSC 1358 UNIX System Administration I (3)
(This is a WECM Course Number.)
Prerequisite: ITSC 1407 or instructor approval. Provide new system administrators the basics of administering UNIX workstations. Students will perform basic system administration tasks, such as installing a standalone system , adding users, backing up and restoring file systems, and adding new printer support. Emphasis on the procedures needed to perform these system administration tasks. Introduces the concept of the system and disk management. (2 Lec., 4 Lab.)

ITSC 1380 Cooperative Education - Computer and Information Sciences, General (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

ITSC 1381 Cooperative Education-Computer and Information Sciences (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

ITSC 1391 Special Topics in Computer and Information Sciences, General (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

ITSC 1401 will not meet the computer literacy requirement in the core curriculum and/or Associate in Arts or Associate in Sciences degrees. COSC 1300 will meet this requirement. ITSC 1401 meets the computer literacy requirement in most technical certificates and degrees. COSC 1300 will not substitute for ITSC 1401 and ITSC 1401 cannot be substituted for COSC 1300.

ITSC 1401 Introduction to Computers (4)
(This is a WECM Course Number.)
Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Explores integration and application in business and other segments in society. Fundamentals of computer problem-solving and programming may be discussed. Examines applications and software relating to a specific curricular area. (3 Lec., 4 Lab.)

ITSC 1402 Computer Control Language (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1411, AS/400 Operating System I for AS/400 certificate or degree or ITSC 1407, UNIX Operating System I for UNIX certificate or degree or instructor approval. Skill development in the use of system control language on mid-range/mainframe computers. Topics include command formats, file management, job scheduling, resource management, and utilities. (3 Lec., 3 Lab.)

ITSC 1405 Introduction to PC Operating Systems (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of personal computers and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by instructor. A study of personal computer operating systems. Topics include installation and configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. (3 Lec., 3 Lab.)

ITSC 1407 UNIX Operating System I (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of personal computers and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by instructor. A study of the UNIX operating system including multi-user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Topics include introductory systems management concepts. (3 Lec., 3 Lab.)

ITSC 1409 Integrated Software Applications I (4)
(This is a WECM Course Number.)
Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 4 Lab.)

ITSC 1411 AS/400 Operating System I (4)
(This is a WECM Course Number.)
Prerequisite: None. A study of the AS/400 operating system including multi-user concepts, terminal emulation, use of system editor, basic AS/400 menus, commands, visual interface options and help screens. Topics include introductory system management concepts and file management. (3 Lec., 3 Lab.)

ITSC 1413 Internet/Web Page Development (4)
(This is a WECM Course Number.)
Instruction in the use of Internet services and the fundamentals of web page design and web site development. This course may be repeated when topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 4 Lab.)

ITSC 1421 Intermediate PC Operating Systems (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of personal computers and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by instructor. Continued study in advanced installation and configuration troubleshooting, advanced file management, memory and storage management. Update peripheral device drivers, and use of utilities to increase system performance.
(3 Lec., 3 Lab.)

ITSC 1425 Personal Computer Hardware (4)
This is a WECM course number.)
Prerequisite: Basic understanding of personal computers and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by instructor. A study of current personal computer hardware including personal computer assembly and upgrading, setup and configuration, and troubleshooting. (3 Lec., 3 Lab.)

ITSC 1429 Fundamentals of Solaris 8 Operating Environment (SA-118) (4)
(This is a WECM Course Number.)
Designed for the student interested in Solaris certification, this course is for new users and covers how to use the basic Solaris operating environment. Topics include fundamental command-line features of the Solaris operating environment file system, file permissions, the VI text editor, command shells, and basic network use. Licensing/Certification Agency: Sun Microsystems. (3 Lec., 3 Lab.)

ITSC 1447 UNIX System Administration II (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1458 or instructor approval. Provides students with the necessary skills to administer UNIX workstations in a network environment. System security features will be presented. (3 Lec., 3 Lab.)

ITSC 1452 Solaris Operating Environment 8 Systems Administrations II (SA-288) (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1454 or instructor approval. Designed for the student interested in Solaris certification. This course covers how to install and maintain Sun systems, configure and troubleshoot the Network File System (NFS) environment, and configure the Network Information Services (NIS) environment. Licensing/Certification Agency: Sun Microsystems.
(3 Lec., 3 Lab.)

ITSC 1454 Solaris Operating Environment 8 Systems Administrations (SA-238) (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1456 or instructor approval. Designed for the student interested in Solaris certification. This course provides students with the necessary knowledge and skills to perform the essential system administration tasks in a Solaris 8 Operating Environment. Instructional topics include essential tasks of standalone installation, file system management, backup procedures, process control, user administration, and device management. Licensing/Certification Agency: Sun Microsystems. (3 Lec., 3 Lab.)

ITSC 1456 Shell Programming (SL-120) (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1429 or instructor approval. Designed for the student interested in Solaris certification. This course provides students with the knowledge to read, write, and debug C shell scripts. Students are taught how to develop simple scripts to automate frequently executed sequences of commands, and how to use conditional logic, user interaction, loops, and menus to enhance the productivity and effectiveness of the user. This course is intended for programmers who are familiar with the Solaris operating environment and who would like to read and understand various C shell scripts and write their own shell scripts to automate their day-to-day tasks. Licensing/Certification Agency: Sun Microsystems. (3 Lec., 3 Lab.)

ITSC 1458 UNIX System Administration I (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1407 or instructor approval. Provide new system administrators the basics of administering UNIX workstations. Students will perform basic system administration tasks, such as installing a standalone system, adding users, backing up and restoring file systems, and adding new printer support. Emphasis on the procedures needed to perform these system administration tasks. Introduces the concept of the system and disk management. (3 Lec., 3 Lab.)

ITSC 1480 Cooperative Education-Computer and Information Sciences (4)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment.
Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 30 Ext.)

ITSC 1491 Special Topics in Computer and Information Sciences, General (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSC 2431 Integrated Software Applications III (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1409 or instructor consent. Designed for advanced users with emphasis on a wide range of productivity tasks including complex assignments that require advanced formatting and functionality. This course may be repeated if topics and learning outcomes vary. (3 Lec., 3 Lab.)

ITSC 2435 Application Problem Solving (4)
(This is a WECM Course Number.)
Analysis and design methods and tools are studied and applied to practical situations involving various business functions. Utilization of current application software to solve advanced problems and generate customized solutions, involving projects and software specific to a specific curricular area. Topics include problem solving skills, logic structures, and programming.
(3 Lec., 4 Lab.)

ITSC 2437 UNIX Operating System II (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1407 or instructor consent. Continued study of the UNIX operating system commands. Includes additional scripting topics such as CGI or PERL. (3 Lec., 3 Lab.)

ITSC 2439 Personal Computer Help Desk (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1405 and (ITSW 1401 or ITSW 2431) and (ITSW 1404 or ITSW 1434) and (ITSW 1407 or ITSW 2437) or instructor approval. Diagnosis and solution of user hardware and software related problems with on-the-job projects. (2 Lec., 4 Lab.)

ITSC 2442 AS/400 Operating System II (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1411 or instructor consent. Advanced study of the AS/400 operating system. Topics include advanced concepts of systems management and communications, installation and maintenance of software, network security, and data integrity.
(3 Lec., 3 Lab.)

ITSE 1191 Special Topics in Computer Programming (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

ITSE 1280 Cooperative Education-Computer Programming (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment.
Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

ITSE 1281 Cooperative Education-Computer Programming (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

ITSE 1291 Special Topics in Computer Programming (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

ITSE 1302 Computer Programming (3)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to computer programming with emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. This course is cross-listed as ITSE 1402. The student may register for either ITSE 1302 or ITSE 1402, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

ITSE 1311 Web Page Programming (3)
(This is a WECM Course Number.)
Instruction in Internet Web page programming and related graphic design issues including mark-up language, Web sites, Internet access software, and interactive topics. May include use of HTML, CGI, JAVA, Javascript, or ASP. This course is cross-listed as ITSE 1411. The student may register for either ITSE 1311 or ITSE 1411, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ITSE 1345 Introduction to Oracle SQL (3)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. An introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL). This course is cross-listed as ITSE 1445. The student may register for either ITSE 1345 or ITSE 1445, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

ITSE 1346 Database Theory and Design (3)
(This is a WECM Course Number.)
Introduction to the analysis and utilization of data requirements and organization into normalized tables using the four normal forms of database design.
(2 Lec., 4 Lab.)

ITSE 1350 System Analysis and Design (3)
(This is a WECM Course Number.)
Prerequisite: Any ITSE programming course or instructor approval. Comprehensive introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools.
(2 Lec., 4 Lab.)

ITSE 1354 Oracle Application Server (3)
(This is a WECM Course Number.)
Prerequisite: Previous Oracle skills or instructor consent. Introduction of knowledge and skills related to Oracle Application Server. Includes e-commerce solution, web related content management, business logic implementation, security, and object.
(2 Lec., 4 Lab.)

ITSE 1356 Introduction to XML (3)
(This is a WECM Course Number.)
Prerequisite: Basic web page generation skills or instructor approval. Introduction of skills and practice related to the Extensible Markup Language/Simple Object Access Protocol. Topics to be covered will include: elements, attributes, namespaces, entities, and what constitutes a well-formed document.
(2 Lec., 2 Lab.)

ITSE 1358 Oracle Topics: Portal (3)
(This is a WECM Course Number.)
Prerequisite: Previous Oracle skills or instructor consent. Introduction of interactive programming on the Web using Oracle's browser-based technology for information portals. Emphasizes knowledge and practice skills to master portal creation, database browsing, application development, component management and performance. (2 Lec., 2 Lab.)

ITSE 1359 Introduction to Scripting Languages (3)
(This is a WECM Course Number.)
Prerequisite: Basic web page generation skills or instructor approval. Introduction to the Perl programming language with the utilization of the three basic types of scalars, arrays and hashes, the control structures, regular expressions, I/O, and textual analysis. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

ITSE 1380 Cooperative Education-Computer Programming (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

ITSE 1381 Cooperative Education-Computer Programming (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

ITSE 1391 Special Topics in Computer Programming (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 2 Lab.)

ITSE 1402 Computer Programming (4)
This is a WECM course number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to computer programming with emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. This course is cross-listed as ITSE 1302. The student may register for either ITSE 1402 or ITSE 1302, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 4 Lab.)

ITSE 1407 Introduction to C++ Programming (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to computer programming using C++. Emphasis on the fundamentals of structured design with development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. (3 Lec., 4 Lab.)

ITSE 1411 Web Page Programming (4)
(This is a WECM Course Number.)
Instruction in Internet Web page programming and related graphic design issues including mark-up language, Web sites, Internet access software, and interactive topics. May include use of HTML, CGI, JAVA, Javascript, or ASP. This course is cross-listed as ITSE 1311. The student may register for either ITSE 1411 or ITSE 1311, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSE 1414 Introduction to RPG Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSC 1411 AS/400 Operating System I or instructor consent. Introduction to computer programming using RPG IV. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. (3 Lec., 4 Lab.)

ITSE 1418 Introduction to COBOL Programming (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to computer programming using COBOL. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. (3 Lec., 4 Lab.)

ITSE 1422 Introduction to C Programming (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to computer programming using C. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. (3 Lec., 4 Lab.)

ITSE 1431 Introduction to Visual BASIC Programming (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to computer programming using Visual BASIC. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. (3 Lec., 4 Lab.)

ITSE 1440 Mastering Distributed Application Design and Development Using Microsoft® Visual Studio (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 1431 or ITSE 2449 or instructor approval. An introduction to the creation of enterprise-level applications and the use of appropriate design tools and technology with Microsoft® Visual Studio. Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITSE 1444 Mastering Microsoft® Visual Basic Development (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 2450 or ITSE 1440 or instructor approval. Skill development in the creation of database applications using component object model (COM). Licensing/Certification Agency: Microsoft® Corporation. (3 Lec., 4 Lab.)

ITSE 1445 Introduction to Oracle SQL (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. An introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL). This course is cross-listed as ITSE 1355. The student may register for either ITSE 1445 or ITSE 1355, but may receive credit for only one of the two. (3 Lec., 4 Lab.)

ITSE 1449 Programming Logic and Design (4)
(This is a WECM Course Number.)
A disciplined approach to problem-solving with structured techniques and representation of algorithms using appropriate design tools. Discussion of methods for testing, evaluation, and documentation.
(3 Lec., 4 Lab.)

ITSE 1450 System Analysis and Design (4)
(This is a WECM Course Number.)
Prerequisite: Any ITSE programming course or instructor approval.
Comprehensive introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools. (3 Lec. 3 Lab.)

ITSE 1480 Cooperative Education-Computer Programming (4)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment.
Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 30 Ext.)

ITSE 1491 Special Topics in Computer Programming (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSE 2302 Intermediate Web Programming (3)
(This is a WECM Course Number.)
Prerequisite: Basic Web Page generation skills or instructor approval. Intermediate applications for web authoring. Topics may include server side including (SSI), Perl, HTML, JAVA, JavaScript, and/or ASP. This course is cross-listed as ITSE 2402. The student may register for either ITSE 2302 or ITSE 2402, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ITSE 2305 Windows Programming (3)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to computer programming for windows. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. This course is cross-listed as ITSE 2405. The student may register for either ITSE 2305 or ITSE 2405, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

ITSE 2313 Web Authoring (3)
(This is a WECM Course Number.)
Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. This course is cross-listed as ITSE 2413. The student may register for either ITSE 2313 or ITSE 2413, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

ITSE 2354 Advanced Oracle PL/SQL (3)
(This is a WECM Course Number.)
Prerequisite: ITSE 1345 or instructor approval. A continuation of Oracle SQL. Topics include hierarchical queries, set based queries, correlated subqueries, scripting, and scripting generation. (2 Lec., 4 Lab.)

ITSE 2356 Oracle Database Administration I (3)
(This is a WECM Course Number.)
Prerequisite: Previous Oracle skills or instructor approval. Fundamentals of the tasks and functions required of a database administrator using Oracle. This course is cross-listed as ITSE 2456. The student may register for either ITSE 2356 or ITSE 2456, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

ITSE 2358 Oracle Database Administration II (3)
(This is a WECM Course Number.)
Prerequisite: ITSE 2356 or instructor approval. A continuation of Oracle Database Administration I. Topics include recovery procedures, logical backups, standby database capabilities, and performance tuning of the Oracle Server. Common performance problems and the use of diagnostic tools to troubleshoot and optimize throughput will be discussed. This course is cross-listed as ITSE 2458. The student may register for either ITSE 2358 or ITSE 2458, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

ITSE 2359 Advanced Computer Programming
(This is a WECM Course Number.)
Prerequisite: ITSE 1302 or instructor consent.
Further applications of programming techniques. Topics include file access methods, data structures, modular programming, program testing, and documentation. This course is cross-listed as ITSE 2459. The student may register for either ITSE 2359 or ITSE 2459, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec. 4 Lab.)

ITSE 2401 Windows Programming Using C++ (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to computer programming for windows using C++. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. (3 Lec., 4 Lab.)

ITSE 2402 Intermediate Web Programming (4)
(This is a WECM Course Number.)
Prerequisite: Basic Web Page generation skills for Computer Information Technology Programs or ITSE 2413 for Internet Development Technologies Programs or instructor approval. Intermediate applications for web authoring. Topics may include server side including (SSI), Perl, HTML, JAVA, JavaScript, and/or ASP. This course is cross-listed as ITSE 2302. The student may register for either ITSE 2402 or ITSE 2302, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSE 2405 Windows Programming (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to computer programming for windows. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. This course is cross-listed as ITSE 2305. The student may register for either ITSE 2405 or ITSE 2305, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSE 2409 Database Programming (4)
This is a WECM course number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Application development using database programming techniques emphasizing database structures, modeling, and database access. (3 Lec., 4 Lab.)

ITSE 2413 Web Authoring (4)
(This is a WECM Course Number.)
Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. This course is cross-listed as ITSE 2313. The student may register for either ITSE 2413 or ITSE 2313, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSE 2417 JAVA Programming (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to JAVA programming with object-orientation. Emphasis on the fundamental syntax and semantics of JAVA for applications and web applets. (3 Lec., 4 Lab.)

ITSE 2421 Object-Oriented Programming (4)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of problem solving and logic structures used with computers obtained in ITSC 2435 or equivalent experiences approved by instructor consent. Introduction to object-oriented programming. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes object-oriented programming techniques, classes, and objects. (3 Lec., 4 Lab.)

ITSE 2429 Oracle Network Administration and Performance Tuning (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 2358 or ITSE 2458 or instructor approval. Introduction to Oracle Client/Server connectivity and distributed databases including configuring, administering, tuning, troubleshooting Oracle SQL *Net and related tools. (2 Lec., 4 Lab.)

ITSE 2431 Advanced C++ Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 1407 or instructor approval.
Further application of C++ programming techniques including subjects such as file access, abstract data structures, class inheritance, and other advanced techniques. (3 Lec., 4 Lab.)

ITSE 2433 Implementing a Database on Microsoft® SQL Server (4)
(This is a WECM Course Number.)
Prerequisite: ITMC 1403 or equivalent experience approved by instructor. Skills development in the implementation of a database solution using Microsoft® SQL Server client/server database management system. (3 Lec., 4 Lab.)

ITSE 2435 Advanced RPG Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 1414 or instructor consent. Further application of RPG IV programming techniques with ILE features, including file access methods, data structures, modular programming, program testing, and documentation. (3 Lec., 4 Lab.)

ITSE 2437 Assembly Language Programming (4)
(This is a WECM Course Number.)
Prerequisite: Any ITSE programming course or instructor consent. Comprehensive coverage of low-level computer operations and architecture. Includes design, development, testing, implementation, and documentation of programs; language syntax; data manipulation; input/output devices and operations; and file access. (3 Lec., 4 Lab.)

ITSE 2439 Advanced Windows Programming Using C++ (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 2401 or instructor approval.
Further applications of windows programming techniques using C++ including file access methods, data structures, modular programming, program testing, and documentation. (3 Lec., 3 Lab.)

ITSE 2443 Advanced Windows Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 2405 or instructor consent. Further applications of windows programming techniques, including file access methods, data structures, modular programming, program testing, and documentation. (3 Lec., 4 Lab.)

ITSE 2445 Data Structures (4)
(This is a WECM Course Number.)
Prerequisite: Any ITSE Introductory programming course or instructor approval. Further applications of programming techniques. Includes an in-depth look at various data structures and the operations performed on them. (3 Lec., 3 Lab.)

ITSE 2447 Advanced Database Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 2409 or instructor consent. Application development using complex database programming techniques emphasizing multiple interrelated files, menu design, security implementation, and multiple access. (3 Lec., 4 Lab.)

ITSE 2449 Advanced Visual BASIC Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 1431 or instructor consent. Further applications of programming techniques using Visual BASIC. Topics include file access methods, data structures, modular programming, program testing, and documentation. (3 Lec., 4 Lab.)

ITSE 2450 Mastering Enterprise Development Using Microsoft® Visual Basic (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 1431 or ITSE 2449 or instructor approval. In-depth development of client/server solutions using component object modeling (COM). Licensing/ Certification Agency: Microsoft® Corporation.
(3 Lec., 4 Lab.)

ITSE 2451 Advanced COBOL Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 1418 or instructor consent. Further applications of programming techniques using COBOL; including file access methods, data structures, modular programming, program testing, and documentation.
(3 Lec., 4 Lab.)

ITSE 2454 Advanced Oracle PL/SQL (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 1445 or instructor approval. A continuation of Oracle SQL. Topics include hierarchical queries, set based queries, correlated subqueries, scripting, and scripting generation. (3 Lec., 3 Lab.)

ITSE 2455 Advanced C Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 1422 or instructor consent. Further applications of programming techniques using C. Topics include file access methods, data structures, modular programming, program testing, and documentation.
(3 Lec., 4 Lab.)

ITSE 2456 Oracle Database Administration I (4)
(This is a WECM Course Number.)
Prerequisite: Previous Oracle skills or instructor approval. Fundamentals of the tasks and functions required of a database administrator using Oracle. This course is cross-listed as ITSE 2356. The student may register for either ITSE 2456 or ITSE 2356, but may receive credit for only one of the two. (3 Lec., 4 Lab.)

ITSE 2457 Advanced Object-Oriented Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 2421 or instructor consent. Application of advanced object-oriented programming techniques such as abstract data structures, class inheritance, virtual functions, and exception handling.
(3 Lec., 4 Lab.)

ITSE 2458 Oracle Database Administration II (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 2456 or instructor consent. A continuation of Oracle Database Administration I. Topics include recovery procedures, logical backups, standby database capabilities, and performance tuning on the Oracle Server. Common performance problems and the use of diagnostic tools to troubleshoot and optimize throughput will be discussed. This course is cross-listed as ITSE 2358. The student may register for either ITSE 2458 or ITSE 2358, but may receive credit for only one of the two. (3 Lec., 4 Lab.)

ITSE 2459 Advanced Computer Programming (4)
(This is a WECM Course Number.)
Prerequisite: ITSE 1402 or instructor consent. Further applications of programming techniques. Topics include file access methods, data structures, modular programming, program testing, and documentation. This course is cross-listed as ITSE 2359. The student may register for either ITSE 2459 or ITSE 2359, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 4 Lab.)

ITSW 1280 Cooperative Education-Data Processing Technology/Technician (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment.
Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

ITSW 1281 Cooperative Education-Data Processing Technology/Technician (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

ITSW 1282 Cooperative Education-Management Information Systems and Business Data Processing, General (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

ITSW 1283 Cooperative Education-Management Information Systems and Business Data Processing, General (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 10 Ext.)

ITSW 1307 Introduction to Database (3)
(This is a WECM Course Number.)
Introduction to database theory and the practical applications of a database. Topics include terminology, database design, table structures, report forms, queries, and macros. This course is cross-listed as ITSW 1407. The student may register for either ITSW 1307 or ITSW 1407, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab)

ITSW 1310 Introduction to Presentation Graphics Software (3)
(This is a WECM Course Number.)
Prerequisite: Basic understanding of personal computers and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by instructor. Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. This course is cross-listed as ITSW 1410. The student may register for either ITSW 1310 or ITSW 1410, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(3 Lec.)

ITSW 1380 Cooperative Education-Data Processing Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

ITSW 1381 Cooperative Education-Data Processing Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

ITSW 1382 Cooperative Education-Management Information Systems and Business Data Processing, General (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

ITSW 1383 Cooperative Education-Management Information Systems and Business Data Processing, General (3)
(This is a WECM course number).
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

ITSW 1401 Introduction to Word Processing (4)
(This is a WECM Course Number.)
Prerequisite: Keyboarding skills required. An overview of the production of documents, tables, and graphics. Topics include entry and editing, reformatting, search and replace, cut-and-paste, file and print operations, and spelling checkers. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSW 1404 Introduction to Spreadsheets (4)
(This is a WECM Course Number.)
Prerequisite: Keyboarding skills recommended. Instruction in the concepts, procedures, and importance of electronic spreadsheets. Topics include formula creation, template design, formatting features, statistical, mathematical and financial functions, file operations, report generation, graphics, and introduction to macro programming. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSW 1407 Introduction to Database (4)
(This is a WECM Course Number.)
Prerequisite: Keyboarding skills recommended. Introduction to database theory and the practical applications of a database. Topics include terminology, database design, table structures, report forms, queries and macros. This course is cross-listed as ITSW 1307. The student may register for either ITSW 1407 or ITSW 1307, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSW 1410 Introduction to Presentation Graphics Software (4)
(This is a WECM course number).
Prerequisite: Basic understanding of personal computers and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by instructor. Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. This course is cross-listed as ITSW 1310. The student may register for either ITSW 1410 or ITSW 1310, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSW 1413 Introduction to Data Entry (4)
(This is a WECM course number).
Prerequisite: Keyboarding by touch (15 to 20 wpm). Training in data input. Includes source documents, conversion of source data into computer input media, input record layout design, and input coding.
(3 Lec., 4 Lab.)

ITSW 1480 Cooperative Education-Data Processing Technology/Technician (4)
(This is a WECM course number).
Prerequisite: Instructor approval prior to enrollment. Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 30 Ext.)

ITSW 2401 Fundamentals of Geographic Information Systems (GIS) (4)
(This is a WECM Course Number.)
Prerequisite: ITSW 1407 or instructor approval. Introduction in the use of geographic information systems software for planning and problem-solving.
(3 Lec., 4 Lab.)

ITSW 2431 Advanced Word Processing (4)
(This is a WECM course number).
Prerequisite: ITSW 1401 or instructor consent. Continuation of the study of word processing including advanced applications in merging, macros, graphics, desktop publishing, and extensive formatting for technical documents. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSW 2434 Advanced Spreadsheets (4)
(This is a WECM Course Number.)
Prerequisite: ITSW 1404 or instructor consent. Designed to provide an understanding of advanced functionality of electronic spreadsheets. Topics include mathematical and financial functions, advanced formatting, graphics and macros. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSW 2437 Advanced Database (4)
(This is a WECM Course Number.)
Prerequisite: ITSW 1407 or instructor consent. Designed to provide an understanding of advanced functionality of databases. Topics include advanced data manipulation features, importing and exporting data, and advanced macros and programming. This course may be repeated if topics and learning outcomes vary. (3 Lec., 4 Lab.)

ITSY 1300 Fundamentals of Information Security (3)
(This is a WECM Course Number.)
Basic information security goals of availability, integrity, accuracy, and confidentiality. Vocabulary and terminology specific to the field of information security are discussed. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning and administrative controls is also discussed.
(2 Lec., 4 Lab.)

ITSY 1342 Information Technology Security (3)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. (2 Lec., 4 Lab.)

ITSY 1400 Fundamentals of Information Security (4)
(This is a WECM Course Number.)
Basic information security goals of availability, integrity, accuracy, and confidentiality. Vocabulary and terminology specific to the field of information security are discussed. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning and administrative controls is also discussed.
(3 Lec., 4 Lab.)

ITSY 1442 Information Technology Security (4)
(This is a WECM Course Number.)
Prerequisite: Prior networking course, networking experience or instructor approval. Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. (3 Lec., 4 Lab.)

ITSY 2300 Operating System Security (3)
(This is a WECM Course Number.)
Prerequisite: ITSY 1342 or instructor approval. Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security. (2 Lec., 4 Lab.)

ITSY 2301 Firewalls and Network Security (3)
(This is a WECM Course Number.)
Prerequisite: ITSY 1342 or instructor approval. Identify elements of firewall design, types of security threats and responses to security attacks. Use best practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities. (2 Lec., 4 Lab.)

ITSY 2341 Security Management Practices (3)
(This is a WECM Course Number.)
Prerequisite: ITSY 2301 or instructor approval. In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan. (2 Lec., 4 Lab.)

ITSY 2342 Incident Response and Handling (3)
(This is a WECM Course Number.)
Prerequisite: ITSY 2300 or instructor approval. In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures.
(2 Lec., 4 Lab.)

ITSY 2343 Computer System Forensics (3)
(This is a WECM Course Number.)
Prerequisite: ITSY 2342 or instructor approval. In-depth study of system forensics including methodologies used for analysis of computer security breaches. Gather and evaluate evidence to perform postmortem analysis of a security breach. (2 Lec., 4 Lab.)

ITSY 2359 Security Assessment and Auditing (3)
(This is a WECM Course Number.)
Prerequisite: ITSY 2300 and ITSY 2301 or instructor approval. Capstone experience for the security curriculum. Synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems to ensure appropriate levels of protection are in place.
(2 Lec., 4 Lab.)

ITSY 2400 Operating System Security (4)
(This is a WECM Course Number.)
Prerequisite: ITSY 1442 or instructor approval. Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security. (3 Lec., 4 Lab.)

ITSY 2401 Firewalls and Network Security (4)
(This is a WECM Course Number.)
Prerequisite: ITSY 1442 or instructor approval. Identify elements of firewall design, types of security threats and responses to security attacks. Use best practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities. (3 Lec., 4 Lab.)

ITSY 2441 Security Management Practices (4)
(This is a WECM Course Number.)
Prerequisite: ITSY 2401 or instructor approval. In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan. (3 Lec., 4 Lab.)

ITSY 2442 Incident Response and Handling (4)
(This is a WECM Course Number.)
Prerequisite: ITSY 2400 or instructor approval. In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures.
(3 Lec., 4 Lab.)

ITSY 2443 Computer System Forensics (4)
(This is a WECM Course Number.)
Prerequisite: ITSY 2442 or instructor approval. In-depth study of system forensics including methodologies used for analysis of computer security breaches. Gather and evaluate evidence to perform postmortem analysis of a security breach. (3 Lec., 4 Lab.)

ITSY 2459 Security Assessment and Auditing (4)
(This is a WECM Course Number.)
Prerequisite: ITSY 2400 and ITSY 2401 or instructor approval. Capstone experience for the security curriculum. Synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems to ensure appropriate levels of protection are in place.
(3 Lec., 4 Lab.)

JAPN 1300 Beginning Japanese (3)
(This is a Texas Common Course Number.)
This course is an introduction to Japanese speaking, oral comprehension, reading, writing, grammar and culture. It is strongly recommended that students who plan to study Japanese for more than one semester enroll in Japanese 1411, which includes an extra hour of lab per week (and an extra hour of credit for the course). Students who successfully complete Japanese 1311 and wish to continue their studies of Japanese may register for Japanese 1412. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1603025113)

JAPN 1311 Introduction to Japanese (3)
(This is a Texas Common Course Number.)
JAPN 1311 is an introduction to the regular Japanese course sequence; it is not a substitute for JAPN 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in JAPN 1411. This course is cross-listed as Japanese 1411. The student may register for either Japanese 1311 or Japanese 1411, but may receive credit for only one of the two. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1603025113)

JAPN 1411 Beginning Japanese (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Japanese customs, culture, and institutions are also presented. This course is cross-listed as Japanese 1311. The student may register for either Japanese 1411 or Japanese 1311, but may receive credit for only one of the two. (3 Lec. 2 Lab.)
(Coordinating Board Academic Approval Number 1603025113)

JAPN 1412 Beginning Japanese (4)
(This is a Texas Common Course Number.)
Prerequisite: Japanese 1411 or the equivalent or demonstrated competence approved by the instructor. This course continues the conversation, reading, writing, and grammar begun in Japanese 1411. Students are expected to acquire a substantial amount of vocabulary, and will continue study of Japanese culture, customs, and institutions. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603025113)

JAPN 2311 Intermediate Japanese (3)
(This is a Texas Common Course Number.)
Prerequisite: Japanese 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency through more advanced reading, listening, speaking and writing exercises. Japanese language structures, vocabulary and the phonetic system are reviewed. The study of culture and institutions is continued. (3 Lec.)
(Coordinating Board Academic Approval Number 1603025213)

JAPN 2312 Intermediate Japanese (3)
(This is a Texas Common Course Number.)
Prerequisite: Japanese 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Japanese 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture. (3 Lec.)
(Coordinating Board Academic Approval Number 1603025213)

NOTE: These courses carry a Dallas County Community College prefix of "JOUR"; however, most can be identified by a Common Course Number for transfer evaluation purposes. Both are listed in the course descriptions.

JOUR 1129 News Publications I (1)
(The Texas Common Course Number is COMM 1129.)
Prerequisite: Demonstrated competence or approved by the instructor. All publication courses must be taken in sequence. (3 Lab.)
(Coordinating Board Academic Approval Number 0904015406)

JOUR 1130 News Publications II (1)
(The Texas Common Course Number is COMM 1130.)
Prerequisite: JOUR 1129. All publication courses must be taken in sequence. Individual assignments are made for student media. Assignments may be in writing, advertising, photography, cartooning, and editing. Students are required to work at prescribed periods under supervision and must attend staff meetings.
(3 Lab.)
(Coordinating Board Academic Approval Number 0904015406)

JOUR 1307 Introduction to Mass Communications (3)
(The Texas Common Course Number is COMM 1307.)
This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society. (3 Lec.)
(Coordinating Board Academic Approval Number 0901025106)

JOUR 1335 Survey of Broadcasting (3)
(The Texas Common Course Number is COMM 1335.)
This course stresses broadcast organization and operations and includes the theoretical and historical aspects of broadcasting. It introduces students to the social, political, technical and economic aspects of the broadcasting industry. (3 Lec.)
(Coordinating Board Academic Approval Number 0901025206)

JOUR 2129 News Publications III (1)
(The Texas Common Course Number is COMM 2129.)
Prerequisite: JOUR 1130. All publication courses must be taken in sequence. Individual assignments are made for student media. Assignments may be in writing, advertising, photography, cartooning, and editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 0904015406)

JOUR 2130 News Publications IV (1)
(The Texas Common Course Number is COMM 2130.)
Prerequisite: JOUR 2129. All publication courses must be taken in sequence. Individual assignments are made for student media. Assignments may be in writing, advertising, photography, cartooning, and editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 0904015406)

JOUR 2305 Editing and Layout (3)
(The Texas Common Course Number is COMM 2305.)
Editing and layout processes, with emphasis on accuracy and fairness, including the principles and techniques of design. (3 Lec.)
(Coordinating Board Academic Approval Number 0904015106)

JOUR 2311 News Gathering and Writing (3)
(The Texas Common Course Number is COMM 2311.)
Prerequisite: Typing ability. This course focuses upon recognizing newsworthy events, gathering information and writing the straight news story. It provides a basis for future study in newspaper and magazine writing, advertising, broadcast journalism and public relations. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0904015706)

JOUR 2315 News Gathering and Writing II (3)
(The Texas Common Course Number is COMM 2315.)
Prerequisite: Journalism 2311 or professional experience approved by the instructor. This course is a continuation of Journalism 2311. Students study and practice writing more complex stories, such as features, profiles, follow-up stories, and sidebars. Students are required to write for the campus newspaper.
(2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0904015806)

JOUR 2327 Principles of Advertising (3)
(The Texas Common Course Number is COMM 2327.)
Fundamentals of advertising, including advertising appeals, print and broadcast copy writing, and design and selection of media will be covered. Typography as it relates to advertising is stressed. The course will provide students with the concepts they will need to go into the advertising field and into advanced advertising courses.
(3 Lec.)
(Coordinating Board Academic Approval Number 0909035106)

JOUR 2330 Introduction to Public Relations (3)
(The Texas Common Course Number is COMM 2330.)
Exploration of the history and development of public relations. Presentation of the theory behind and process of public relations, including the planning, implementation, and evaluation of PR campaigns.
(3 Lec.)
(Coordinating Board Academic Approval Number 0909025106)

JOUR 2332 Radio/Television News (3)
(The Texas Common Course Number is COMM 2332.)
Preparation and analysis of news styles for the electronic media. (3 Lec.)
(Coordinating Board Academic Approval Number 0904025206)

KORE 1311 Introduction to Korean (3)
(This is a Texas Common Course Number.)
KORE 1311 is an introduction to the regular Korean course sequence; it is not a substitute for KORE 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in KORE 1411. This course is cross-listed as Korean 1411. The student may register for either Korean 1311 or Korean 1411, but may receive credit for only one of the two.
(3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1603035113)

KORE 1411 Beginning Korean I (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. By the end of the semester, students are expected to master Hangul, the Korean writing system. Customs and cultural insights are presented. This course is cross-listed as Korean 1311. The student may register for either Korean 1411 or Korean 1311, but may receive credit for only one of the two.
(3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603035113)

KORE 1412 Beginning Korean II (4)
(This is a Texas Common Course Number.)
Prerequisite: Korean 1411 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Korean 1411. Students are expected to acquire substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603035113)

KORE 2311 Intermediate Korean I (3)
(This is a Texas Common Course Number.)
Prerequisite: Korean 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency and cultural knowledge through advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1603035213)

KORE 2312 Intermediate Korean II (3)
(This is a Texas Common Course Number.)
Prerequisite: Korean 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Korean 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture. This course also concentrates on the introduction of approximately 120 Chinese characters related to Korean vocabulary words. (3 Lec.)
(Coordinating Board Academic Approval Number 1603035213)

LGLA 1301 Legal Research and Writing (3)
(This is a WECM Course Number.)
Corequisite: LGLA 1313 or LGLA 1311. This course provides a working knowledge of the fundamentals of effective legal research and writing. Topics include law library techniques and operations, computer assisted legal research, writing briefs and legal memoranda, proper citation form for legal resources, ethical obligations of the paralegal in legal research, and legal research terminology. (3 Lec.)

LGLA 1311 Introduction to Law (3)
(This is a WECM Course Number.)
Corequisite: LGLA 1313 or LGLA 1301. This course provides an overview of the law and the legal system. Topics include elementary legal concepts of various areas of the law, procedures, terminology, ethical obligations of the paralegal, current issues in law, and the function, jurisdiction, practices, and principles of trial and appellate courts at state and federal levels. (3 Lec.)

LGLA 1313 Introduction to Paralegal Studies (3)
(This is a WECM Course Number.)
Corequisite: LGLA 1311 or LGLA 1301. This course provides an overview of the paralegal profession including ethical obligations, regulation, professional trends and issues, and the paralegal's role in assisting the delivery of legal services. Professional organizations, job search strategies, legal vocabulary, legal analysis, writing skills, and critical thinking are introduced. (3 Lec.)

LGLA 1343 Bankruptcy (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of bankruptcy law and procedure. Topics include individual and business liquidation and reorganization, debtors' and creditors' rights, adversarial matters and litigation in bankruptcy court, legal terminology relating to bankruptcy. law, ethical considerations for paralegals working in this area, and emerging computer applications in bankruptcy practice. (3 Lec.)

LGLA 1345 Civil Litigation (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts, rules, and procedures of civil litigation with emphasis on the paralegal's role. Topics include pretrial, trial, and post-trial phases of civil litigation, the role of alternative dispute resolution processes in civil litigation proceedings, practical techniques required to cope with protracted or complex litigation, ethical considerations, drafting problems a paralegal may encounter in this area, and computer applications utilized in civil litigation activities. (3 Lec.)

LGLA 1351 Contracts (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of contract law with emphasis on the paralegal's role. Topics include formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code, ethical considerations of the paralegal working in this area, emerging computer applications, contract law terminology, and special problems encountered when drafting various instruments and documents related to the law of contracts. (3 Lec.)

LGLA 1353 Wills, Trusts, and Probate Administration (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of the law of will, trusts, and probate administration with emphasis on the paralegal's role. Topics include common law and statutory components of wills, trusts, and other instruments relating to estate planning, estate tax considerations, alternatives to traditional estate planning mechanisms, common law and statutory requirements regarding testate and intestate distribution of property, ethical obligations and professional responsibilities of the paralegal working in this area, drafting guidelines and concerns, probate court structure and procedures, emerging computer applications, and legal terminology related to wills, trusts, and probate administration. (3 Lec.)

LGLA 1355 Family Law (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of family law with emphasis on the paralegal's role. Topics include formal and informal marriages, separation, divorce, annulment, marital property, the parent-child relationship, child custody and support, adoption, guardianship, domestic relations court procedures, public records research, and the paralegal's role in alternative dispute resolution/mediation processes. Ethical obligations, family law terminology, and emerging computer applications in domestic relations practice are also presented. (3 Lec.)

LGLA 1380 Cooperative Education-Paralegal/Legal Assistant (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301.
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

LGLA 2303 Torts and Personal Injury Law (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of tort law with emphasis on the paralegal's role. Topics include intentional torts, negligence, product liability, strict liability, special tort actions, immunities and commonly employed defenses, techniques of investigating claims, a paralegal's ethical obligations in this field, tort law terminology, and computer applications in tort law. (3 Lec.)

LGLA 2307 Law Office Management (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301. This course present the fundamentals of law office management and organization including basic principles and structure of management, administrative and substantive systems in large and small law offices and law practice technology. Topics include accounting systems, budgets, cash flow planning, marketing, time and billing systems, current developments in computer applications, benefits, effective utilization of attorney and staff resources, ethical obligations of the paralegal handling law office management responsibilities, and career opportunities for paralegals in this field. (3 Lec.)

LGLA 2309 Real Property (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of real property law with emphasis on the paralegal's role. Topics include the nature of real property, rights and duties of ownership, land use and limitations, voluntary and involuntary conveyances (deeds, contracts, liens, mortgages, deeds of trust, leases, etc.), property descriptions, the recording and searching for real estate documents, landlord and tenant issues, problems involved in drafting real estate documents, ethical considerations for a paralegal working in the real estate area, real property terminology, and emerging computer resources and applications in real estate practice. (3 Lec.)

LGLA 2311 Business Organizations (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313 , LGLA 1311, ENGL 1301. This course presents basic common law and statutory concepts of business organizations with emphasis on the paralegal's role. Topics include the law of agency, sole proprietorships, forms of partnerships, forms of corporations, and emerging business entities such as limited liability companies and partnerships. Additional topics include ethical considerations, legal terminology related to business organizations, and computer applications being utilized in this area. Practical organizational and writing skills are emphasized through assigned drafting and formation projects. (3 Lec.)

LGLA 2313 Criminal Law and Procedure (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301. This course introduces the criminal justice system including procedures from arrest to final disposition, principles of federal and state law and the preparation of pleadings and motions. The paralegal's role in assisting the attorney practicing criminal law is emphasized. Topics include review of the criminal court system, stages in a criminal prosecution, constitutional rights and limitations of the accused, investigation procedures, the juvenile justice system, dealing with clients, drafting specialized documents, ethical obligations of the paralegal working in this area, criminal law terminology, and the impact of computer applications on criminal courts and criminal law attorneys. (3 Lec.)

LGLA 2331 Advanced Legal Research and Writing (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, LGLA 1301, at least 7 other LGLA courses, and ENGL 1301. This capstone course must be taken during the final semester you are enrolled in the program. This course builds upon skills acquired in prior legal research and writing courses including computerized research techniques and preparation of complex legal documents such as briefs, legal office memoranda, and citation forms. This course requires the student to synthesize the specialized information and resources learned in all previously completed paralegal courses and apply this knowledge to a capstone activity. (3 Lec.)

LGLA 2335 Advanced Civil Litigation (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, LGLA 1345, ENGL 1301. This course provides opportunities to implement advanced civil litigation techniques and builds upon skills acquired in prior civil litigation courses with emphasis on the paralegal's role. Common law and statutory civil litigation concepts, ethical obligations of the paralegal assisting in civil litigation work, alternative dispute resolution processes, are reviewed. (3 Lec.)

LGLA 2380 Cooperative Education-Paralegal/Legal Assistant (3)
(This is a WECM Course Number.)
Prerequisite: LGLA 1313, LGLA 1311, ENGL 1301.
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

LIBR 1370 College Library Research Methods and Materials (3)
(This is a Unique Need Course.)
This course is a survey of college research methodologies and materials with emphasis on search strategies appropriate for college-level research in the undergraduate disciplines, the structure and assessment of information sources within society, and the organization of academic libraries. Attention will also be given to the formal presentation of research results, including models of academic writing, bibliographic preparation and documentation standards. (3 Lec.)
(Coordinating Board Academic Approval Number 2501019112)

LMGT 1319 Introduction to Business Logistics (3)
(This is a WECM Course Number.)
A systems approach to managing activities associated with traffic, transportation, inventory management and control, warehousing, packaging, order processing, and materials handling. (3 Lec.)

LMGT 1321 Introduction to Materials Handling (3)
(This is a WECM Course Number.)
Introduces the concepts and principles of materials management to include inventory control and forecasting activities. (3 Lec.)

LMGT 1323 Domestic and International Transportation Management (3)
(This is a WECM Course Number.)
An overview of the principles and practices of transportation and its role in the distribution process. Emphasis on the physical transportation systems involved in the United States as well as on global distribution systems. Topics include carrier responsibilities and services, freight classifications, rates, tariffs, and public policy and regulations. Also includes logistical geography and the development of skills to solve logistical transportation problems and issues. (3 Lec.)

LMGT 1341 Freight Loss and Damage Claims (3)
(This is a WECM Course Number.)
An analysis of bill of lading contracts and liability for lost or damaged freight, including procedures for filing and documenting claims. (3 Lec.)

LMGT 1345 Economics of Transportation and Distribution (3)
(This is a WECM Course Number.)
A study of the basic economic principles and concepts applicable to transportation and distribution. (3 Lec.)

LMGT 1349 Materials Requirement Planning (3)
(This is a WECM Course Number.)
A study of materials requirement planning that includes net change versus regenerative systems, lot sizing, and the time sharing of dependent demand. (3 Lec.)

LMGT 1425 Warehouse and Distribution Center Management (4)
(This is a WECM Course Number.)
Emphasis on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just-in-time manufacturing, continuous replenishment, and third party. This course is cross-listed as LMGT 1325. The student may register for either LMGT 1425 or LMGT 1325, but may receive credit for only one of the two.
(3 Lec., 3 Lab.)

LMGT 2330 International Logistics Management (3)
(This is a WECM Course Number.)
Identification of the principles and practices involved in international distribution systems including the multinational corporation. Attention to global strategic planning, production, supply, manpower/labor, geography, business communications, cultural, political, and legal issues affecting global distribution and firm/host relationships. (3 Lec.)

LMGT 2334 Principles of Traffic Management (3)
(This is a WECM Course Number.)
A study of the role and functions of a transportation traffic manager within a commercial or public enterprise. Includes training in rate negotiation, carrier and mode selection, carrier service evaluation, quality control, traffic pattern analysis, documentation for domestic and international shipments, claims, hazardous materials movement, and the state, federal, and international environments of transportation. (3 Lec.)

LOTT 1401 Introduction to Fiber Optics (4)
(This is a WECM Course Number.)
An introductory course in fiber optics and its application including advantages of fiber, light transmission in fiber, sources, detectors and connectors. (3 Lec., 3 Lab.)

LOTT 2340 Microwave Fundamentals (3)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. This course is an introduction to microwave theory and applications, transmitter and receiver. The student will state the principles of operation and demonstrate the proper, safe operation of microwave signal sources: reflex klystron, backward wave oscillator (BWO), traveling wave tube (TWT), magnetron, gunn effect device, and impact diode. The student will demonstrate the use of various types of measurement devices including but not limited to: microwave power meters, voltage standing wave radio (VSWR) meters, slotted lines, frequency meters, and attenuators. The student will perform the calculation and conversion of measured values to a useful form; and verify through calculations and measurements characteristics of a transmission line and a transmission load. The student will demonstrate theory and use of the following waveguide and coaxial components given ZO and ZL: hybrid junctions, attenuators, detectors, modulators, matching stubs, and directional couplers. The student will state the principles of operation of microwave antennas, phased arrays, and lenses; and state the operating principles of the following terms: time domain reflectometer (TDR), multiplexing, and pulsed radar. (3 Lec.)

(See Developmental Mathematics also. Supplementary instruction in mathematics is available through the learning center.)

The following MATH courses meet the requirements for Core Curriculum EXCEPT: TECM 1303, TECM 1317, TECM 1341 and TECM 1349.

MATH 1314 is a 3 credit hour lecture course. MATH 1414 is a 4 credit hour lecture course. Either course will meet degree requirements.

MATH 1314 College Algebra (3)
(This is a Texas Common Course Number.)
Prerequisite: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. This course is a study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics include complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, proofs, and applications. MATH 1314 is a 3 credit hour lecture course. MATH 1414 is a 4 credit hour lecture course. Either course will meet degree requirements. This course is cross-listed as Math 1414. The student may register for either Math 1314 or Math 1414, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015419)

MATH 1316 Plane Trigonometry (3)
(This is a Texas Common Course Number.)
Prerequisite: MATH 1314 or MATH 1414 or equivalent, or approval of instructor. This course is a study of angular measures, functions of angles, identities, solutions of triangles, equations, inverse trigonometric functions, and complex numbers. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015319)

MATH 1324 Mathematics for Business and Economics (3)
(This is a Texas Common Course Number.)
Prerequisite: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. This course includes equations, inequalities, matrices, linear programming; linear, quadratic, polynomial, rational, exponential, and logarithmic functions; and probability. Applications to business and economics problems are emphasized. (3 Lec.)
(Coordinating Board Academic Approval Number 2703015219)

MATH 1325 Business Calculus and Applications I (3)
(This is a Texas Common Course Number.)
Prerequisite: MATH 1324, MATH 1314 or MATH 1414. This course includes limits, differential calculus, integral calculus, and appropriate applications. This course is cross-listed as Math 1425. The student may register for either Math 1325 or Math 1425, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 2703015219)

MATH 1332 College Mathematics I (3)
(This is a Texas Common Course Number.)
Prerequisite: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. Designed for liberal arts students, this course includes the study of sets, logic, sets of numbers, and mathematical systems. Additional topics will be selected from mathematics of finance, introduction to computers, introduction to statistics, and introduction to matrices. Recreational and historical aspects of selected topics are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015119)

MATH 1333 College Mathematics II (3)
(This is a Texas Common Course Number.)
Prerequisite: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. Designed for liberal arts students, this course includes the study of algebra, linear programming, permutations, combinations, probability, and geometry. Recreational and historical aspects of selected topics are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015119)

MATH 1348 Analytic Geometry (3)
(This is a Texas Common Course Number.)
Prerequisite: MATH 1316 or equivalent. This course is a study of the real numbers, distance, the straight line, conics, transformation of coordinates, polar coordinates, parametric equations, and three-dimensional space.
(3 Lec.)
(Coordinating Board Academic Approval Number 2701015519)

MATH 1350 Teaching Math in Elementary and Middle School I (3)
(This is a Texas Common Course Number.)
Prerequisite: MATH 1314 or MATH 1414 or the equivalent. Concepts of sets, functions, numeration systems, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek middle grade (4-8) teacher certification.
(3 Lec.)
(Coordinating Board Academic Approval Number 2701015619)

MATH 1351 Teaching Math in Elementary and Middle School II (3)
(This is a Texas Common Course Number.)
Prerequisite: MATH 1350. Concepts of geometry, probability, and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek middle grade (4-8) certification.
(3 Lec.)
(Coordinating Board Academic Approval Number 2701015619)

MATH 1370 Business Calculus and Applications II (3)
(This is a Unique Need Course.)
Prerequisite: MATH 1325. This course includes applications of differential equations, functions of several variables, least squares modeling, multiple integrals, and infinite series. (3 Lec.)
(Coordinating Board Academic Approval Number 2701019819)

MATH 1414 is a 4 credit hour lecture course. MATH 1314 is a 3 credit hour lecture course. Either course will meet degree requirements.

MATH 1414 College Algebra (4)
(This is a Texas Common Course Number.)
Prerequisite: Two years of high school algebra and an appropriate assessment score or Developmental Mathematics 0099 or Developmental Mathematics 0093. This course is study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics include complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, proofs, and applications. This course is cross-listed as Math 1314. The student may register for either Math 1414 or Math 1314, but may receive credit for only one of the two. (4 Lec.)
(Coordinating Board Academic Approval Number is 2701015419)

MATH 1425 Business Calculus and Applications I (4)
(This is a Texas Common Course Number.)
Prerequisite: MATH 1324, MATH 1314 or MATH 1414. This course includes limits, differential calculus, integral calculus, and appropriate applications. This course is cross-listed as Math 1325. The student may register for either Math 1425 or Math 1325, but may receive credit for only one of the two.(4 Lec.)
(Coordinating Board Academic Approval Number 2703015219)

MATH 2305 Discrete Mathematics (3)
(This is a Texas Common Course Number.)
Prerequisite: Mathematics 2513 and an introductory programming course. This course is a study of sets, algebraic structures (relations, functions, groups, and Boolean Algebra), combinatorics, graphs, logic, algorithms, and applications to computing devices.
(3 Lec.)
(Coordinating Board Academic Approval Number 2705015119)

MATH 2315 Calculus III (3)
(This is a Texas Common Course Number.)
Prerequisite: MATH 2414 or equivalent. This course is a study of topics in vector calculus, functions of several variables, and multiple integrals, with applications.
(3 Lec.)
(Coordinating Board Academic Approval Number 2701015919)

MATH 2318 Linear Algebra (3)
(This is a Texas Common Course Number.)
Prerequisite: Mathematics 2513 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformations. This course is cross-listed as Math 2418. The student may register for either Math 2318 or Math 2418, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 2701016119)

MATH 2320 Differential Equations (3)
(This is a Texas Common Course Number.)
Prerequisite: Mathematics 2414 or demonstrated competence approved by the instructor. This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications. This course is cross-listed as Math 2420. The student may register for either Math 2320 or Math 2420, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 2703015119)

MATH 2321 Differential Equations and Linear Algebra (3)
(This is a Texas Common Course Number.)
Prerequisite: Up to 12 hours of calculus. This course emphasizes solution techniques. Ordinary differential equations, vector spaces, linear transformations, matrix.vector algebra, eigenvectors, Laplace Transform, and systems of equations. This course is cross-listed as Math 2421. The student may register for either Math 2321 or Math 2421, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015719)

MATH 2342 Introductory Statistics (3)
(This is a Texas Common Course Number.)
Prerequisite: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0093 or Developmental Mathematics 0099. This course is a study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability, and application to various fields. This course is cross-listed as Math 2442. The student may register for either Math 2342 or Math 2442, but may receive credit for only one of the two.
(3 Lec.)
(Coordinating Board Academic Approval Number 2705015119)

MATH 2412 Precalculus Mathematics (4)
(This is a Texas Common Course Number.)
Prerequisite: MATH 1316. This course consists of the study of algebraic and trigonometric topics including polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs. Conic sections, polar coordinates, and other topics of analytic geometry will be included. (4 Lec.)
(Coordinating Board Academic Approval Number 2701015819)

MATH 2414 Calculus II (4)
(This is a Texas Common Course Number.)
Prerequisite: MATH 2513 or equivalent. This course is a study of techniques of integration, polar coordinates, parametric equations, topics in vector calculus, sequences, series, indeterminate forms, and partial differentiation with applications. (4 Lec.)
(Coordinating Board Academic Approval Number 2701015919)

MATH 2418 Linear Algebra (4)
(This is a Texas Common Course Number.)
Prerequisite: Mathematics 2513 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformations. This course is cross-listed as Math 2318. The student may register for either Math 2418 or Math 2318, but may receive credit for only one of the two. (4 Lec.)
(Coordinating Board Academic Approval Number 2701016119)

MATH 2420 Differential Equations (4)
(This is a Texas Common Course Number.)
Prerequisite: Mathematics 2414 or demonstrated competence approved by the instructor. This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications. This course is cross-listed as Math 2320. The student may register for either Math 2420 or Math 2320, but may receive credit for only one of the two. (4 Lec.)
(Coordinating Board Academic Approval Number 2703015119)

MATH 2421 Differential Equations and Linear Algebra (4)
(This is a Texas Common Course Number.)
Prerequisite: Up to 12 hours of calculus. This course emphasizes solution techniques. Ordinary differential equations, vector spaces, linear transformations, matrix.vector algebra, eigenvectors, Laplace Transform, and systems of equations. This course is cross-listed as Math 2321. The student may register for either Math 2421 or Math 2321, but may receive credit for only one of the two. (4 Lec.)
(Coordinating Board Academic Approval Number 2701015719)

MATH 2442 Introductory Statistics (4)
(This is a Texas Common Course Number.)
Prerequisite: Two years of high school algebra and an appropriate test scores or Developmental Mathematics 0093 or Developmental Mathematics 0099. This course is a study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability, and application to various fields. This course is cross-listed as Math 2342. The student may register for either Math 2442 or Math 2342, but may receive credit for only one of the two. (4 Lec.)
(Coordinating Board Academic Approval Number 2705015119)

MATH 2513 Calculus I (5)
(This is a Texas Common Course Number.)
Prerequisite: MATH 2412 or MATH 1348 or equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and transcendental functions, with applications. (5 Lec.)
(Coordinating Board Academic Approval Number 2701015919)

MBST 1407 Masonry I (4)
(This is a WECM Course Number.)
Introduction to masonry including safety, tools and equipment, masonry materials, theory, terminology, federal and state guidelines, building plans, mortar mixing and spreading, and the fundamentals of laying bricks and block. Lab required. (3 Lec., 2 Lab.)

MBST 1409 Masonry II (4)
(This is a WECM Course Number.)
A continuation of Masonry I with emphasis on hands-on applications of masonry concepts and theories. Lab required. (3 Lec., 2 Lab.)

MBST 2407 Masonry III (4)
(This is a WECM Course Number.)
Development of the ability to lay brick or blocks to the line, straight leads, build corners, and construct piers including blueprints, symbols, abbreviations, and sealing systems. Lab required. (3 Lec., 2 Lab.)

MBST 2409 Masonry IV (4)
(This is a WECM Course Number.)
A continuation of Intermediate Masonry I including practical applications of masonry theories and skills using plain and reinforced mortars. Lab required. (3 Lec., 2 Lab.)

MBST 2447 Masonry V (4)
(This is a WECM Course Number.)
Instruction in the theory and application of special masonry construction, including material and labor estimations, costs estimating, bond patterns, fireplaces, arches and lintels, tying into walls, and laying of masonry materials. Lab required. (3 Lec., 2 Lab.)

MCHN 1301 Sheet Metal I (3)
(This is a WECM Course Number.)
An introduction to the materials, tools, and techniques used in the sheet metal industry. Review of trade math problems involving measurement of lines, area, volume, weight, and geometric figures. Introduction of types and uses of hand, layout, and cutting tools along with bending and forming machines. Practice of material types and properties along with the principles of layout and metal forming. Lab required. (2 Lec., 3 Lab.)

MCHN 1349 Sheet Metal II (3)
(This is a WECM Course Number.)
An introduction to various types of pipe and fittings. Emphasis on principles and type of fittings for radial line development are discussed and factors that influence bend allowances and calculations necessary for determining proper bend allowances. Introduction to principles of soldering roof flashings, gutters, down spouts, and sheet metal duct fabrications. Lab required. (2 Lec., 3 Lab.)

MCHN 1352 Intermediate Machining I (3)
(This is a WECM Course Number.)
Operation of drills, milling machines, lathes, and power saws. Introduction to precision measuring techniques. (1 Lec., 6 Lab.)

MCHN 1370 Sheet Metal IV (3)
(This is a WECM Local Need Course.)
This course covers math, insulating materials and methods of installation, layout by the triangulation method, basic piping practices, rigging and hosting. Lab required. (2 Lec., 3 Lab.)

MCHN 1371 Sheet Metal V (3)
(This is a WECM Local Need Course.)
The course covers sheet metal duct fabrication standards, gutters and downspouts, hoods and ventilators, and flashing walls and roofs. Lab required. (2 Lec., 3 Lab.)

MCHN 1372 Sheet Metal VI (3)
(This is a WECM Local Need Course.)
This course covers principles of air flow for HVAC systems, fiber glass and PVC duct, and introduction to welding. Lab required. (2 Lec., 3 Lab.)

MCHN 2370 Sheet Metal VII (3)
(This is a WECM Local Need Course.)
The course covers sheet metal fabrication, principles of airflow, introduction to brazing and oxyfuel cutting, field measuring and fitting, incorporating blueprints and specifications. Lab required. (2 Lec., 3 Lab.)

MCHN 2371 Sheet Metal VIII (3)
(This is a WECM Local Need Course.)
The course studies shop production and organization, air balance, and advanced sheet metal fabrication. Lab required. (2 Lec., 3 Lab.)

MCHN 2372 Sheet Metal IX (3)
(This is a WECM Local Need Course.)
A comprehensive review of louvers, dampers, access doors, hoods and ventilators, and fume and exhaust system design. Lab required. (2 Lec., 3 Lab.)

MDCA 1201 Human Disease/Pathophysiology (2)
(This is a WECM Course Number.)
Prerequisite: MDCA 1313. A study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment, signs and symptoms of common diseases of all body systems. (2 Lec.)

MDCA 1202 Human Disease/Pathophysiology (2)
(This is a WECM Course Number.)
Prerequisite: MDCA 1201. A study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment, signs and symptoms of common diseases of all body systems. This course is cross-listed as MDCA 1302. The student may register for either MDCA 1202 or MDCA 1302, but may receive credit for only one of the two. (2 Lec.)

MDCA 1205 Medical Law and Ethics (2)
(This is a WECM Course Number.)
Prerequisite: GED or High School Diploma and admission to program. Instruction in principles, procedures, and regulations involving legal and ethical relationships among physicians, patients, and medical assistants. Includes current ethical issues and risk management as they relate to the practice of medicine and fiduciary responsibilities. This course may be repeated for credit. (2 Lec.)

MDCA 1213 Medical Terminology (2)
(This is a WECM Course Number.)
A study and practical application of a medical vocabulary system. Includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms. This course is cross-listed as MDCA 1313. The student may register for either MDCA 1213 or MDCA 1313, but may receive credit for only one of the two. (2 Lec.)

MDCA 1216 Procedures in a Clinical Setting (2)
(This is a WECM Course Number.)
Prerequisite: MDCA 1313, MDCA 1205 and MDCA 1201. Emphasis on patient-centered assessment, examination, intervention, and treatment as directed by physician. Includes vital signs, collection and documentation of patient information, asepsis, minor surgical procedures, and other treatments as appropriate for the medical office. (1 Lec., 2 Lab.)

MDCA 1217 Procedures in a Clinical Setting (2)
(This is a WECM Course Number.)
Prerequisite: MDCA 1216, MDCA 1313 and MDCA 1201. Emphasis on patient-centered assessment, examination, intervention, and treatment as directed by physician. Includes vital signs, collection and documentation of patient information, asepsis, minor surgical procedures, and other treatments as appropriate for the medical office. (1 Lec., 2 Lab.)

MDCA 1247 Pharmacology and Administration of Medications (2)
(This is a WECM Course Number.)
Prerequisite: MDCA 1313 and MDCA 1201. Instruction in concepts and application of pharmacological principles. Focuses on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculation of drug problems, and medico-legal responsibilities of the medical assistant. (1 Lec., 2 Lab.)

MDCA 1251 Medical Assistant Laboratory Procedures (2)
(This is a WECM Course Number.)
Prerequisite: MDCA 1313 and MDCA 1201. Emphasis on common laboratory procedures performed in the physician's office or clinical setting. Includes blood collection, specimen handling, basic urinalysis, identification of normal ranges, and electrocardiography. (1 Lec., 2 Lab.)

MDCA 1302 Human Disease/Pathophysiology (3)
(This is a WECM Course Number.)
Prerequisite: SCIT 1407 Human Anatomy and Physiology I, SCIT 1408 Human Anatomy and Physiology II, HITT 1205 Medical Terminology and HITT 2231 Medical Terminology - Advanced. A study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment , signs, and symptoms of common diseases of all body systems. This course is cross-listed as MDCA 1202. The student may register for either MDCA 1302 or MDCA 1202, but may receive credit for only one of the two. (2 Lec., 2 Lab.)

MDCA 1313 Medical Terminology (3)
(This is a WECM Course Number.)
Prerequisite: GED or High School Diploma and admission to program. A study and practical application of a medical vocabulary system. Includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms. This course is cross-listed as MDCA 1213. The student may register for either MDCA 1313 or MDCA 1213, but may receive credit for only one of the two. (3 Lec.)

MDCA 1352 Medical Assistant Laboratory Procedures (3)
(This is a WECM Course Number.)
Emphasis on common laboratory procedures performed in the physician's office or clinic setting. Includes blood collection, specimen handling, basic urinalysis, identification of normal ranges, and electrocardiography. Student will demonstrate competencies necessary to function as a Patient Care Technician in caring for patients in various age groups with respiratory, circulatory, musculoskeletal, endocrine, reproductive and neurosensory disturbances. (2 Lec., 3 Lab.)

MDCA 1421 Administrative Procedures (4)
(This is a WECM Course Number.)
Prerequisite: MDCA 1313 and MDCA 1201. A course in medical office procedures which may include appointment scheduling, medical records creation and maintenance, phone communications, transcriptions, coding, billing, collecting, third party reimbursement, credit arrangements, and use of computer in the medical office. This course may be repeated for credit. (4 Lec.)

MDCA 1443 Medical Insurance (4)
(This is a WECM Course Number.)
Prerequisite: MDCA 1313 and MDCA 1201. Emphasizes accurate ICD-9 and CPT coding of office procedures for payment/ reimbursement by patient or third party and prevention of insurance fraud. Additional topics may include managed care or medical economics. (4 Lec.)

MDCA 2361 Clinical – Medical/Clinical Assistant (3)
(This is a WECM Course Number.)
Prerequisite: Admission into the El Centro College Medical Assisting Program, MDCA 1313, MDCA 1201, MDCA 1205, MDCA 1443, MDCA 1421, MDCA 1247, MRMT 1211, MRMT 1192, MDCA 1216, MDCA 1217, MDCA 1251, ENGL 1301, SPCH 1311. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course may be repeated for credit. (10 Ext.)

(Offered in cooperation with the University of Texas at Arlington. Registration for these courses is through Mountain View College.)

MILS 1141 Foundations of Leadership (1)
Fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments. The study of time management skills, basic drill and ceremony, physical fitness, repelling, leadership reaction course, first aid, making presentations and marksmanship. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in independent physical fitness training, plus optional participation in a weekend field training exercise.
(1 Lec.)

MILS 1142 Introduction to Leadership (1)
Application of principles of leadership through participation in physically and mentally challenging exercises with upper division ROTC students. Course focuses on communication skills, organizational ethics, and study and time management techniques. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise. (1 Lec.)

MILS 1180 Leadership Laboratory (1)
A practical laboratory of applied leadership and skills. Student-planned, -organized and -conducted training, oriented toward leadership development. Laboratory topics include marksmanship, small unit tactics, multi-tiered programs focused on individual skill levels. Uniform and equipment provided, no fee. This course may be repeated for credit. (3 Lab.)

MILS 2251 Individual/Team Development (2)
Application of ethics-based leadership skills and fundamentals of ROTC's Leadership Development Program. Develop skills in oral presentations, concise writing, event planning, coordination of group efforts, advanced first aid, land navigation, and military tactics. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise. (2 Lec.)

MILS 2252 Individual/Team Military Tactics (2)
Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security, and pre-execution checks. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise. (2 Lec.)

MILS 2291 Conference Course (2)
Prerequisite: Permission of the PMS. Independent study. Designed to supplement the military science curricula by a student's concentrated study in a narrower field of military skill or subject matter. This course may be repeated for credit. Does not count for PE credit.
(2 Lec.)

NOTE: HPRS 1204, 1291, 1202, 2300, 2231, 2201 are all health occupations core curriculum courses. These courses are listed and described in a separate section of the college catalog: Health Occupations Core Curriculum.

MLAB 1167 Practicum (or Field Experience)-Clinical/Medical Laboratory Technician (1)
(This is a WECM Course Number.)
Prerequisite: MLAB 1415 with a minimum grade of a "C". Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (8 Ext.)

MLAB 1335 Immunology/Serology (3)
(This is a WECM Course Number.)
Prerequisite: Acceptance in the Medical Laboratory Technology program or Biotechnology program. An introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of serological procedures. (2 Lec., 2 Lab.)

MLAB 1415 Hematology (4)
(This is a WECM Course Number.)
Prerequisite: Acceptance into the Medical Laboratory Technology Program with completion of Biology 2401 or Biology 1470 and English 1301. Introduction to theory and practical application of routine and special hematology procedures, both manual and automated; red blood cells and white blood cells maturation sequences, and normal and abnormal morphology and associated diseases. (3 Lec., 4 Lab.)

MLAB 2266 Practicum (or Field Experience)-Clinical/Medical Laboratory Technician (2)
(This is a WECM Course Number.)
Prerequisite: Completion of MLAB 1335 and MLAB 2501 with a minimum grade of "C". Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (14 Ext.)

MLAB 2267 Practicum (or Field Experience)-Clinical/Medical Laboratory Technician (2)
(This is a WECM Course Number.)
Prerequisite: Completion of MLAB 2331 and MLAB 2434 with a minimum grade of "C'. Practical, general, workplace training supported by an individualized learning plan developed by the employer, college, and student. (20 Ext.)

MLAB 2331 Immunohematology (3)
(This is a WECM Course Number.)
Prerequisite: Acceptance into the Medical Laboratory Technology Program. A study of blood antigens and antibodies. Performance of routine blood banking procedures, including blood group and Rh typing, antibody screens, antibody identification, cross matching, elution, and absorption techniques. This course contains the capstone experience for the program. (2 Lec., 4 Lab.)

MLAB 2434 (Clinical) Microbiology (4)
(This is a WECM Course Number.)
Prerequisite: Acceptance into the Medical. Laboratory Technology Program. Instruction in the theory, practical application, and pathogenesis of clinical microbiology, including collection, setup, identification, susceptibility testing, and reporting procedures. (3 Lec., 4 Lab.)

MLAB 2501 (Clinical) Chemistry (5)
(This is a WECM Course Number.)
Prerequisite: CHEM 1411 and CHEM 1412 with a minimal grade of a "C" and acceptance into the Medical Laboratory Technology Program. An introduction to the principles and procedures of various tests performed on Clinical Chemistry. Presents the physiological basis for the test, the principle and procedure for the test, and the clinical significance of the test results, including quality control and normal values. Also includes basic chemical laboratory technique, chemical laboratory safety, electrolytes and acid-base balance, proteins, carbohydrate, lipids, enzymes, metabolites, endocrine function, and toxicology. The study of urines and body fluids is extensively studied with this course as well. (4 Lec., 4 Lab.)

MRKG 1291 Special Topics in Business Marketing and Marketing Management (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

MRKG 1301 Customer Relations (3)
(This is a WECM Course Number.)
Topics address general principles of customer service including skills, knowledge, attitudes, and behaviors pertinent to the professional development of the student. (3 Lec.)

MRKG 1302 Principles of Retailing (3)
(This is a WECM Course Number.)
Introduction to the retailing environment and its relationship to consumer demographics, trends, and traditional/nontraditional retailing markets. The employment of retailing techniques and the factors that influence modern retailing. (3 Lec.)

MRKG 1311 Principles of Marketing (3)
(This is a WECM Course Number.)
Introduction to basic marketing functions, identification of consumer and organizational needs, explanation of economic, psychological, sociological, and global issues, and description and analysis of the importance of marketing research. (3 Lec.)

MRKG 1366 Practicum (or Field Experience) – Marketing/Marketing Management, General (3)
(This is a WECM Course Number.)
Prerequisite: Completion of two courses in Business Marketing or demonstrated competence approved by the instructor. A basic or intermediate type of non-health professions work-based instruction that provides basic career exploration or helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience. Indirect supervision is provided by the work supervisor. A practicum may be a paid or unpaid learning experience. (1 Lec., 20 Ext.)

MRKG 1381 Cooperative Education - Marketing/Marketing Management, General (3)
(This is a WECM Course Number.)
Prerequisite: Completion of two courses in Business Marketing or demonstrated competence approved by the instructor. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. (1 Lec., 15 Ext.)

MRKG 2312 e-Commerce (3)
(This is a WECM Course Number.)
Prerequisite: Integrated Software Applications I for E-Commerce Program or none for Internet Development Technologies Programs. Explore electronic tools utilized in marketing; focus on marketing communications in developing customer relationships. (3 Lec.)

MRKG 2333 Principles of Selling (3)
(This is a WECM Course Number.)
Overview of the selling process. Identification of the elements of the communication process between buyers and sellers and examination of the legal and ethical issues of organizations which affect salespeople. (3 Lec.)

MRKG 2348 Marketing Research and Strategies (3)
(This is a WECM Course Number.)
Designed to enhance student understanding of the marketing environment and the dynamic interrelationships of the functions of marketing price, channels of distribution, promotion, and product responsibility. Provides a simulated marketing environment for experience in marketing decision-making and provides practical experiences in analyzing market cases for the students. (3 Lec.)

MRKG 2349 Advertising and Sales Promotion (3)
(This is a WECM Course Number.)
Introduction to the advertising principles, practices, and multi-media of persuasive communication including buyer behavior, budgeting, and regulatory constraints. (3 Lec.)

MRKG 2366 Practicum (or Field Experience) - Business Marketing and Marketing Management (3)
(This is a WECM Course Number.)
Prerequisite: Completion of two courses in Business Marketing or demonstrated competence approved by the instructor. A basic or intermediate type of non-health professions work-based instruction that provides basic career exploration or helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience. Indirect supervision is provided by the work supervisor. A practicum may be a paid or unpaid learning experience. (1 Lec., 20 Ext.)

MRKG 2381 Cooperative Education - Marketing/Marketing Management, General (3)
(This is a WECM Course Number.)
Prerequisite: Completion of two courses in Business Marketing or demonstrated competence approved by the instructor. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. (1 Lec., 15 Ext.)

MRMT 1192 Special Topics in Medical Transcription (1)
(This is a WECM Course Number.)
Prerequisite: MDCA 1311, MDCA 1201, and program admission or instructor approval. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lab.)

MRMT 1211 Computers in Health Care (2)
(This is a WECM course number).
Prerequisite: Typing speed of 30 wpm. Introduction to the concepts of computer technology related to health care and the tools and techniques for collecting, storing and retrieving health care data. (1 Lec., 2 Lab.)

MRMT 1292 Special Topics in Medical Transcription (2)
(This is a WECM Course Number.)
Prerequisite: MRMT 1307, Intermediate Medical Transcription. Application of learned transcription fundamentals and utilization of references in the production of intermediate level reports of physician dictation with development of speed and accuracy. (1 Lec., 3 Lab.)

MRMT 1307 Medical Transcription Fundamentals (3)
(This is a WECM Course Number.)
Prerequisite: Admission to Medical Transcription or Medical Assistant program or instructor approval. Fundamentals of medical transcription with hands-on experience in transcribing physician dictation including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. Utilizes transcribing and information processing equipment compatible with industry standards. Designed to develop speed and accuracy. (2 Lec., 2 Lab.)

MRMT 1382 Cooperative Education – Medical Transcription/Transcriptionist (3)
(This is a WECM Course Number.)
Prerequisite: Completion or concurrent enrollment in SCIT 1407 and HITT 2331. Completion or concurrent enrollment in MRMT 2433. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. This course may be repeated if topics and learning outcomes vary. (1 Lec., 16 Ext.)

MRMT 2433 Advanced Medical Transcription (4)
(This is a WECM Course Number.)
Prerequisite: POFM 2313. Production of advanced reports of physician dictation with increasing speed and accuracy including history and physicals, consultations, discharge summaries, operative reports, and other medical reports. (2 Lec., 4 Lab.)

MSST 1270 Legal and Ethical Aspects of Health Care (2)
(This is a WECM Local Need Course.)
Focus of this course is on the legal processes and ethical aspects affecting health care. Exposure to legal terminology and statutes, as well as ethical decision making is provided. Confidentiality, consent, patient rights, liability and negligence will be covered. (2 Lec.)

MSST 1301 Medical Staff Services I (3)
(This is a WECM Course Number.)
An introduction to fundamental concepts, principles and organization of the Medical Staff Office in a healthcare organization. The role of the office, organization of health care facilities, credentialing of medical staff and allied health practitioners, staff appointments, privilege delineation, monitoring and documentation of proctoring, peer review, medical management, and preparing agenda and minutes are covered. (3 Lec.)

MSST 1302 Medical Staff Law (3)
(This is a WECM Course Number.)
Designed to introduce students to the U.S. legal system as it applies to credentialing and peer review aspects of the health care delivery system and Medical Staff Services including legal terminology, statutes, ethical decisions, liability and negligence in credentialing and peer review activities. (3 Lec.)

MSST 1340 Medical Staff Services II (3)
(This is a WECM Course Number.)
Prerequisite: MSST 1301 Medical Staff Services I with a minimum grade of C. A continuation of Medical Staff Services I, covering the process of meeting standards of the Joint Commission on the Accreditation of Health Care Organizations (JCAHO), National Committee for Quality Assurance (NCQA), and state licensure laws and other regulatory requirements. (3 Lec.)

MSST 1341 Performance Improvement (3)
(This is a WECM Course Number.)
Focuses on performance improvement and quality management in health care. Theories fundamental to Total Quality Management (TQM) and Continuous Quality Improvement (CQI) are explored and applied to the health care setting. Evolution of efforts to measure quality in healthcare organizations and attitudes of physicians concerning these efforts are examined. Statistical tools and use of CQI teams are described. The Joint Commission on Accreditation of Hospital Organizations (JCAHO) Performance Improvement Standards are covered, with emphasis on expectations of the medical staff organization. The description of a hospital risk management program and National Committee for Quality Assurance (NCQA) required monitors are also reviewed. (3 Lec.)

MSST 1380 Cooperative Education-Medical Staff Services Directed Study (3)
(This is a WECM Course Number.)
Prerequisite: All other Medical Staff Services courses with a minimum grade of C. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. (1 Lec., 20 Ext.)

MSST 2331 Medical Staff Services III (3)
(This is a WECM Course Number.)
Prerequisite: MSST 1340 Medical Staff Services II with a minimum grade of C. An advanced course building on bylaws and methods to research and review applications and credentials to determine privileging, establish a peer review process, and investigate problem areas. (3 Lec.)

MTRC 1366 Practicum - Motorcycle Mechanic and Repairer (3)
(This is a WECM course number).
A basic or intermediate type of non-health professions work-based instruction that provides basic career exploration or helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience. Indirect supervision is provided by the work supervisor. A practicum may be a paid or unpaid learning experience. (1 Lec., 20 Ext.)

MTRC 1380 Cooperative Education-Motorcycle Mechanic and Repairer (3)
(This is a WECM Course Number.)
An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience. (1 Lec., 20 Ext.)

MTRC 1402 Motorcycle Tune Up (4)
(This is a WECM Course Number.)
Introduction to tune up procedures for both two and four stroke motorcycles including analysis, valve train, ignition, fuel system, and chassis service. Emphasis on the appropriate procedures and equipment.
(3 Lec., 4 Lab.)

MTRC 1405 Motorcycle Service Principles (4)
(This is a WECM Course Number.)
Principles of operation of two and four stroke motorcycle engines and their associated systems. Emphasis on troubleshooting and analysis of faulty systems and their individual components. (3 Lec., 4 Lab.)

MTRC 1408 Motorcycle Chassis and Drive Systems (4)
(This is a WECM Course Number.)
Theory of operation, servicing procedures, and problem diagnosis of motorcycle chassis, final drive systems, wheels, brakes, frames, and suspensions with emphasis on troubleshooting for handling and ridability problems. (3 Lec., 4 Lab.)

MUAP 1101-1181 Applied Music-Minor (1)
These courses are open to students enrolled in music theory, ensembles, and other music major and minor courses. They provide private instruction in the student's secondary area and consist of a one-half hour lesson a week. Private music may be repeated for credit. (1 Lec.)

MUAP 1101 Applied Music-Violin (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1105 Applied Music-Viola (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1109 Applied Music-Cello (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1113 Applied Music-Double Bass (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1115 Applied Music-Electric Bass (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1117 Applied Music-Flute (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1121 Applied Music-Oboe (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1125 Applied Music-Bassoon (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1129 Applied Music-Clarinet (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1133 Applied Music-Saxophone (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1137 Applied Music-Trumpet (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1141 Applied Music-French Horn (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1145 Applied Music-Trombone (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1149 Applied Music-Baritone (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1153 Applied Music-Tuba (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1157 Applied Music-Percussion (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1158 Applied Music-Drum Set (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1161 Applied Music-Guitar (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1165 Applied Music-Organ (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1169 Applied Music-Piano (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1177 Applied Music-Harp (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 1181 Applied Music-Voice (1)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2201- 2281 Applied Music-Concentration (2)
These courses are open to students enrolled in music theory, ensembles, or other music major and minor courses. They provide private instruction in the area of the student's concentration and consist of one hour of instruction per week. Private music may be repeated for credit. (1 Lec.)

MUAP 2201 Applied Music-Violin (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2205 Applied Music-Viola (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2209 Applied Music-Cello (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2213 Applied Music-Double Bass (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2215 Applied Music-Electric Bass (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2217 Applied Music-Flute (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2221 Applied Music-Oboe (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2225 Applied Music-Bassoon (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2229 Applied Music-Clarinet (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2233 Applied Music-Saxophone (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2237 Applied Music-Trumpet (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2241 Applied Music-French Horn (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2245 Applied Music-Trombone (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2249 Applied Music-Baritone (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2253 Applied Music-Tuba (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2257 Applied Music-Percussion (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2258 Applied Music-Drum Set (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2261 Applied Music-Guitar (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2265 Applied Music-Organ (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2269 Applied Music-Piano (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2277 Applied Music-Harp (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2281 Applied Music-Voice (2)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2301 - 2381 Applied Music-Major (3)
These courses are primarily for music performance majors and are open to students enrolled in music theory, ensembles, or other music major and minor courses. They provide private instruction in the area of the student's major instrument and consist of one hour of instruction per week. These courses may be repeated for credit. (1 Lec.)

MUAP 2301 Applied Music-Violin (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2305 Applied Music-Viola (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2309 Applied Music-Cello (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2313 Applied Music-Double Bass (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2317 Applied Music-Flute (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2321 Applied Music-Oboe (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2325 Applied Music-Bassoon (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2329 Applied Music-Clarinet (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2333 Applied Music-Saxophone (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2337 Applied Music-Trumpet (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2341 Applied Music-French Horn (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2345 Applied Music-Trombone (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2349 Applied Music-Baritone (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2353 Applied Music-Tuba (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2357 Applied Music-Percussion (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2361 Applied Music-Guitar (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2365 Applied Music-Organ (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2369 Applied Music-Piano (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2377 Applied Music-Harp (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUAP 2381 Applied Music-Voice (3)
(This is a Texas Common Course Number.)
This course may be repeated for credit.
(Coordinating Board Academic Approval Number 5009035426)

MUEN 1121 Orchestra (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. Experience is provided in performing and reading orchestral literature and in participating in the college orchestra. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035526)

MUEN 1122 Jazz Ensemble (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. The jazz ensemble rehearses and performs a variety of jazz styles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035526)

MUEN 1123 Band (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035526)

MUEN 1131 Keyboard Ensemble (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. A group of keyboard instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035626)

MUEN 1132 Woodwind Ensemble (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. A group of woodwind instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035626)

MUEN 1133 Brass Ensemble (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. A group of brass instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035626)

MUEN 1134 Guitar Ensemble (1)
(This is a Texas Common Course Number.)
Music composed and arranged for a guitar ensemble is performed. Works for a guitar and a different instrument or for guitar and a voice are also included. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035626)

MUEN 1135 Percussion Ensemble (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. A group of percussion instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035626)

MUEN 1136 String Ensemble (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. A group of string instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035626)

MUEN 1137 Symphonic Wind Ensemble (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. In the symphonic wind ensemble, students study and perform stylistic literature of all periods. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035626)

MUEN 1151 Vocal Ensemble (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. Activities include study and performance of specialized choral literature suitable for more advanced students. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035826)

MUEN 1152 Chamber Ensemble (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. A group of chamber instrumentalists or vocalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035826)

MUEN 1153 Madrigal Singers (1)
(This is a Texas Common Course Number.)
A group of vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035826)

MUEN 2123 Lab Band (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. Students study and perform various forms of commercial music, such as jazz, pop, avant-garde, and fusion. Student arranging, composing, and conducting are encouraged. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035526)

MUEN 2141 Chorus (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. A wide variety of music representing the literature of the great eras of music history is studied and performed. This course may be repeated for credit.
(3 Lab.)
(Coordinating Board Academic Approval Number 5009035526)

MUSB 1305 Survey of the Music Business (3)
(This is a WECM Course Number.)
An overview of the music industry including songwriting, live performances, the record industry, music merchandising, contracts and licenses, and career opportunities. (3 Lec.)

MUSB 1380 Cooperative Education - Music Management and Merchandising (3)
(This is a WECM Course Number.)
Career related activities encountered in the students' area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. (1 Lec., 15 Ext.)

MUSB 1381 Cooperative Education – Music Management and Merchandising (3)
(This is a WECM course number).
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

MUSC 1303 History of Popular Music (3)
(This is a WECM Course Number.)
A study of commercial music industry trends and developments through historical analysis. Topics include the evolution of the music industry with emphasis on the development of popular musical styles and the impact of culture and technology on industry growth.
(3 Lec.)

MUSC 1327 Audio Engineering I (3)
(This is a WECM Course Number.)
Overview of the recording studio. Topics include basic studio electronics and acoustic principles, wave form analysis, microphone concepts and miking techniques, studio set up and signal flow, recording console theory, signal processing concepts, tape machine principles and operation, and an overview of mixing and editing.
(2 Lec., 3 Lab.)

MUSC 1331 Musical Instrument Digital Interface (MIDI) I (3)
(This is a WECM course number).
History and evolution of Musical Instrument Digital Interface (MIDI) systems and applications, the MIDI language, and applications in the studio environment using software-based sequencing programs.
(2 Lec., 2 Lab.)

MUSC 2141 Forum/Recital (1)
(This is a WECM Course Number.)
Stylistic analysis of commercial music performances presented by students, faculty, and guest artists. This course may be repeated if topics and learning outcomes vary. (2 Lab.)

MUSC 2314 Improvisation Theory I (3)
(This is a WECM Course Number.)
A study of the chordal structures of jazz, rock, country, and fusion with emphasis on extemporaneous performance. (3 Lec.)

MUSC 2319 Orchestration (3)
(This is a WECM Course Number.)
Exploration of writing for voices and instruments to include ranges, transposition, and idiosyncrasies of each instrument with emphasis on commercial music chord voicings. (3 Lec.)

MUSC 2343 Audio Engineering Electronics Troubleshooting (3)
(This is a WECM Course Number.)
Concepts in troubleshooting audio problems. Topics include soldering techniques, audio electronic alignment procedures for tape machines, console maintenance, and sound reinforcement equipment maintenance.
(2 Lec., 2 Lab.)

MUSC 2355 Musical Instrument Digital Interface (MIDI) II (3)
(This is a WECM Course Number.)
Prerequisite: MUSC 1331 or demonstrated competence approved by the instructor. A continuation of MIDI I with emphasis on advanced sequencer operation, and SMPTE-based synchronization in the interaction of multiple recording and playback systems.
(2 Lec., 2 Lab.)

MUSC 2427 Audio Engineering II (4)
(This is a WECM Course Number.)
Prerequisite: MUSC 1327. Implementation of the recording process, microphones, audio console, multitrack recorder, and signal processing devices.
(3 Lec., 3 Lab.)

MUSC 2447 Audio Engineering III (4)
(This is a WECM Course Number.)
Prerequisite: MUSC 2427. Procedures and techniques in recording and manipulating audio. Topics include advanced computer-based console automation, hard disk based digital audio editing, nonlinear digital multitrack recording, and advanced engineering project completions. (3 Lec., 3 Lab.)

MUSC 2448 Audio Engineering IV (4)
(This is a WECM Course Number.)
Prerequisite: MUSC 2447. Examination of the role of the producer including recording, mixing, arranging, analyzing projects, session planning, communication, budgeting, business aspects, technical considerations, and music markets. (3 Lec., 3 Lab.)

MUSI 1116 Musicianship I (1)
(This is a Texas Common Course Number.)
Prerequisite: Music 1300, Music 1304 or consent of the instructor. Keyboard skills and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in Music 1311 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045626)

MUSI 1117 Musicianship II (1)
(This is a Texas Common Course Number.)
Prerequisite: Music 1116. This course is a continuation of Music 1116. It is recommended that students enrolled in Music 1312 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045626)

MUSI 1160 Italian Diction (1)
(This is a Texas Common Course Number.)
The phonetic sounds of the Italian language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085326)

MUSI 1161 English Diction (1)
(This is a Texas Common Course Number.)
The phonetic sounds of the English language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085326)

MUSI 1170 Synthesizer Class I (1)
(This is a Unique Need Course.)
Prerequisite: Music 1181 or prior keyboard experience. This course is an entry-level performance course designed to teach students the basic theoretical concepts and performance skills necessary to perform on synthesizers. (3 Lab.)
(Coordinating Board Academic Approval Number 5009037126)

MUSI 1172 Synthesizer Class II (1)
(This is a Unique Need Course.)
Prerequisite: Music 1170 or prior music synthesizer experience. This course is a continuation of Music 1170. This course emphasizes the rehearsal and performance of commercial music styles. FM synthesis is introduced and a variety of programmable equipment is surveyed including drum machines, sequencers, digital samplers and computer software. (3 Lab.)
(Coordinating Board Academic Approval Number 5009037126)

MUSI 1181 Piano Class I (1)
(This is a Texas Common Course Number.)
This course is primarily for students with no piano background. It develops basic musicianship and piano skills. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075126)

MUSI 1182 Piano Class II (1)
(This is a Texas Common Course Number.)
Prerequisite: Music 1181 or demonstrated competence approved by the instructor. The study of piano is continued. Included are technique, harmonization, transposition, improvisation, accompanying, sight reading, and performing various styles of repertoire. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075126)

MUSI 1183 Voice Class I (1)
(This is a Texas Common Course Number.)
This course is for non-voice majors. It presents the principles of breathing, voice production, tone control, enunciation, and phrasing in two group lessons a week. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085126)

MUSI 1184 Voice Class II (1)
(This is a Texas Common Course Number.)
This course is a continuation of Music 1183. It is open to all non-voice majors. Emphasis is on solo singing, appearance in studio recital, stage deportment, and personality development. Two group lessons are given a week. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085126)

MUSI 1192 Guitar Class I (1)
(This is a Texas Common Course Number.)
An introductory course in acoustic guitar playing based on acoustic and classical guitar technique. Music reading of melodic, harmonic, and rhythmic exercises are learned to gain initial mastery of the fundamental techniques of guitar playing. Introductory elements about the history and culture of the guitar are included in this course. (2 Lab.)
(Coordinating Board Academic Approval Number 5009035126)

MUSI 1193 Guitar Class II (1)
(This is a Texas Common Course Number.)
Prerequisite: Music 1192 or demonstrated competence approved by the instructor. This course is a continuation of Music 1192. Emphasis is on classical guitar techniques and music reading skills. (2 Lab.)
(Coordinating Board Academic Approval Number 5009035126)

MUSI 1263 Jazz Improvisation (2)
(This is a Texas Common Course Number.)
The art of improvisation is introduced. Basic materials, aural training, analysis, and common styles are presented. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5009036526)

MUSI 1300 Foundations of Music I (3)
(This is a Texas Common Course Number.)
This course is the initial course to prepare students with limited music training for Music 1311. It focuses on notation (music reading), musical terminology, analysis, listening to and creating rhythmic and melodic responses. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045426)

MUSI 1304 Foundations of Music II (3)
(This is a Texas Common Course Number.)
Prerequisite: Music 1300 or demonstrated competence approved by the instructor. This course prepares students with limited music training for Music 1311 and increases their general music understanding. Emphasis is on rhythmic and melodic training, chord functions, melody, textures, and basic analysis of music. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045426)

MUSI 1306 Music Appreciation (3)
(This is a Texas Common Course Number.)
The basic elements of music are surveyed and examined in the music literature of western civilization, particularly from the Baroque Period to the present. Cultural influences on the music of each era are observed. (3 Lec.)
(Coordinating Board Academic Approval Number 5009025126)

MUSI 1308 Music Literature (3)
(This is a Texas Common Course Number.)
The music of recognized composers in the major periods of music history is examined. Topics include the characteristics of sound, elements of music, performance media, and musical texture. Emphasis is on the music of the late Gothic, Renaissance, and Baroque eras. (3 Lec.)
(Coordinating Board Academic Approval Number 5009025226)

MUSI 1309 Music Literature (3)
(This is a Texas Common Course Number.)
This course is a continuation of Music 1308. The compositional procedures and forms used by composers are studied. Emphasis is on the Classical, Romantic, and Modern periods. (3 Lec.)
(Coordinating Board Academic Approval Number 5009025226)

MUSI 1310 History of Jazz/Rock Music (3)
(This is a Texas Common Course Number.)
The study of social and musical influences on Jazz/Rock music and the influence of Jazz/Rock Music on society and the music industry. (3 Lec.)
(Coordinating Board Academic Approval Number 5009025326)

MUSI 1311 Music Theory I (3)
(This is a Texas Common Course Number.)
Prerequisite: Music 1300 and 1304 or demonstrated competence approved by the instructor. This course is designed for music majors and minors. Emphasis is on notation, cadences, classification of diatonic triads, scales, and modes. It is recommended that students enrolled in Music 1116 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045126)

MUSI 1312 Music Theory II (3)
(This is a Texas Common Course Number.)
Prerequisite: Music 1311 or demonstrated competence approved by the instructor. This course focuses on part-writing and harmonization with triads and their inversions. Also included is a chord vocabulary expanded to include materials from the common practice period as well as contemporary periods. It is recommended that students enrolled in Music 1117 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045126)

MUSI 1370 Guitar Literature and Materials (3)
(This is a Unique Need Course.)
The body of music for the guitar is surveyed. Emphasis is on the repertoire of instruments in the guitar family, such as the lute. Transcription and arranging are studied as well as the selection of a program for public performance. (3 Lec.)
(Coordinating Board Academic Approval Number 5009029226)

MUSI 1386 Composition (3)
(This is a Texas Common Course Number.)
Prerequisite: Music 1311 and 1312 or demonstrated competence approved by the instructor. This course covers composing in small forms for simple media in a variety of styles. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045326)

MUSI 1390 Digital Music Production (3)
(This is a Texas Common Course Number.)
Prerequisite: One semester of music theory and keyboard or demonstrated competence approved by the instructor. This course is designed to introduce major/non-major music students to the MIDI technology as an extension of the music theory/keyboard curriculum. Various MIDI devices, computer hardware, and computer software will be explored. This course may be repeated for credit. (2 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number is 5009045826)

MUSI 1391 Digital Music Production (3)
(This is a Texas Common Course Number.)
Prerequisite: Successful completion of Music 1390 or demonstrated competence approved by the instructor. This course is a continuation of Music 1390 and will present advanced concepts in music production. This course may be repeated for credit. (2 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number is 5009045826)

MUSI 2116 Musicianship III (1)
(This is a Texas Common Course Number.)
Prerequisite: Music 1116 and 1117 or demonstrated competence approved by the instructor. Keyboard and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in Music 2311 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045726)

MUSI 2117 Musicianship IV (1)
(This is a Texas Common Course Number.)
Prerequisite: Music 2116 or demonstrated competence approved by the instructor. This course is a continuation of Music 2116. It is recommended that students enrolled in Music 2312 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045726)

MUSI 2160 German Diction (1)
(This is a Texas Common Course Number.)
The phonetic sounds of the German language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085326)

MUSI 2161 French Diction (1)
(This is a Texas Common Course Number.)
The phonetic sounds of the French language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085326)

MUSI 2181 Piano Class III (1)
(This is a Texas Common Course Number.)
Prerequisite: Music 1181 and 1182 or demonstrated competence approved by the instructor. This course is a continuation of functional keyboard skills, including harmonization, sight-reading, accompanying styles, improvisation, and technical exercises. It is designed for the music major preparing for the piano proficiency exam, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075126)

MUSI 2182 Piano Class IV (1)
(This is a Texas Common Course Number.)
Prerequisite: Music 2181 or demonstrated competence of the instructor. This course is a continuation of functional keyboard skills in Music 2181 with greater emphasis on advanced harmonization and appropriate technical skills. It is designed as a preparation for the piano proficiency exam for the music major, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075126)

MUSI 2192 Guitar Pedagogy (1)
(This is a Texas Common Course Number.)
Guitar method books are surveyed. Emphasis is on the strengths and weaknesses of each method. Structuring lessons and optimizing each individual teacher-student relationship are also discussed. (2 Lec.)
(Coordinating Board Academic Approval Number 5009035126)

MUSI 2311 Music Theory III (3)
(This is a Texas Common Course Number.)
Prerequisite: Music 1311 and 1312 or demonstrated competence approved by the instructor. This course is a continuation of the study of music theory. It includes the materials of modulation, larger forms, and thematic development, and more advanced analysis. It is recommended that students enrolled in Music 2116 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045226)

MUSI 2312 Music Theory IV (3)
(This is a Texas Common Course Number.)
Prerequisite: Music 2311 or demonstrated competence approved by the instructor. This course is a continuation of the topics developed in Music 2311. The preceding materials are expanded to include melody, harmony, tonality, and the formal processes of 20th century music. It is recommended that students enrolled in Music 2117 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045226)

MUSI 9176 Recital (1)
This is an on-campus concert/seminar series designed to provide a laboratory and listening experience as an extension of classroom music studies. Concerts, seminars and workshops are presented by guest artists and lecturers, faculty members and students. This is a one-hour credit course. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009030026)

MUSP 1242 Small Commercial Music Ensemble (2)
(This is a WECM Course Number.)
Participation in a small commercial music ensemble concentrating on commercial music performance styles. (3 Lec.)

MUSP 1391 Special Topics in Music - General Performance (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

NDTE 2411 Preparation for Welding Inspection (4)
This is a WECM course number.
Preparation for students for certification as welding inspectors, including accepted testing requirements and procedures, measurement systems, duties and responsibilities of inspectors, destructive and nondestructive testing, quality assurance/quality control, welding codes and blueprints, procedures, and case studies. An overview of welding tools and equipment, metallurgy, chemistry, and joint design will be explored. (3 Lec., 4 Lab.)

NUPC 1320 Patient Care Technician (3)
(This is a WECM Course Number.)
A course designed to provide the student with the necessary training, skills, and knowledge needed to gain employment as a Patient Care Technician in a hospital setting. A national certification test is offered upon successful completion of the course. (2 Lec., 3 Lab.)

NURA 1160 Clinical – Nursing Assistant/Aide (1)
(This is a WECM Course Number.)
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (3 Ext.)

NURA 1260 Clinical-Nurse/Nursing Assistant/Aide and Patient Care Assistant (2)
(This is a WECM Course Number.)
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (6 Ext.)

NURA 1291 Special Topics in Nursing Assistant/Aide (2)
(This is a WECM Course Number.)
Instruction in first aid for the injured or ill persons. Includes lifesaving skills for respiratory and cardiac emergencies involving adults, children, and infants in a medical setting. During this course students will be awarded the American Heart Association Healthcare Provider Course Completion card. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

NURA 1301 Nurse Aide for Health Care Organizations I (3)
(This is a WECM Course Number.)
Preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics include resident's rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis on effective interaction with members of the health care team. (2 Lec., 3 Lab.)

NURA 1307 Nurse Aide for Health Care Organizations II (3)
(This is a WECM Course Number.)
A basic study of the structures and functions of the human body. (2 Lec., 3 Lab.)

NUTR 1322 Principles of Nutrition (3)
(The Texas Common Course Number is HECO 1322.)
This is an introduction to human nutrition. Topics will include classes, sources, and function of nutrients, digestion and absorption, and metabolism with applications to normal and therapeutic nutritional needs. (3 Lec.)
(Coordinating Board Academic Approval Number 1905025109)

OSHT 1313 Accident Prevention, Inspection, and Investigation (3)
(This is a WECM Course Number.)
Principles and practices providing a basis for understanding the nature of occupational hazard recognition, accident prevention, loss reduction, inspection techniques, and accident investigation analysis. (3 Lec.)

PBAD 1315 Postal Organization, Development, and Management (3)
(This is a WECM Course Number.)
An overview of the history of written communication and merchandise delivery. Topics include current postal organization; postal philosophies, policies, procedures, rules and regulations; and principles of effective supervision. (3 Lec.)

PBAD 1345 Postal Customer Services, Processing, and Distribution (3)
(This is a WECM Course Number.)
Fundamentals of mail delivery and collection systems within the Postal Service. Topics include postal and non-postal services, retail functions, and customer relations; rapid separation facts; revenue determination procedures; and flow characteristics involved in receipt, processing, and dispatch of all mail. (3 Lec.)

PBAD 1391 Special Topics Public Administration and Services, Other (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

PBAD 2331 Budgeting in the Public Sector (3)
(This is a WECM Course Number.)
Examination of revenue-producing activities and sources of funds; construction and implementation of budgets; and basic terminology, concepts, and mechanics as they relate to fiscal factors. Topics include budget cycle, taxation, bonds, indebtedness, and fund accounting. (3 Lec.)

PBAD 2345 Postal Finance and Labor Relations (3)
(This is a WECM Course Number.)
In-depth coverage of the internal workings of postal finance units and the regulations and procedures involved. Topics include laws and practices related to labor and management in the postal service. Emphasis will be on national and local agreements, bargaining units and associations, grievance procedures, and the National Labor Relations Board. (3 Lec.)

PFPB 1219 Commercial Plumbing I (2)
(This is a WECM Course Number.)
An introductory study of skills, procedures, and techniques used in the installation of drain, waste, and vent (DWV), and water supply systems in commercial buildings. This course is cross-listed as PFPB 1319. The student may register for either PFPB 1219 or PFPB 1319, but may receive credit for only one of the two. (1 Lec., 3 Lab.)

PFPB 1225 Mechanics of Plumbing (2)
(This is a WECM Course Number.)
An introduction to the principles of physical science and the mechanics used in the plumbing industry that includes basic principles of physics, matter, liquids, and hydraulics. (1 Lec., 3 Lab.)

PFPB 1247 Backflow Prevention (2)
(This is a WECM Course Number.)
Principles, practices, and regulations of backflow including backpressure, public health, laws and responsibilities, mechanics and use of backflow devices. Required. (1 Lec., 3 Lab.)

PFPB 1251 Commercial and Industrial Gas Installation (2)
(This is a WECM Course Number.)
A study of the principles, code requirements, and practical knowledge needed to design and install commercial and industrial gas supply systems Required. (1 Lec., 3 Lab.)

PFPB 1253 Commercial Plumbing II (2)
(This is a WECM Course Number.)
A study of methods used in the layout and installation of pneumatic controls, water-heating systems, and piping commonly found in commercial buildings. (1 Lec., 3 Lab.)

PFPB 1255 Industrial Plumbing (2)
(This is a WECM Course Number.)
A study of the layout and installation of plumbing systems in industrial construction, including water treatment, power plants, and manufacturing facilities. This course is cross-listed as PFPB 1355. The student may register for either PFPB 1255 or PFPB 1355, but may receive credit for only one of the two. (1 Lec., 3 Lab.)

PFPB 1272 Basic HVAC for Plumbing/Pipefitting (2)
(This is a WECM Local Need Course.)
This course provides an introduction to the basic HVAC and Refrigeration cycle, system components, system operation, application, and design. The student will use gauges to properly test both HVAC and Refrigeration Systems. (1 Lec., 3 Lab.)

PFPB 1291 Special Topics in Plumbing Technology/Plumber (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Required. This course may be repeated if topics and learning outcomes vary. (1 Lec., 3 Lab.)

PFPB 1308 Introduction to Pipefitting (3)
(This is a WECM Course Number.)
An introduction to the craft including mathematical operations applicable to pipefitting, hand tools, safety practices, and material communication. Lab required. (2 Lec., 3 Lab.)

PFPB 1313 Introduction to the Plumbing Trade (3)
(This is a WECM Course Number.)
An introduction to the plumbing craft including mathematical operations applicable to the plumbing trade, hand tools, safety practices, and material identification. Lab required. (2 Lec., 3 Lab.)

PFPB 1319 Commercial Plumbing I (3)
(This is a WECM Course Number.)
An introductory study of skills, procedures, and techniques used in the installation of drain, waste, and vent (DWV), and water supply systems in commercial buildings. This course is cross-listed as PFPB 1219. The student may register for either PFPB 1319 or PFPB 1219, but may receive credit for only one of the two.
(2 Lec., 3 Lab.)

PFPB 1323 Plumbing Codes I (3)
(This is a WECM Course Number.)
An introductory study of state and local plumbing codes and their application in residential and light commercial settings. Required. (2 Lec., 2 Lab.)

PFPB 1345 Commercial Construction and Fixture Setting (3)
(This is a WECM Course Number.)
Instruction in the use of practices and procedures employed by a plumber in the common construction of a commercial building including multilevel drain waste vent systems, water systems, and fixture installation. Lab required. (2 Lec., 2 Lab.)

PFPB 1353 Commercial Plumbing II (3)
(This is a WECM Course Number.)
A study of methods used in the layout and installation of pneumatic controls, water heating systems, and piping commonly found in commercial buildings.
(2 Lec.; 3 Lab.)

PFPB 1355 Industrial Plumbing (3)
(This is a WECM Course Number.)
A study of the layout and installation of plumbing systems in industrial construction, including water treatment, power plants, and manufacturing facilities. This course is cross-listed as PFPB 1255. The student may register for either PFPB 1355 or PFPB 1255, but may receive credit for only one of the two.
(2 Lec.; 3 Lab.)

PFPB 1357 Plumbing Codes II (3)
(This is a WECM Course Number.)
An advanced study of state and local plumbing codes and their application in commercial and industrial settings. (2 Lec., 2 Lab.)

PFPB 2235 Commercial and Industrial Control Systems (2)
(This is a WECM Course Number.)
A study of systems design and the equipment used in commercial and industrial control systems, including air handling units, air volume boxes, centrifugal chillers, absorption systems , cooling towers, water treatment, and chilled water systems (1 Lec., 3 Lab)

PFPB 2239 Commercial and Industrial System Start-Up (2)
(This is a WECM Course Number.)
An overview of alignment, testing, start-ups, and troubleshooting of commercial and industrial plumbing systems. (1 Lec., 3 Lab.)

PFPB 2240 Medical Gas (2)
(This is a WECM Course Number.)
A study of the basic installation and inspection techniques used for medical gas piping. Required.
(1 Lec., 3 Lab.)

PFPB 2271 Advanced HVAC for Plumbers/Pipefitters/AC (2)
(This is a WECM Local Need Course.)
This course is a comprehensive study of industrial equipment, applications, and codes that relate to large component split systems, centrifugal chillers, absorption chillers, and related equipment. (1 Lec., 3 Lab.)

PFPB 2277 Motors and Pump Alignment for Plumbers/Pipefitters/AC (2)
(This is a WECM Local Need Course.)
This course provides a comprehensive introduction to motors and pumps used in commercial and industrial mechanical systems. The student will study system safety and design that apply methods used during installation, alignment, start-up, testing, and balancing motors and pumps used in mechanical systems.
(1 Lec., 3 Lab.)

PFPB 2301 Pipe Fabrication and Installation I (3)
(This is a WECM Course Number.)
Skill development in pipe fabrication and pipe supports. Lab required. (2 Lec., 3 Lab.)

PFPB 2341 Pipe Fabrication and Installation II (3)
(This is a WECM Course Number.)
In-depth instruction in advanced pipe fabrication procedures including pipe template development. Lab required. (2 Lec., 3 Lab.)

PFPB 2343 Pipe Practices (3)
(This is a WECM Course Number.)
An advanced course in testing; steam traps; valve maintenance; and the identification, storage, and handling of inline specialties. Lab required.
(2 Lec., 3 Lab.)

PFPB 2347 Plumbing and Pipefitting Equipment and Safety (3)
(This is a WECM Course Number.)
Instruction in the safe use of construction equipment used in the process of the plumbing and pipefitting trades. Required (2 Lec., 2 Lab.)

PHED 1100 Beginning Lifetime Sports Activities (1)
(This is a Texas Common Course Number.)
Beginning level skills in various lifetime sports are presented as well as rules, etiquette, safety, strategy, offensive and defensive elements, conditioning activities and physical assessments where appropriate. Physical. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1101 Beginning Casting and Angling (1)
(This is a Texas Common Course Number.)
This course will include the fundamentals of bait casting, spinning and spin casting. This course covers basic knowledge and understanding of angling techniques and concepts, and will include several tackle crafts. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1102 Beginning Soccer (1)
(This is a Texas Common Course Number.)
Course content emphasizes the basic playing skills of both indoor and outdoor soccer at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1103 Shooting and Firearm Safety (1)
(This is a Texas Common Course Number.)
Course content includes fundamentals of shooting, gun safety and principles of reloading. This course includes personal safety associated with hunting and sport shooting. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1104 Beginning Softball (1)
(This is a Texas Common Course Number.)
Course content includes the basic playing skills of softball at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. These common elements will be applied to fast pitch, slow pitch, and coed softball. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1105 Beginning Racquetball (1)
(This is a Texas Common Course Number.)
Basic racquetball skills, rules and strategies are taught and class tournaments are conducted. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1106 Beginning Badminton (1)
(This is a Texas Common Course Number.)
Course content emphasizes the basic playing skills of badminton at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. Each of the above elements will be applied to the singles, doubles, and mixed-double games. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1107 Intramural Athletics (1)
(This is a Texas Common Course Number.)
Intramural competition in a variety of activities is offered for men and women. Individual and team competition are offered. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1108 Beginning Archery (1)
(This is a Texas Common Course Number.)
The beginning level skills of target and field shooting and bow hunting are emphasized. History, rules of competition, preparation and care of equipment and safety are included. Equipment is furnished. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1109 Beginning Golf (1)
(This is a Texas Common Course Number.)
Course content emphasizes the basic skills involved in club selection, golf course analysis, shot selection and execution of the golf swing. Rules, scoring, handicapping, and etiquette are included. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1110 Beginning Tennis (1)
(This is a Texas Common Course Number.)
This course emphasizes the acquisition of beginning level skills in the execution of forehand strokes, backhand strokes, the serve, and the volley. Rules, strategies of the singles and doubles games, etiquette, safety, and competitive activities are included. Equipment is furnished. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1111 Beginning Bowling (1)
(This is a Texas Common Course Number.)
Basic bowling skills at the beginner level as well as rules, strategies, safety, scoring and competitive activities are emphasized. All classes are conducted at an off-campus bowling lane. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1112 Folk Dance (1)
(This is a Texas Common Course Number.)
Participation is provided in a variety of folk dances from other lands. The study of cultural backgrounds and costumes is included. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1113 Beginning Gymnastics (1)
(This is a Texas Common Course Number.)
Beginning level skills in both men's and women's all-around gymnastic events are emphasized. Men's events include horizontal bar, pommel horse, rings, vaulting, floor exercise, and parallel bars. Women's events include floor exercise, vaulting, balance beam, and uneven parallel bars. Basic tumbling skills are also included. All appropriate events will be incorporated into a beginner's level routine. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1114 Beginning Swimming (1)
(This is a Texas Common Course Number.)
This course is designed to teach a non-swimmer or a shallow water swimmer to become a safe and efficient deep-water swimmer. After the development of sufficient skills to perform a modified crawl stroke, the elementary back stroke, survival floating, jumping into deep water, leveling off and changing directions, swimmers will be able to swim in deep water. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1115 Social Dance (1)
(This is a Texas Common Course Number.)
This course is for students who have limited experience in dance. Ballroom and social dancing are offered. Included are fundamental steps and rhythms of the fox-trot, waltz, tango, and recent dances. "Country" dancing includes the two-step, cotton-eyed Joe, square dance, and other dances. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1116 Conditioning Exercise (1)
(This is a Texas Common Course Number.)
This course focuses on understanding exercise and its effect on the body. Cardiovascular endurance, muscular strength, endurance and flexibility are improved through a variety of conditioning activities. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1117 Beginning Basketball and Volleyball (1)
(This is a Texas Common Course Number.)
Basic basketball and volleyball skills are taught. Rules, game strategies and competitive activities are included. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1118 Modern Dance (1)
(This is a Texas Common Course Number.)
This beginning course is designed to emphasize basic dance technique, body alignment and placement, floor work, locomotor patterns, and creative movement. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1119 Beginning Weight Training (1)
(This is a Texas Common Course Number.)
Instruction in weight training and conditioning techniques are stressed. Emphasis is placed on muscular strength and endurance. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1120 Beginning Self-Defense (1)
(This is a Texas Common Course Number.)
Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed. Uniform required. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1121 Beginning Jogging (1)
(This is a Texas Common Course Number.)
Development and improvement of physical fitness through jogging is emphasized. Fitness concepts and jogging skills will be introduced. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1122 Outdoor Education (1)
(This is a Texas Common Course Number.)
Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1123 Beginning Walking for Fitness (1)
(This is a Texas Common Course Number.)
This course is designed for the student who desires cardiovascular fitness by means of a low impact method. Maximum physical fitness is achieved by vigorous walking. The heart rate is elevated to the appropriate target zone for peak conditioning. An extensive warm-up and cool down increases joint and muscle flexibility. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1124 Beginning Aerobics (1)
(This is a Texas Common Course Number.)
This course emphasizes the development of cardiovascular endurance by utilizing choreographed routines which may combine basic dance patterns with walking, jogging, jumping, etc. Individual fitness levels are accommodated by the intensity of the workout. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1125 Aquatic Fitness (1)
(This is a Texas Common Course Number.)
This course is designed to promote fitness through the use of water-related activities compatible with a pool environment. Emphasis is placed on water resistant exercises, lap swimming utilizing various kicks and strokes, relays, and a variety of aquatic games. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1126 Beginning Cycling (1)
(This is a Texas Common Course Number.)
Development of cycling skills and improvement of physical fitness through cycling are emphasized. Fitness concepts, riding technique, safety, routine maintenance and repair of the cycle are fundamental topics of this course. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1127 Triathlon Fitness (1)
(This is a Texas Common Course Number.)
This course includes an individualized program of walking, running, cycling, swimming, and weight training. From these activities, the student and instructor will design a fitness program to improve total body fitness, strength, endurance and self-image. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1128 Canoeing/Kayaking (1)
(This is a Texas Common Course Number.)
This course is designed to teach the students knowledge and appreciation of basic white water canoeing/kayaking skills so they can actively engage in these activities throughout their lives. A weekend river trip is included in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1129 Backpacking/Rock Climbing (1)
(This is a Texas Common Course Number.)
This course is designed to teach the students basic skills, knowledge and appreciation of backpacking and rock climbing to the extent that they can actively engage in these activities throughout their lives. A weekend backpacking trip is included in the course. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1130 Intermediate Lifetime Sports Activities (1)
(This is a Texas Common Course Number.)
Intermediate and intermediate/advanced skills in a variety of lifetime sports are presented. Students participate in a selected sport. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1131 Intermediate Soccer (1)
(This is a Texas Common Course Number.)
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of strategies, safety, offensive and defensive patterns of play and competitive activities are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1132 Intermediate Softball (1)
(This is a Texas Common Course Number.)
Emphasis is placed on game strategy, base coaching, preparing a lineup, conducting drills, and performance on hitting, catching, and throwing. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1133 Intermediate Racquetball (1)
(This is a Texas Common Course Number.)
This activity course is designed for students seeking to advance their racquetball skill level. The course content covers advanced shot execution, strategy, and the doubles game. Emphasis is placed on improved skill and strategy. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1134 Intermediate Physical Fitness (1)
(This is a Texas Common Course Number.)
Basic skills and techniques of fitness-related activities are developed beyond the beginner level. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1135 Intermediate Archery (1)
(This is a Texas Common Course Number.)
Course content includes refinement for basic archery skills and competitive target shooting and field archery. Equipment is furnished. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1136 Intermediate Golf (1)
(This is a Texas Common Course Number.)
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of the golf swing, swing theory and methods, strategy, and actual golf course playing are emphasized. Equipment is furnished. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1137 Intermediate Tennis (1)
(This is a Texas Common Course Number.)
Emphasis is placed on refinement of basic skills and specialty shots. Competitive activities in singles, doubles and mixed doubles will be included. Equipment is furnished. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1139 Intermediate Gymnastics (1)
(This is a Texas Common Course Number.)
Basic tumbling and the all-around events for men and women will be emphasized at the intermediate performance level. Course emphasis is placed on the development, preparation and presentation of gymnastic routines. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1140 Intermediate Swimming (1)
(This is a Texas Common Course Number.)
The correct performance of the crawl, elementary back stroke, side and breast strokes will be emphasized. Some speed and endurance swimming will be required. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1141 Intermediate Weight Training (1)
(This is a Texas Common Course Number.)
Skills and instruction in weight training techniques are developed beyond the beginner level. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1142 Intermediate Self-Defense (1)
(This is a Texas Common Course Number.)
Students will be introduced to intermediate forms of defense and combinations of self defense methods. Emphasis is on practical application of self defense movements. Uniform required. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1143 Intermediate Jogging (1)
(This is a Texas Common Course Number.)
Improvement of physical fitness through jogging is developed beyond the beginner stage. A higher level of fitness is expected. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1144 Intermediate Walking for Fitness (1)
(This is a Texas Common Course Number.)
Students participate in a low impact exercise walking program beyond the beginning level. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1145 Intermediate Aerobics (1)
(This is a Texas Common Course Number.)
This course emphasizes the development of cardiovascular endurance through a combination of walking, jogging, jumping, etc. Individual fitness levels are developed beyond the beginner level. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1146 Intermediate Basketball (1)
(This is a Texas Common Course Number.)
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of shooting, passing, dribbling, team play, strategies, and competitive play covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1147 Intermediate Volleyball (1)
(This is a Texas Common Course Number.)
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of the forearm pass, setting, spiking, serving, team play, strategies, and competitive play are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1148 Intermediate Baseball (1)
(This is a Texas Common Course Number.)
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of hitting, fielding, pitching, team play, and competitive play are emphasized. Baseball history and interpretation of the rules are also covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1149 Intermediate Cycling (1)
(This is a Texas Common Course Number.)
Improvement of physical fitness through cycling is developed beyond the beginner stage. A higher level of fitness is expected. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1150 Intermediate Bowling (1)
(This is a Texas Common Course Number.)
This course is designed for students seeking improvement in the lifetime sport of bowling. The course covers a review of history, etiquette, care and selection of equipment, rules and scoring. Additional information will be provided on handicapping, league play, variation of grips, spot bowling and alley textures. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085123)

PHED 1164 Beginning Physical Fitness (1)
(This is a Texas Common Course Number.)
Students are introduced to wellness related concepts and activities for the purpose of gaining knowledge and skills necessary to evaluate personal fitness level and to develop a personal lifelong fitness program. Activities include, but are not limited to: aerobics, circuit training, muscular development, flexibility, agility exercises, weight training and body composition. (3 Lab.)
(Coordinating Board Academic Approval Number 3105015223)

PHED 1251 Scuba Diving (2)
(This is a Texas Common Course Number.)
This course includes instruction in the proper use of equipment, safety, physiology and open water diving. Students completing course requirements receive certification through one of several major accredited associations. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601085323)

PHED 1252 Advanced Open Water Scuba (2)
(This is a Texas Common Course Number.)
Prerequisite: Physical Education 1251 or appropriate certifying agency entry level certificate. Instruction will include the introductory knowledge and skill development in the open water environment for the student to participate in underwater investigation, deep diving, search and light salvage, and limited visibility/night diving. Safety, special equipment, dive planning and dive buddy procedures will be covered. Upon successful completion of the course, the student will receive advanced open water certification through a qualified certifying agency. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601085323)

PHED 1270 Divemaster (2)
(This is a Unique Need Course.)
Prerequisite: Physical Education 1252 or advanced certification from any of the national certifying organizations. This course is designed for the advanced diver who seeks additional training as an instructional assistant responsible for the organization, teaching and safety of scuba divers. Students who successfully complete this course will receive divemaster certification. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601089323)

PHED 1301 Introduction to Physical Education (3)
(This is a Texas Common Course Number.)
This course is for students majoring in physical education and is designed for professional orientation in physical education, health, and recreation. The history, philosophy, and modern trends of physical education are surveyed. Topics include teacher qualifications, vocational opportunities, expected competencies, and skill testing. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 3105015223)

PHED 1304 Health for Today (3)
(This is a Texas Common Course Number.)
Emphasis is placed on relating course content to lifestyle to foster a better understanding of the major health issues of today. Current issues include, but are not limited to: emotional health, chemical use and abuse, human sexuality, major diseases, physical fitness, nutrition, aging, death and dying. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 5115045116)

PHED 1306 Advanced First Aid and Emergency Care (3)
(This is a Texas Common Course Number.)
This course covers the theory and practice in advanced first aid and emergency care. Various aspects of safety education also are included. The course content has been selected from nationally recognized organizations in safety education and first aid. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 5115045316)

PHED 1308 Sports Officiating I (3)
(This is a Texas Common Course Number.)
This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are football, basketball, and other sports as appropriate. Students are expected to officiate intramural games. This course does not satisfy the physical education activity course requirement. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3101015123)

PHED 1309 Sports Officiating II (3)
(This is a Texas Common Course Number.)
This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are softball, track and field, baseball, and other sports as appropriate. Students are expected to officiate intramural games. This course does not satisfy the physical education activity course requirement. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3101015123)

PHED 1321 The Coaching of Football and Basketball (3)
(This is a Texas Common Course Number.)
The skills and techniques of coaching football and basketball are presented. Included are the history, theories, philosophies, rules, terminology, and finer points of the sports. Emphasis is on coaching techniques. This course does not satisfy the physical education activity course requirement. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3105055123)

PHED 1336 Outdoor Recreation (3)
(This is a Texas Common Course Number.)
Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 3101015123)

PHED 1337 Community Recreation (3)
(This is a Texas Common Course Number.)
This course is primarily for students majoring or minoring in health, physical education, or recreation. The principles, organization, and function of recreation in American society are covered. This course does not satisfy the physical educationactivity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 3101015123)

PHED 2155 Advanced Life Saving (1)
(This is a Texas Common Course Number.)
Prerequisite: Demonstrated competence approved by the instructor. Successful completion of this course qualifies students for the Red Cross Life Guarding Certificate. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085323)

PHED 2255 Water Safety Instructor (2)
(This is a Texas Common Course Number.)
Prerequisite: Current Advanced Life Saving Card. The principles and techniques for instructors in water safety and life saving classes are covered. Completion of the course qualifies the student to test for certification by the Red Cross as a water safety instructor. A uniform is required. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601085323)

PHIL 1301 Introduction to Philosophy (3)
(This is a Texas Common Course Number.)
An introduction to the ideas about such things as the good life, reality, God, the acquisition and characteristics of knowledge, and the nature of humans. Students will evaluate both ancient and modern theories about these issues in terms of their logic, historical significance, and meaning in everyday life, as they practice the methods for doing philosophy. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015112)

PHIL 1313 Critical Thinking (3)
(This is a Texas Common Course Number.)
This course is designed to improve students' critical thinking ability. Students will both analyze and construct arguments. Elementary deductive forms, common fallacies, and inductive reasoning are considered.
(3 Lec.)
(Coordinating Board Academic Approval Number 3801015712)

PHIL 2303 Logic (3)
(This is a Texas Common Course Number.)
The critical and correct construction and analysis of arguments using induction, deduction and scientific reasoning. Students will practice analyzing fallacies, definitions, analogies, and uses of language. They will learn to use some of the elementary tools of formal logic, such as Venn diagrams, truth tables, and formal proofs using the rules of inference. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015212)

PHIL 2306 Ethics (3)
(This is a Texas Common Course Number.)
Consideration of what constitutes a good and a moral life. Using classical and contemporary theories, students will weigh such ingredients as pleasure, duty, power, and love as they apply to current issues of daily living. Students may consider ethical problems in business, law, and medicine. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015312)

PHIL 2307 Introduction to Social and Political Philosophy (3)
(This is a Texas Common Course Number.)
The relationships of philosophical ideas to the community are presented. Emphasis is on concepts of natural rights, justice, education, freedom, and responsibility (3 Lec.)
(Coordinating Board Academic Approval Number 3801015412)

PHIL 2316 History of Ancient Philosophy (3)
(This is a Texas Common Course Number.)
The history of philosophy from pre-Socratic times to the Renaissance is examined. Connections are made between the pre-Socratics, Plato, and Aristotle; Stoicism, Epicureanism, and Scholasticism are considered
(3 Lec.)
(Coordinating Board Academic Approval Number 3801015512)

PHIL 2317 History of Modern Philosophy (3)
(This is a Texas Common Course Number.)
The history of philosophy from the Renaissance through the 19th century is examined. Emphasis is on continental rationalism, British empiricism, Kantian metaphysics and epistemology, and the Hegelian system as it relates to 20th century philosophies. The historical relationships among these schools of thought are explored. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015512)

PHIL 2318 Contemporary Philosophy (3)
(This is a Texas Common Course Number.)
As a third course in the history of philosophy sequence, this course examines philosophic movements in the 20th and 21st centuries. Emphasis may vary from semester to semester. Existentialism, logical positivism, linguistic philosophy, among others, as well as individual philosophers, may be considered. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015512)

PHIL 2389 Academic Cooperative in Philosophy (3)
(This is a Texas Common Course Number.)
This course will integrate on-campus study with practical hands-on experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of philosophy.
(1 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2401035212)

NOTE: These courses have a Dallas County Community College prefix of "PHOT;" however, some can be identified by a Common Course Number for transfer evaluation purposes. Both are listed in the parenthetical notes in the course descriptions.

PHOT 1316 Introduction to Photography and Photojournalism (3)
(The Texas Common Course Number is COMM 1316.)
Photography and photojournalism are introduced. Topics include the general mechanics of camera lenses and shutters and the general characteristics of photographic films, papers, and chemicals. Darkroom procedures are presented, including enlarging, processing, contact printing, and exposing films and papers. Artificial lighting is introduced. (2 Lec., 4 Lab)
(Coordinating Board Academic Approval Number 0904015506)

PHOT 1317 Advanced Photography and Photojournalism (3)
(The Texas Common Course Number is COMM 1317.)
Prerequisite: Photography 1316 or demonstrated competence approved by the instructor Techniques learned in Photography 1316 are refined. Emphasis is on photographic communication. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0904015512)

PHOT 2324 Introduction to Multimedia (3)
(The Texas Common Course Number is COMM 2324.)
Prerequisite: Photography 1316 or Art 2356, Photography 2325. This course will provide students with an exploration of the latest computer hardware and software applications used to produce multimedia presentations. Students will experience the areas of digital sound reproduction, the creation of computer animation, converting video into digital images, and digital editing techniques. (2 Lec., 4 Lab)
(Coordinating Board Academic Approval Number 0907015306)

PHOT 2325 Introduction to Digital Imaging (3)
(The Texas Common Course Number is COMM 2325.)
Prerequisite: Photography 1316 or Art 2356 is recommended for this course. This is a broad-based, introductory course which explores the creation and manipulation of images on the computer. The course content will include an introduction to the computer system, an overview of desktop publishing and graphic programs, use of the digital camera, scanning-in photographs, and exploring techniques of photo-manipulation. (2 Lec., 4 Lab)
(Coordinating Board Academic Approval Number 0907015306)

PHOT 2326 Advanced Digital Imaging (3)
(The Texas Common Course Number is COMM 2326.)
Prerequisite: Photography 2325 is required. In addition, Photography 1316 or Art 2356 is recommended. This course will explore in greater depth the applications covered in the Introduction to Digital Photography (Photography 2325) class. Students will work to master the technical complexities of digital photography and seek to clarify a personal direction through extended projects. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0907015306)

PHOT 2356 Commercial Photography I (3)
(The Texas Common Course Number is ARTS 2356.)
Prerequisite: Photography 1316 and 1317 or demonstrated competence approved by the instructor Commercial or contract photography is studied. Field, studio, and darkroom experiences for various kinds of photography are discussed. Social, portrait, studio, fashion, publicity, landscape, and product photography, as well as portfolio development, are included. The use of natural and artificial lighting is covered. This course is cross-listed as Arts 2356. The student may register for either Photography 2356 or Arts 2356, but may receive credit for only one of the two. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055126)

PHOT 2357 Commercial Photography II (3)
(The Texas Common Course Number is ARTS 2357.)
Prerequisite: Photography 1316 and 1317 or demonstrated competence approved by the instructor This course is a continuation of Photography 2356. Publicity, architectural, interior, and advertising photography are included. The latest equipment, papers, films, and techniques are explored. Exchanges may be made with sample clients, employers, studios, and agencies. This course is cross-listed as Arts 2357. The student may register for either Photography 2357 or Arts 2357, but may receive credit for only one of the two.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055226)

PHTC 1349 Photo Digital Imaging I (3)
(This is a WECM Course Number.)
Prerequisite: IMED 1301. Instruction in the computer as an electronic darkroom. Topics include color and gray scale images and image conversion and presentation.
(2 Lec., 4 Lab.)

PHTC 1380 Cooperative Education-Commercial Photography
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

PHTC 2349 Photo Digital Imaging II (3)
(This is a WECM Course Number.)
Prerequisite: PHTC 1349 or PHOT 2325. Continued skill development in the use of the computer for retouching, copying, photographic restoration, color correction, data importation, composite imaging, and background dropout and replacement. (2 Lec., 4 Lab.)

PHYS 1111 Astronomy Laboratory I (1)
(This is a Texas Common Course Number.)
Prerequisite: Credit or concurrent enrollment in Physics 1311. The student uses simple equipment to make elementary astronomical observations of the motions of celestial objects. Also covered are elementary navigational techniques, graphical techniques of calculating the position of a planet or comet, and construction of simple observing equipment. This laboratory includes night observations. (3 Lab.)
(Coordinating Board Academic Approval Number 4002015103)

PHYS 1112 Astronomy Laboratory II (1)
(This is a Texas Common Course Number.)
Prerequisite: Credit or concurrent enrollment in Physics 1312. The student makes and uses elementary astronomical observations. Topics include timekeeping, the various uses of spectra, and the motions of stars and galaxies. This laboratory includes night observations.
(3 Lab.)
(Coordinating Board Academic Approval Number 4002015103)

PHYS 1311 Descriptive Astronomy (3)
(This is a Texas Common Course Number.)
This course surveys the fundamentals of astronomy. Emphasis is on the solar system. Included is the study of the celestial sphere, the earth's motions, the moon, planets, asteroids, comets, meteors, and meteorites. This course is cross-listed as Physics 1411. The student may register for either Physics 1311 or Physics 1411, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4002015103)

PHYS 1312 General Astronomy (3)
(This is a Texas Common Course Number.)
Stellar astronomy is emphasized. Topics include a study of the sun, the properties of stars, star clusters, nebulae, interstellar gas and dust, the Milky Way Galaxy, and external galaxies. This course is cross-listed as Physics 1412. The student may register for either Physics 1312 or Physics 1412, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4002015103)

PHYS 1401 Introductory General Physics (4)
(This is a Texas Common Course Number.)
Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for pre-dental, biology, premedical, pre-pharmacy, and pre-architecture majors and other students who need a two-semester technical course in physics. Mechanics and heat are studied. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015303)

PHYS 1402 Introductory General Physics (4)
(This is a Texas Common Course Number.)
Prerequisite: Physics 1401. This course is a continuation of Physics 1401. Electricity, magnetism, light, and sound are studied. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015303)

PHYS 1405 Concepts in Physics (4)
(This is a Texas Common Course Number.)
This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of worldwide energy production are examined. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015103)

PHYS 1407 Concepts in Physics (4)
(This is a Texas Common Course Number.)
This is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on modern developments in physics. Topics include acoustics, electricity and magnetism, light and the electromagnetic spectrum, atomic physics, and relativity. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015103)

PHYS 1411 Fundamentals of Astronomy (4)
(This is a Texas Common Course Number.)
This course concerns fundamental aspects of the solar system and the historical development of astronomical ideas. Included are studies of the celestial sphere and motions of the earth, the moon, planets, and other minor bodies. The origin and evolution of the solar system are also covered. The laboratory includes outdoor viewing sessions and study of celestial motions, elementary navigation, constellation identification, and telescope construction. This course is cross-listed as Physics 1311. The student may register for either Physics 1411 or Physics 1311, but may receive credit for only one of the two. (3 Lec., 3 Lab)
(Coordinating Board Academic Approval Number 4002015103)

PHYS 1412 General Introductory Astronomy (4)
(This is a Texas Common Course Number.)
This course concerns fundamental properties of stars, stellar systems, star clusters, nebulae, interstellar gas and dust, and galaxies. Included is the study of the sun, Milky Way Galaxy, stellar evolution, black holes, and current cosmological ideas. The laboratory includes outdoor viewing sessions and the study of timekeeping, use of spectra, and motions of stars and galaxies. This course is cross-listed as Physics 1312. The student may register for either Physics 1412 or Physics 1312, but may receive credit for only one of the two.
(3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4002015103)

PHYS 1415 Physical Science (4)
(This is a Texas Common Course Number.)
This course is primarily for non-science majors. It is a study of the basic principles and concepts of physics, chemistry, and nuclear science. The three basic sciences are related to the physical world at an introductory level. (3 Lec., 3 Lab)
(Coordinating Board Academic Approval Number 4001015103)

PHYS 1417 Physical Science (4)
(This is a Texas Common Course Number.)
This course is for non-science majors. It focuses on the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are emphasized. Selected principles and concepts are explored. This course is cross-listed as Geology 1401. The student may register for either Physical Science 1417 or Geology 1401, but may receive credit for only one of the two. (3 Lec., 3 Lab)
(Coordinating Board Academic Approval Number 4001015103)

PHYS 2425 General Physics (4)
(This is a Texas Common Course Number.)
Prerequisite: Credit or concurrent enrollment in Mathematics 2513. This course is designed primarily for physics, chemistry, mathematics, and engineering majors. The principles and applications of mechanics, wave motion, and sound are studied. Emphasis is on fundamental concepts, problem-solving, notation, and units. The laboratory includes a one-hour problem session. (3 Lec., 3 Lab)
(Coordinating Board Academic Approval Number 4008015403)

PHYS 2426 General Physics (4)
(This is a Texas Common Course Number.)
Prerequisite: Physics 2425 and credit or concurrent enrollment in Mathematics 2414. This course presents the principles and applications of heat, electricity, magnetism, and optics. Emphasis is on fundamental concepts, problem-solving, notation and units. The laboratory includes a one-hour problem session.
(3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015403)

POFI 1100 Introduction to Computer Fundamentals (1)
(This is a WECM Course Number.)
Prerequisite: Keyboarding proficiency.
An introduction to various computer applications using a specific business or office-related software. Projects emphasize the concurrent development of office skills and computer knowledge. This course is cross-listed as POFI 1200. The student may register for either POFI 1100 or POFI 1200, but may receive credit for only one of the two. This course may be repeated for credit.
(1 Lec.)

POFI 1200 Introduction to Computer Fundamentals (2)
(This is a WECM Course Number.)
Prerequisite: Keyboarding proficiency.
An introduction to various computer applications using a specific business or office-related software. Projects emphasize the concurrent development of office skills and computer knowledge. This course is cross-listed as POFI 1100. The student may register for either POFI 1200 or POFI 1100, but may receive credit for only one of the two. This course may be repeated for credit.
(2 Lec.)

POFI 1301 Computer Applications I (3)
(This is a WECM Course Number.)
Prerequisite: Keyboarding proficiency. Overview of computer applications including current terminology and technology. Introduction to computer hardware, software applications, and procedures. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 2 Lab.)

POFI 1341 Computer Applications II (3)
(This is a WECM Course Number.)
Continued study of current computer terminology and technology. Advanced skill development in computer hardware, software applications, and procedures This course is cross-listed as POFI 1441. The student may register for either POFI 1341 or POFI 1441, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 2 Lab.)

POFI 1345 Integrated Software Applications II (3)
(This is a WECM Course Number.)
Continued study of computer applications from business productivity software suites. Instruction in embedding data and linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. (2 Lec., 2 Lab.)

POFI 1349 Spreadsheets (3)
(This is a WECM Course Number.)
In-depth coverage in the use of a spreadsheet software application. This course may be repeated if topics and learning outcomes vary. (2 Lec., 3 Lab.)

POFI 1441 Computer Applications II (4)
(This is a WECM Course Number.)
Prerequisite: Computer Applications I or equivalent. Continued study of current computer terminology and technology. Advanced skill development in computer hardware, software applications, and procedures. This course is cross-listed as POFI 1341. The student may register for either POFI 1441 or POFI 1341, but may receive credit for only one of the two. This course may be repeated if topics and learning outcomes vary.
(3 Lec., 2 Lab.)

POFI 2301 Word Processing (3)
(This is a WECM Course Number.)
Prerequisite: Keyboarding proficiency. In-depth coverage of word processing software application. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

POFI 2331 Desktop Publishing for the Office (3)
(This is a WECM Course Number.)
Prerequisite: Keyboarding proficiency.
In-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis on layout techniques, graphics, and multiple page displays. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

POFI 2340 Advanced Word Processing (3)
(This is a WECM course number).
Prerequisite: POFI 2301 or instructor consent. Continuation of the study of word processing including advanced applications in merging, macros, graphics, desktop publishing, and extensive formatting for technical documents. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

POFM 2313 Medical Transcription II (3)
(This is a WECM Course Number.)
Prerequisite: MRMT 1307 Medical Transcription Fundamentals. Skill development in the production of medical reports including history and physicals, consultations, discharge summaries, operative reports, and other medical reports. Emphasis on speed and accuracy. (2 lec., 2 lab)

POFT 1127 Introduction to Keyboarding (1)
(This is a WECM Course Number.)
Skill development in keyboarding with emphasis on alphabet, number, and symbol keys by touch. (3 Lab.)

POFT 1192 Special Topics in Administrative Assistant/Secretarial Science, General (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

POFT 1193 Special Topics in General Office/Clerical and Typing Services (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation which are relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lab.)

POFT 1207 Proofreading and Editing (2)
(This is a WECM Course Number.)
Instruction in proofreading and editing skills necessary to assure accuracy in business documents. (1 Lec., 2 Lab.)

POFT 1292 Special Topics in Administrative Assistant/Secretarial Science, General (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

POFT 1293 Special Topics in General Office/Clerical and Typing Services (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation which are relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec., 2 Lab.)

POFT 1301 Business English (3)
(This is a WECM Course Number.)
Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business. (2 Lec., 2 Lab.)

POFT 1309 Administrative Office Procedures I (3)
(This is a WECM Course Number.)
Prerequisite: Basic keyboarding skills. Study of current office procedures, duties, and responsibilities applicable to an office environment. (2 Lec., 2 Lab.)

POFT 1313 Professional Development for Office Personnel (3)
(This is a WECM Course Number.)
Preparation for the work force including business ethics, interpersonal relations, professional attire, and career advancement. (2 Lec., 2 Lab.)

POFT 1319 Records and Information Management I (3)
(This is a WECM Course Number.)
Introduction to basic records and information management. Includes the life cycle of a record, manual and electronic records management, and basic filing procedures and rules. (2 Lec., 2 Lab.)

POFT 1321 Business Math (3)
(This is a WECM Course Number.)
Instruction in the fundamentals of business mathematics including analytical and problem-solving skills for critical thinking in business applications. (3 Lec.)

POFT 1325 Business Math and Machine Applications (3)
(This is a WECM Course Number.)
Skill development in the use of electronic calculators and business math functions. Emphasis on business problem-solving skills using spreadsheet software and/or electronic calculation/keyboard. (2 Lec., 2 Lab.)

POFT 1328 Business and Professional Presentations (3)
(This is a WECM Course Number.)
Prerequisite: Keyboarding proficiency.
Skill development in planning and conducting business presentations on an individual and/or group basis including communication and media skills. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 2 Lab.)

POFT 1329 Keyboarding and Document Formatting (3)
(This is a WECM Course Number.)
Skill development in the operation of the keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents.
(2 Lec., 2 Lab.)

POFT 1349 Administrative Office Procedures II (3)
(This is a WECM Course Number.)
In-depth coverage of office application with special emphasis on decision making, goal setting, management theories, and critical thinking. (2 Lec., 2 Lab.)

POFT 1380 Cooperative Education-Administrative Assistant/Secretarial Science, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

POFT 1381 Cooperative Education-Administrative Assistant/Secretarial Science, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

POFT 1382 Cooperative Education-General Office/Clerical and Typing Services (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

POFT 1383 Cooperative Education-General Office/Clerical and Typing Services (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

POFT 1392 Special Topics in Administrative Assistant/Secretarial Science, General (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation which are relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 2 Lab.)

POFT 1393 Special Topics in General Office/Clerical and Typing Services (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 2 Lab.)

POFT 1493 Special Topics in General Office/Clerical and Typing Services (4)
(This is a WECM Course Number.)
Topics address recently identified current event, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

POFT 2203 Speed and Accuracy Building (2)
(This is a WECM Course Number.)
Review, correct, improve, and/or perfect touch keyboarding techniques for the purpose of increasing speed and improving accuracy. (1 Lec., 2 Lab.)

POFT 2301 Document Formatting and Skillbuilding (3)
(This is a WECM Course Number.)
Prerequisite: Keyboarding and Document Formatting. A continuation of keyboarding skills in document formatting, emphasizing speed, and accuracy. Emphasis on proofreading, editing, and following instructions, and keying documents from various copy. (2 Lec., 2 Lab.)

POFT 2312 Business Correspondence and Communication (3)
(This is a WECM Course Number.)
Prerequisite: Basic keyboarding skills. Development of writing skills to produce effective business documents. (2 Lec., 2 Lab.)

POFT 2331 Administrative Systems (3)
(This is a WECM Course Number.)
Advanced concepts of project management and office procedures utilizing integration of previously learned office skills. (2 Lec., 2 Lab.)

POFT 2380 Cooperative Education-Administrative Assistant/Secretarial Science, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

POFT 2381 Cooperative Education-Administrative Assistant/Secretarial Science, General (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.) (1 Lec., 20 Ext.)

POFT 2382 Cooperative Education-General Office/Clerical and Typing Services (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

POFT 2383 Cooperative Education-General Office/Clerical and Typing Services (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

POFT 2388 Internship-General Office/Clerical and Typing Services (3)
(This is a WECM Course Number.)
A work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. A learning plan is developed by the college and the employer. (1 Lec., 15 Ext.)

PORT 1311 Introduction to Portuguese (3)
(This is a Texas Common Course Number.)
PORT 1311 is an introduction to the regular Portuguese course sequence; it is not a substitute for PORT 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in PORT 1411. This course is cross-listed as Portuguese 1411. The student may register for either Portuguese 1311 or Portuguese 1411, but may receive credit for only one of the two. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1609045113)

PORT 1411 Beginning Portuguese (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. This course is cross-listed as Portuguese 1311. The student may register for either Portuguese 1411 or Portuguese 1311, but may receive credit for only one of the two. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609045113)

PORT 1412 Beginning Portuguese (4)
(This is a Texas Common Course Number.)
Prerequisite: Portuguese 1411 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Portuguese 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609045113)

PORT 2311 Intermediate Portuguese (3)
(This is a Texas Common Course Number.)
Prerequisite: Portuguese 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1609045213)

PORT 2312 Intermediate Portuguese (3)
(This is a Texas Common Course Number.)
Prerequisite: Portuguese 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Portuguese 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture. (3 Lec.)
(Coordinating Board Academic Approval Number 1609045213)

PSTR 1191 Special Topics in Baker/Pastry Chef (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec., 1 Lab.)

PSTR 1206 Cake Decorating I (2)
(This is a WECM Course Number.)
Introduction to skills, concepts and techniques of cake decorating. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.
(1 Lec., 3 Lab.)

PSTR 1207 Cake Decorating II (2)
(This is a WECM Course Number.)
Prerequisite: PSTR 1206. A course in decoration of specialized and seasonal products. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (1 Lec., 3 Lab.)

PSTR 1291 Special Topics in Baker/Pastry Chef (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 1 Lab.)

PSTR 1301 Fundamentals of Baking (3)
(This is a WECM Course Number.)
Fundamentals of baking including dough, quick breads, pies, cakes, cookies, tarts, and doughnuts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

PSTR 1305 Breads and Rolls (3)
(This is a WECM Course Number.)
Prerequisite: PSTR 1301 with a "C" or better. Concentration on fundamentals of chemically and yeast raised breads and rolls. Instruction on commercial preparation of a wide variety of products. The student will identify and explain baking terms, ingredients, equipment, and tools; scale and measure ingredients; convert and cost recipes; safely operate baking equipment and tools; and prepare yeast and quick breads and rolls to a commercially acceptable standard. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

PSTR 1310 Pies, Tarts, Teacakes and Cookies (3)
(This is a WECM Course Number.)
Prerequisite: PSTR 1301 with a "C" or better. Focus on preparation of American and European style pie and tart fillings and dough, cookies, teacakes, custard and batters. Instruction in finishing and presentation techniques. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.
(2 Lec., 4 Lab.)

PSTR 1312 Laminated Dough, Pate a Choux, and Donuts (3)
(This is a WECM Course Number.)
Prerequisite: PSTR 1301 and PSTR 1305 with a "C" or better. Focus on preparation of laminated doughs to include puff pastry, croissant, and Danish and a variety of pate a choux (eclair paste) products and donuts. Fillings and finishing techniques included. Both savory and sweet products are prepared. Emphasis is placed on advanced techiques, and presentation in preparation of these baked goods. (2 Lec., 4 Lab.)

PSTR 1342 Quantity Bakeshop Production (3)
(This is a WECM Course Number.)
Prerequisite: PSTR 1305 with a "C" or better. Advanced baking techniques to include volume production of breads and desserts. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

PSTR 1343 Bakery Operations and Management (3)
(This is a WECM Course Number.)
Introduction to management, marketing, supervision and sanitation principles required in retail and wholesale bakery operations. Emphasis on cost control, pricing, computer usage and personnel issues. (3 Lec., 1 Lab.)

PSTR 1391 Special Topics in Baker/Pastry Chef (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

PSTR 2330 Advanced Pastry Competition (3)
(This is a WECM Course Number.)
Prerequisite: PSTR 2331 with a "C" better. Skill development for culinary competition by offering advanced experience in salon presentations. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

PSTR 2331 Advanced Pastry Shop (3)
(This is a WECM Course Number.)
Prerequisite: PSTR 1301 with a "C" or better. A study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. (2 Lec., 4 Lab.)

PSYC 1300 Learning Framework (3)
(This is a Texas Common Course Number.)
This course is a study of theoretical models regarding how people learn, think and motivate themselves. Students will use assessment instruments to help them identify their own academic strengths and weaknesses. Students are ultimately expected to integrate and apply these skills to become effective efficient learners. (3 Lec.)
(Coordinating Board Academic Approval Number 4203015125)

PSYC 2301 Introduction to Psychology (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading. Introduction to Psychology surveys major topics in the study of behavior. Factors which determine and affect behavior are examined. Psychological principles are applied to the human experience. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015125)

PSYC 2302 Applied Psychology (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading. Psychological facts and principles are applied to problems and activities of life and will be used to examine basic aspects of human relationships in society. This course will involve the direct application of psychological principles to human relations problems in such areas as business, health occupations, social service agencies, and interpersonal relationships. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015225)

PSYC 2306 Human Sexuality (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading. Topics include physiological, psychological, and sociological aspects of human sexuality. This course is cross-listed as Sociology 2306. The student may register for either Pyschology 2306 or Sociology 2306, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015325)

PSYC 2314 Developmental Psychology (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading and Psychology 2301 recommended. This course is a study of human growth, development, and behavior. Emphasis is on psychological changes during life. Processes of life from prenatal beginnings through adulthood and aging are included. (3 Lec)
(Coordinating Board Academic Approval Number 4207015125)

PSYC 2316 Psychology of Personality (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading and Psychology 2301 recommended. This course is an introduction to the study of personality. Topics of personality and adjustment will be studied in the context of various personality theories. Emphasis will be on the application of those topics. (3 Lec)
(Coordinating Board Academic Approval Number 4201015725)

PSYC 2319 Social Psychology (3)
(This is a Texas Common Course Number.)
Prerequisite: Psychology 2301. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. This course is cross-listed as Sociology 2326. The student may register for either Psychology 2319 or Sociology 2326, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4216015125)

PSYC 2371 Current Issues in Psychology (3)
(This is a Unique Need Course.)
This course provides an in-depth study of current issues in psychology. Topics include: abnormal psychology, psychology of the offender, death and dying, and gender roles. Topics may vary from semester to semester. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 4201019125)

PSYC 2372 Communication and Negotiation Skills for Conflict Resolution (3)
(This is a Unique Need Course.)
This course teaches how to recognize negative communication styles and the technique necessary to break impasses, and create options or agreement; skills include how to build an atmosphere that fosters negotiation and how to mediate "win-win" solutions. This course is cross-listed as Sociology 2372. The student may register for either Psychology 2372 or Sociology 2372, but may receive credit for only one of the two.
(3 Lec.)
(Coordinating Board Academic Approval Number 4511019225)

PYSC 2373 Introduction to Mediation (3)
(This is a Unique Need Course.)
This course defines the process of mediation, its history and development, and examines theories of conflict resolution and negotiation. Explores the use of mediation in domestic, commercial, educational, and other settings. Within each of these contexts, laws, ethics, gender considerations, psychology, sociology, and cultural diversity will be explored. This course is cross-listed as Sociology 2373. The student may register for either Psychology 2373 or Sociology 2373, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4511019125)

PSYC 2389 Psychology Practicum (3)
(This is a common course number.)
An instructional program designed to integrate on-campus study with practical field experience in Psychology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human behavior, and/or social institutions, and in the practice of community services.
(1 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4501015125)

QCTC 1343 Quality Assurance (3)
(This is a WECM Course Number.)
Prerequisite: Credit or concurrent enrollment in MATH 1414 or the equivalent. Information on quality assurance principles and applications; designed to introduce the student to the quality assurance profession. (3 Lec.)

NOTE: HPRS 1204, 1291, 1202, 2300, 2231, 2201 are all health occupations core curriculum courses. These courses are listed and described in a separate section of the college catalog: Health Occupations Core Curriculum.

RADR 1166 Practicum (or Field Experience) – Radiologic Technology/Science – Radiographer (1)
(This is a WECM Course Number.)
Prerequisite: HPRS 2231, HPRS 1204, HPRS 1291, RADR 2213, RADR 1411, RADR 1313, RADR 2301. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (8 Ext.)

RADR 1202 Radiographic Image Evaluation I (2)
(This is a WECM Course Number.)
Prerequisite: RADR 1166 or instructor permission. This course will introduce the student to the scientific process of radiographic image evaluation. (2 Lec.)

RADR 1250 Radiographic Image Evaluation II (2)
(This is a WECM Course Number.)
Prerequisite: RADR 1267 or instructor permission. Topics addressed are image quality assessment developing image quality standards, and applying the scientific process in developing exposure charts.
(2 Lec.)

RADR 1267 Practicum (or Field Experience) – Radiologic Technology/Science – Radiographer (2)
(This is a WECM Course Number.)
Prerequisite: RADR 1166. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (20 Ext.)

RADR 1313 Principles of Radiographic Imaging I (3)
(This is a WECM Course Number.)
Prerequisite: RADR 1411. An introduction to radiographic image qualities and the effects of exposure

variables upon these qualities. (2 Lec., 3 Lab.)

RADR 1411 Basic Radiographic Procedures (4)
(This is a WECM Course Number.)
Prerequisite: RADR 2213, HPRS 1204, SCIT 1408 or BIOL 2402 or concurrent enrollment. An introduction to radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of basic anatomy. (3 Lec., 4 Lab.)

RADR 2213 Radiation Biology and Protection (2)
This is a WECM course number.)
Prerequisite: SCIT 1407 or BIOL 2401 and admission to the program. A study of the effects of radiation exposure on biological systems, typical medical exposure levels, methods for measuring and monitoring radiation and methods for protecting personnel and patients from excessive exposure. (2 Lec.)

RADR 2217 Radiographic Pathology (2)
(This is a WECM Course Number.)
Prerequisite: HPRS 2201, SCIT 1408 or BIOL 2402, RADR 1411, RADR 2301, RADR 2331. A presentation of the disease process and common diseases and their appearance on medical images. (2 Lec.)

RADR 2235 Radiologic Technology Seminar (2)
(This is a WECM Course Number.)
Prerequisite: All previously required RADR courses in sequence, concurrent enrollment or permission of the instructor. A capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning. (1 Lec., 3 Lab.)

RADR 2266 Practicum (or Field Experience) – Radiologic Technology/Science – Radiographer (2)
(This is a WECM Course Number.)
Prerequisite: RADR 1267. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (20 Ext.)

RADR 2267 Practicum (or Field Experience) – Radiologic Technology/Science – Radiographer (2)
(This is a WECM Course Number.)
Prerequisite: RADR 2266. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (15 Ext.)

RADR 2301 Intermediate Radiographic Procedures (3)
(This is a WECM Course Number.)
Prerequisite: RADR 1411, HPRS 1204. A continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of anatomy. (2 Lec., 4 Lab.)

RADR 2305 Principles of Radiographic Imaging II (3)
(This is a WECM Course Number.)
Prerequisite: RADR 1313. A continuation of the study of radiographic imaging technique formulation, image quality assurance, and the synthesis of all variables in image production. (2 Lec., 2 Lab.)

RADR 2309 Radiograhic Imaging Equipment (3)
(This is a WECM Course Number.)
Prerequisite: RADR 1313 and RADR 2305. A study of the equipment and physics of x-ray production, basic x-ray circuits, and the relationship of equipment components to the imaging process. (3 Lec.)

RADR 2331 Advanced Radiographic Procedures (3)
(This is a WECM Course Number.)
Prerequisite: RADR 1411 and RADR 2301. Continuation of positioning; alignment of the anatomical structure and equipment, evaluation of images for proper demonstration of anatomy and related pathology.
(2 Lec., 2 Lab.)

RBTC 2445 Robot Application, Set-Up and Testing (4)
(This is a WECM Course Number.)
This is a capstone course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance. The student will demonstrate familiarity with hardwiring and interfacing PLCs, robots, CNC equipment, and support equipment; troubleshoot and debug equipment to make it function in a live automated environment; and apply design techniques to maintain maximum cycle times on an automated system. (3 Lec., 3 Lab.)

RELE 1105 Uniform Standards of Professional Appraisal Practices (1)
(This is a WECM Course Number.)
Provides instruction on current provisions of the Uniform Standards of Professional Appraisal Practice (USPAP). (1 Lec.)

RELE 1191 Special Topics in Real Estate (1)
(This is a WECM Course Number.)
Topics address recently identified current event, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec.)

RELE 1201 Principles of Real Estate (2)
(This is a WECM Course Number.)
An overview of licensing as a real estate broker and salesperson, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens, distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also includes federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. This course must be taken concurrently with RELE 2209. This course is cross-listed as RELE 1301. The student may register for either RELE 1201 or RELE 1301, but may receive credit for only one of the two. (2 Lec.)

RELE 1291 Special Topics in Real Estate (2)
(This is a WECM Course Number.)
Topics address recently identified current event, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec.)

RELE 1301 Principles of Real Estate (3)
(This is a WECM Course Number.)
An overview of licensing as a real estate broker and salesperson, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens, distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also includes federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. This course is cross-listed as RELE 1201. The student may register for either RELE 1301 or RELE 1201, but may receive credit for only one of the two.
(3 Lec.)

RELE 1303 Real Estate Appraisal (3)
(This is a WECM Course Number.)
A study of the central purposes and functions of an appraisal, social, and economic determinant of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. (3 Lec.)

RELE 1307 Real Estate Investment (3)
(This is a WECM Course Number.)
Financing, evaluation, and management of real estate investment. Emphasis on real estate investment characteristics, techniques of investment analysis, time-valued money, discounted investment criteria, leverage, and applications to property tax implications of owning real estate. (3 Lec.)

RELE 1309 Real Estate Law (3)
(This is a WECM Course Number.)
Provides a study of legal concepts of real estate, land description, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, and evidence of title. (3 Lec.)

RELE 1311 Law of Contracts (3)
(This is a WECM Course Number.)
Includes the elements of a contract, offer and acceptance, the statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms and owner disclosure requirements. (3 Lec.)

RELE 1315 Property Management (3)
(This is a WECM Course Number.)
A study of the role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance reports, habitability laws, and the Fair Housing Act. (3 Lec.)

RELE 1319 Real Estate Finance (3)
(This is a WECM Course Number.)
An overview of the U.S. monetary system, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative instruments, laws affecting mortgage lending, and the State Housing Agency. (3 Lec.)

RELE 1321 Real Estate Marketing (3)
(This is a WECM Course Number.)
A study of real estate professionalism and ethics; characteristics of successful salespersons; time management; psychology of marketing; listing procedures; advertising; negotiating and closing financing; and the deceptive trade practice act, consumer protection act, and commercial code. (3 Lec.)

RELE 1323 Real Estate Computer Application (3)
(This is a WECM Course Number.)
A study of the availability of technology, especially software, and its ability to help a real estate agent become more productive. Includes data base mapping interest and software application. (3 Lec.)

RELE 1324 Loan Origination and Quality Control (3)
(This is a WECM Course Number.)
An introduction to the mortgage loan application process. Topics include regulatory compliance and documentation; real estate contracts; the mortgage application process, interview techniques; credit, income and property qualification, quality controls and procedures. (3 Lec.)

RELE 1325 Real Estate Mathematics (3)
(This is a WECM Course Number.)
Mathematical logic and basic arithmetic skills including percentages, interest, time-valued money, depreciation, amortization, proration, and estimation of closing statement. (3 Lec.)

RELE 1327 Real Estate Commercial Appraisal (3)
(This is a WECM Course Number.)
Principles and techniques used in the valuation of commercial property. Topics include purposes and functions of an appraisal, social and economic forces affecting value, appraisal case studies, cost, and income approaches to value. (3 Lec.)

RELE 1329 Fundamentals of Environmental Issues (3)
(This is a WECM Course Number.)
A study of environmental issues affecting the real estate industry including hazardous substances, underground storage tanks, and wetlands. (3 Lec.)

RELE 1381 Cooperative Education - Real Estate (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. (1 Lec., 20 Ext.)

RELE 1391 Special Topics In Real Estate (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

RELE 1406 Real Estate Principles (4)
(This is a WECM Course Number.)
Overview of real estate broker and salesman license; ethical practice; titles and conveyance of real estate; legal descriptions; law of agency, deeds; encumbrances and liens; personal and real property; contracts; appraisal; finance and regulations; closing procedures; real estate mathematics; and federal, state, and local laws relating to housing discrimination; housing credit discrimination, and community reinvestment. (4 Lec.)

RELE 2209 Principles of Real Estate II (2)
(This is a WECM Course Number.)
An overview of licensing as a real estate broker and salesperson, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens, distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also includes federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. This course must be taken concurrently with RELE 1201. This course is cross-listed as RELE 2309. The student may register for either RELE 2209 or RELE 2309, but may receive credit for only one of the two. (2 Lec.)

RELE 2301 Law of Agency (3)
(This is a WECM Course Number.)
A study of law of agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying procedures, and the disclosure of an agency. (3 Lec.)

RELE 2305 Real Estate Inspections (3)
(This is a WECM Course Number.)
A study of the different types of building systems and materials used in the design and construction of real property. Covers residential construction and commercial building systems and materials. Includes different structural building systems with emphasis on wood-related products, concrete and concrete masonry, brick, stone and steel units. The Texas Real Estate Commission Promulgated Property Condition Addendum will be addressed along with inspector and client agreements, tools and procedures, and electro-mechanical systems. (3 Lec.)

RELE 2309 Principles of Real Estate II (3)
(This is a WECM Course Number.)
An overview of licensing as a real state broker and salesman; ethics of practice; titles to and conveyancing of real estate; legal descriptions; law of agency; deeds; encumbrances and liens; distinctions between personal and real property; contracts; appraisal; discrimination; housing credit discrimination, and community reinvestment. This course is cross-listed as RELE 2209. The student may register for either RELE 2309 or RELE 2209, but may receive credit for only one of the two.
(3 Lec.)

RELE 2331 Real Estate Brokerage (3)
(This is a WECM Course Number.)
A study of law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel; records and control, and real estate firm analysis and expansion criteria. (3 Lec.)

RELE 2380 Cooperative Education - Real Estate (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

RELE 2381 Cooperative Education - Real Estate (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

RELE 2388 Internship - Real Estate (3)
(This is a WECM Course Number.)
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. (9 Ext.)

RELE 2389 Internship - Real Estate (3)
(This is a WECM Course Number.)
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. (9 Ext.)

NOTE: These courses carry a Dallas County Community College prefix of "RELI"; however, some can be identified by a common course number for transfer evaluation purposes. Both are listed in the course descriptions.

RELI 1304 Major World Religion (3)
(The Texas Common Course Number is PHIL 1304.)
This course surveys the major world religions. Hinduism, Buddhism, Judaism, Islam, and Christianity are included. The history of religions is covered, but the major emphasis is on current beliefs. Other topics may also be included, such as the nature of religion, tribal religion, and alternatives to religion. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015212)

RELI 1316 Religion in American Culture (3)
(The Texas Common Course Number is PHIL 1316.)
This course examines the nature of religion in America. It covers important influences from the past and characteristics of current religious groups and movements. Emphasis is on understanding the role of religion in American life. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015212)

RELI 1317 The History and Literature of the Bible (3)
(The Texas Common Course Number is PHIL 1317.)
This course presents a history and literature of both the Hebrew people during the Old Testament period and the Christian movement during the New Testament period with emphasis upon the origins and development of the religious ideas and institutions of the biblical people (3 Lec.)
(Coordinating Board Academic Approval Number 3802015212)

RELI 2321 Contemporary Religious Problems (3)
(The Texas Common Course Number is PHIL 2321.)
Both classic and recent issues are explored. Such topics as the nature of religion, the existence of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be offered with emphasis on a specific topic, such as death and dying (3 Lec.)
(Coordinating Board Academic Approval Number 3802015312)

RNSG 1119 Integrated Nursing Skills I (1)
(This is a WECM Course Number.)
Prerequisite: Admission to the program and C grade or better in SCIT 1407 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5. Concurrent enrollment in SCIT 1408 or Biology 2402, and Psychology 2314. Concurrent enrollment in corequisite courses RNSG 1423 and RNSG 1460. Study of the concepts and principles essential for demonstrating competence in the performance of basic nursing skills for care of diverse clients across the life span. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. Emphasis is on medical and surgical asepsis, assessment, documentation, safety, selected skills for basic care needs, medications. Content includes applicable competencies in basic workplace skills. Licensing/certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (2 Lab.)

RNSG 1129 Integrated Nursing Skills II (1)
(This is a WECM Course Number.)
Prerequisite: Minimum grade of C in RNSG 1423, RNSG 1460, RNSG 1119, SCIT 1408 or Biology 2402, and Psychology 2314. Concurrent enrollment in Biology 2420 and Speech Communication 1311. Concurrent enrollment in corequisite courses RNSG 2504 and RNSG 1461. Study of the concepts and principles necessary to perform intermediate or advanced nursing skills for care of diverse clients across the life span. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. Focus is on assessment, parenteral medication administration, IV therapy, documentation, surgical asepsis, and basic skills competency validation. Licensing/certification agency: Board of Nurse Examiners for the State of Texas (BNE). (2 Lab.)

RNSG 1160 Clinical-Nursing-Registered Nurse Training (RN, ASN, BSN, MSN) (1)
(This is a WECM Course Number.)
Prerequisite: Current Texas LVN license, admission to the Associate Degree Nursing program, and C grade or better in SCIT 1407 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5 or better. Additional prerequisites include SCIT 1408 or Biology 2402, Biology 2420, Psychology 2314 and Speech Communication 1311 with a minimum grade of C. Licensed Vocational Nurses will take this course in place of RNSG 1423, RNSG 1460, RNSG 1119, RNSG 2504, RNSG 1129, and RNSG 1461. Concurrent enrollment in corequisite courses RNSG 1327 and RNSG 1170. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Utilizes nursing process in the care of individuals with problems in areas of fluid/electrolytes, inflammation/immune response and reproductive/sexual health. Focus is on health promotion, expanded assessment, multi-disciplinary teamwork, communication, and the role of the nurse within a legal/ethical framework. Content includes applicable competencies in basic workplace skills. (3 Ext.)

RNSG 1170 ADN Bridge Nursing Skills (1)
(This is a WECM Local Need Course.)
Prerequisite: Current Texas LVN license, admission to the Associate Degree Nursing program, and C grade or better in SCIT 1407 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5 or better. Additional prerequisites include SCIT 1408 or Biology 2402, Biology 2420, Psychology 2314 and Speech Communication 1311 with a minimum grade of C. Licensed Vocational Nurses will take this course in place of RNSG 1119, RNSG 1423, RNSG 1460, RNSG 2504, RNSG 1129, and RNSG 1461. Concurrent enrollment in corequisite courses RNSG 1327 and RNSG 1160. Knowledge and principles applicable in the performance of nursing skills and procedures. Focus is on assessment of adults, clients in childbearing/child rearing; critical thinking; documentation; communication skills; nursing process with an ethical/legal framework; transition from LVN to RN role. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (2 Lab.)

RNSG 1301 Pharmacology (3)
(This is a WECM Course Number.)
Prerequisite: Minimum grade of C in SCIT 1407 or Biology 2401 and concurrent enrollment in SCIT 1408 or Biology 2402. Registered Nurses or Licensed Vocational Nurses may enroll for refresher purposes. Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. (3 Lec.)

RNSG 1311 Nursing Pathophysiology (3)
(This is a WECM Course Number.)
Prerequisite: SCIT 1407 or Biology 2401 and concurrent enrollment in SCIT 1408 or Biology 2402. Registered nurses or Licensed Vocational Nurses may enroll for refresher purposes. Basic principles of pathophysiology emphasizing nursing applications. Topics include principles of homeostasis related to body systems. (3 Lec.)

RNSG 1327 Transition from Vocational to Professional Nursing (3)
(This is a WECM Course Number.)
Prerequisite: Current Texas LVN license, admission to the Associate Degree Nursing program, and C grade or better in SCIT 1407 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5 or better. Additional prerequisites include SCIT 1408 or Biology 2402, Biology 2420, Psychology 2314 and Speech Communication 1311 with a minimum grade of C. Licensed Vocational Nurses will take this course in place of RNSG 1119, RNSG 1423, RNSG 1460, RNSG 2504, RNSG 1129, and RNSG 1461. Concurrent enrollment in corequisite courses RNSG 1170 and RNSG 1160. Topics include health promotion, expanded assessment, analysis of data, nursing process, pharmacology, multidisciplinary teamwork, communication, and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework throughout the lifespan. Specific areas of emphasis include the role of the nurse in the management of clients with problems of fluid and electrolytes, inflammation/immune response, nutrition and clients during childbearing and child rearing ages. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (3 Lec.)

RNSG 1423 Introduction to Professional Nursing for Integrated Programs (4)
(This is a WECM Course Number.)
Prerequisite: Admission to the program and C grade or better in SCIT 1407 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5. Concurrent enrollment in SCIT 1408 or Biology 2402, and Psychology 2314. Concurrent enrollment in corequisite courses RNSG 1119 and RNSG 1460. Introduction to the profession of nursing including the roles of the registered nurse with emphasis on health promotion and primary disease prevention across the life span; essential components of the nursing health assessment; identification of deviations from expected health patterns; the application of a systematic, problem-solving process to provide basic nursing care to diverse clients across the life span; and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. Focus is on caring competent nursing care of adults in acute and transitional care settings. Content includes applicable competencies in basic workplace skills. Licensing/certification Agency: Board of Nurse Examiners for the State of Texas (BNE). This course is cross-listed as RNSG 1523. The student may register for either RNSG 1423 or RNSG 1523, but may receive credit for only one of the two. (4 Lec.)

RNSG 1460 Clinical-Nursing- Registered Nurse Training (RN, ASN, BSN, MSN) (4)
(This is a WECM Course Number.)
Prerequisite: Admission to the program and C grade or better in SCIT 1407 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5. Concurrent enrollment in SCIT 1408 or Biology 2402, and Psychology 2314. Concurrent enrollment in corequisite courses RNSG 1423 and RNSG 1119. A health-related work-based learning experience that enabled the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Nursing process is utilized in the care of individuals in acute and transitional care settings. Focus is on health promotion/disease prevention, basic pharmacological concepts, caring, ethical/legal aspects, and decision-making. Emphasis is on beginning assessment, psychomotor; and communication skills. Content includes applicable competencies in basic workplace skills. (12 Ext.)

RNSG 1461 Clinical-Nursing-Registered Nurse Training (RN, ASN, BSN, MSN) (4)
(This Is a WECM Course Number.)
Prerequisite: Minimum grade of C in RNSG 1423, RNSG 1119, RNSG 1460, SCIT 1408 or Biology 2402, and Psychology 2314. Concurrent enrollment in Biology 2420 and Speech Communication 1311. Concurrent enrollment in corequisite courses RNSG 2504 and RNSG 1129. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Utilizes the nursing process to deliver care to individuals and families in varied structured health care settings. Focus in on health promotion/health maintenance, nutrition, pharmacological management, communication, ethical/legal aspects, and course-related psychomotor skills. Emphasis is on physical and psychosocial assessment of newborns, children, and adults in the collaborative management of individuals and families during childbearing and child rearing ages and in caring for individuals undergoing selected surgical interventions. Content includes applicable competencies in basic workplace skills. (12 Ext.)

RNSG 2221 Management of Client Care (2)
(This Is a WECM Course Number.)
Prerequisite: Minimum grade of C in RNSG 2514 and RNSG 2460. Concurrent enrollment in corequisite course RNSG 2535 and RNSG 2562. Exploration of leadership and management principles applicable to the role of the nurse as a provider of care, coordinator of care, and member of a profession. Includes application of knowledge, judgment, skills, and professional values within a legal/ethical framework. Emphasis is on economics, communication skills, trends and issues in health care delivery systems, legal and ethical parameters of professional nursing according to the Nurse Practice Act. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (2 Lec.)

RNSG 2460 Clinical-Nursing-Registered Nurse Training (RN, ASN, BSN, MSN) (4)
(This Is a WECM Course Number.)
Prerequisite: Minimum grade of C in RNSG 2504, RNSG 1129, RNSG 1461, Biology 2420, and Speech Communication 1311. Concurrent enrollment in a Humanities course. LVN Option: Minimum of C in RNSG 1327, RNSG 1170, and RNSG 1160. Concurrent enrollment in corequisite course RNSG 2514. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Utilizes systematic problem-solving process and critical-thinking skills to provide nursing care to individuals with complex health care needs in diverse health care settings. Focus is on health promotion, work organization, time management, communication techniques, ethical/legal aspects, and critical-thinking skills. Emphasis is on performance of assessment, pharmacotherapeutic interventions, and the collaborative role of the nurse in the delivery of nursing care. Content includes applicable competencies in course-related and basic workplace skills. (12 Ext.)

RNSG 2504 Integrated Care of the Client with Common Health Care Needs (5)
(This Is a WECM Course Number.)
Prerequisite: Minimum grade of C in RNSG 1423, RNSG 1119, RNSG 1460, SCIT 1408 or Biology 2402, and Psychology 2314. Concurrent enrollment in Biology 2420 and Speech Communication 1311. Concurrent enrollment in corequisite courses RNSG 1129 and RNSG 1461. Application of a systematic problem-solving process and critical thinking skills to provide nursing care to diverse clients/families across the life span with common health care needs including, but not limited to, common childhood/adolescent diseases, uncomplicated perinatal care, mental health concepts, perioperative care, frequently occurring adult health problems and health issues related to aging. Emphasis on secondary disease prevention and collaboration with members of the multidisciplinary health care team. Content includes applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. Focus is on caring, competent nursing care of individuals and families during childbearing and childrearing ages. Emphasis is on aspects of health promotion, health maintenance, nutrition, pharmacologic management. Content includes applicable competencies in basic workplace skills. Licensing/certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (5 Lec.)

RNSG 2514 Integrated Care of the Client with Complex Health Care Needs (5)
(This is a WECM Course Number.)
Prerequisite: Minimum grade of C in RNSG 2504, RNSG 1129, RNSG 1461, Biology 2420, and Speech Communication 1311. Concurrent enrollment in a Humanities course. LVN Option: Minimum of C in RNSG 1327, RNSG 1170, RNSG 1160. Concurrent enrollment in corequisite course RNSG 2460. Application of a systematic problem-solving process and critical thinking skills to provide comprehensive nursing care to diverse clients/families across the life span with complex health care needs including, but not limited to, complex childhood/adolescent diseases, complicated perinatal care, acute mental illness, complex perioperative care, serious adult health problems and health issues related to aging. Emphasis on tertiary/disease prevention, health maintenance/restoration and collaboration with members of the multidisciplinary health care team. Topics include the role of the nurse as client advocate and coordinator of care and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. Focus is on assessment, pharmacotherapeutic interventions, and the collaborative role of the nurse in the delivery of safe, caring nursing care. Content includes applicable competencies in basic workplace skills. Licensing/certification Agency: Board of Nurse Examiners for the State of Texas (BNE).
(5 Lec.)

RNSG 2535 Integrated Client Care Management (5)
(This is a WECM Course Number.)
Prerequisite: Minimum grade of C in RNSG 2514 and RNSG 2460. Concurrent enrollment in corequisite RNSG 2562 and RNSG 2221. Application of client assessment skills, critical thinking, and independent nursing interventions to care for diverse clients/families throughout the life span whose health care needs may be difficult to predict. Emphasis on collaborative clinical decision-making, nursing leadership skills, and client management. Topics include the significance of professional development, trends in nursing and health care, and applicable knowledge, judgment, skills, and professional values within a legal/ethical framework. Focus is on caring, competent nursing care of individuals who are experiencing acute/chronic episodes of illness and/or multi-system failure. Emphasis on pathophysiology, treatment modalities, and nursing interventions. Content includes applicable competencies in basic workplace skills. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE).
(5 Lec.)

RNSG 2562 Clinical-Nursing-Registered Nurse Training (RN, ASN, BSN, MSN) (5)
(This is a WECM Course Number.)
Prerequisite: Minimum grade of C in RNSG 2514 and RNSG 2460. Concurrent enrollment in RNSG 2221 and corequisite RNSG 2535. A health-related work-based experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Utilizes assessment skills, critical thinking, and independent nursing intervention to care for individuals experiencing acute/chronic episodes of illness and/or multi-system failure. Focus is on caring, health promotion, health restoration and professional values within a legal/ethical framework. Emphasis is on collaborative clinical decision-making, nursing leadership, skills, and client management in the delivery of nursing care. Content includes applicable competencies in basic workplace skills. (15 Ext.)

RSPT 1141 Respiratory Home Care/Rehabilitation (1)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201, and RSPT 2310. Designed to develop an understanding of respiratory home care/rehabilitation equipment, procedures, and patient care, with emphasis on the use of special technology and equipment in the treatment of patients in a subacute and/or long term patient care setting. (2 Lab.)

RSPT 1213 Basic Respiratory Care Pharmacology (2)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1431. A study of pharmacological principles/practices of drugs which affect the cardiopulmonary systems. Emphasis on classification, route of administration, dosages/calculations, and interaction of the autonomic nervous system. (2 Lec.)

RSPT 1227 Applied Physics for Respiratory Care (2)
(This is a WECM Course Number.)
Prerequisite: Admission to Respiratory Care Program; a grade of "C" in all courses in Semester I and Semester II; Elective course co-requisite if not completed previously. Exploration of the theoretical and practical applications of mathematics and physics with a focus on the applicability and clinical utility of the modalities, techniques, procedures, equipment, and diagnostic tests utilized in respiratory care. (2 Lec.)

RSPT 1260 Clinical-Respiratory Care Therapy/Therapist (2)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1431. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (12 Ext.)

RSPT 1307 Cardiopulmonary Anatomy and Physiology (3)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1431. An introduction to the anatomy and physiology of the cardiovascular, renal, and pulmonary systems. Includes the terminology used in respiratory physiology. (3 Lec.)

RSPT 1311 Respiratory Care Procedures II (3)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1431. Provides student with the essential knowledge of airway care and mechanical ventilation. Airway care includes indications, techniques, equipment, and hazards and complications. Mechanical ventilation includes indications, initiation, modes, clinical application, management, complications, and weaning. (2 Lec., 3 Lab.)

RSPT 1431 Respiratory Care Fundamentals II (4)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in all courses in Semester I and Semester II, RSPT 1227, and Elective course. Provides a foundation for the development of knowledge and skills for respiratory care including lung expansion therapy, postural drainage and percussion, artificial airways, manual resuscitation devices, suctioning, pulse oximetry, bedside spirometry, arterial sampling techniques and blood gas analysis and interpretation. (2 Lec., 6 Lab.)

RSPT 2131 (Clinical) Simulations in Respiratory Care (1)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201 and RSPT 2310. The theory and history of clinical simulation examinations. Topics include the construction types, scoring, and mechanics of taking the exam along with practice in taking both written and computerized simulations, and basic concepts of computer usage. (2 Lab.)

RSPT 2163 Clinical-Respiratory Care Therapy/Therapist (1)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1141, RSPT 2113, RSPT 2258, RSPT 2262, RSPT 2314, and RSPT 2453. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (6 Ext.)

RSPT 2166 Practicum (or Field Experience)-Respiratory Care Therapy/Therapist (1)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1141, RSPT 2113, RSPT 2258, RSPT 2262, RSPT 2314, and RSPT 2453. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (10 Ext.)

RSPT 2201 Cardiopulmonary Assessment (2)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1413. Advanced concepts of the physical, radiological, hemodynamic, laboratory, and fluid/eletrolyte assessment of patients with cardiopulmonary disease. (2 Lec.)

RSPT 2258 Advanced Respiratory Care Patient Assessment (2)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201, and RSPT 2310. Instruction in the integration of patient examination techniques, clinical lab studies, x-ray, pulmonary function, arterial blood gases, and invasive and non-invasive hemodynamics results in patient assessment. (1 Lec., 2 Lab.)

RSPT 2262 Clinical-Respiratory Care Therapy/Therapist (2)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201, and RSPT 2310. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (12 Ext.)

RSPT 2310 Cardiopulmonary Disease (3)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1431. A discussion of pathogenesis, pathology, history, prognosis, manifestations, and management of cardiopulmonary diseases. (3 Lec.)

RSPT 2314 Mechanical Ventilation (3)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201, and RSPT 2310. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experience may be paid or unpaid.
(2 Lec., 3 Lab.)

RSPT 2453 Neonatal/Pediatric Cardiopulmonary Care (4)
(This is a WECM Course Number.)
Prerequisite: A grade of "C" in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201, and RSPT 2310. A study of acute care, monitoring, and management as applied to the neonatal and pediatric patient.
(3 Lec., 3 Lab.)

RSTO 1191 Special Topics in Food and Beverage/Restaurant Operations Manager (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec., 1 Lab.)

RSTO 1291 Special Topics in Food and Beverage/Restaurant Operations Manager (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 1 Lab.)

RSTO 1301 Beverage Management (3)
(This is a WECM Course Number.)
A study of the beverage service of the hospitality industry including spirits, wines, beers, and non alcoholic beverages. Topics include purchasing, resource control, legislation, marketing, physical plant requirements, staffing, service, and the selection of wines to enhance foods. (3 Lec., 1 Lab.)

RSTO 1304 Dining Room Service (3)
(This is a WECM Course Number.)
Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel. Dining Room Service classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.
(2 Lec., 4 Lab.)

RSTO 1306 Facilities Layout and Design (3)
(This is a WECM Course Number.)
Overview of the planning, development, and feasibility aspects of building or renovating a food service facility. Application of principles of work and flow analysis, spatial relationships, and equipment selection as they relate to the overall layout and design. (3 Lec., 1 Lab.)

RSTO 1313 Hospitality Supervision (3)
(This is a WECM Course Number.)
Fundamentals of recruiting, selection, and training of food service and hospitality personnel. Topics include job descriptions, schedules, work improvement, motivation, and applicable personnel laws and regulations. Emphasis on leadership development.
(3 Lec., 1 Lab.)

RSTO 1319 Viticulture and Enology (3)
(This is a WECM Course Number.)
A study of the growing regions, production, processing, and distribution of domestic and international wines. Topics include types of wine grapes, varieties of wine, proper storage procedures, and the techniques of proper wine service. Student must be 21 on first class day.
(3 Lec., 1 Lab.)

RSTO 1325 Purchasing for Hospitality Operations (3)
(This is a WECM Course Number.)
Study of purchasing and inventory management of foods and other supplies include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle. (3 Lec., 1 Lab.)

RSTO 1380 Cooperative Education – Restaurant, Culinary and Catering Management/Manager (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 20 Ext.)

RSTO 1391 Special Topics in Food and Beverage/Restaurant Operations Manager (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 4 Lab.)

RSTO 1491 Special Topics in Food and Beverage/Restaurant Operations Manager (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec., 4 Lab.)

RSTO 2301 Principles of Food and Beverage Controls (3)
(This is a WECM Course Number.)
Prerequisite: TECM 1391, MATH 1314, MATH 1414 or concurrent enrollment. A study of financial principles and controls of food service operation including review of operation policies and procedures. Topics include financial budgeting and cost analysis emphasizing food, beverage, and labor costs, operational analysis, and international and regulatory procedures. (3 Lec., 1 Lab.)

RSTO 2307 Catering (3)
(This is a WECM Course Number.)
Principles, techniques, and applications for both on-premises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques. (3 Lec., 1 Lab.)

RSTO 2380 Cooperative Education – Restaurant, Culinary and Catering Management/Manager (3)
(This is a WECM Course Number.)
Prerequisite: RSTO 1380. Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. (1 Lec., 20 Ext.)

RTVB 1191 Special Topics in Radio and Television Broadcasting (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

RTVB 1305 Introduction to Television Technology (3)
(This is a WECM Course Number.)
Instruction in the selection and application of production supplies and equipment in shooting situations. Introduction to digital and analog signal concepts and their use in production and the theory, application, and internal operation of television production equipment. (2 Lec., 2 Lab.)

RTVB 1317 Survey of Electronic Media (3)
(This is a WECM Course Number.)
A survey of the broadcast and cable industry. Topics include the history of the broadcast and cable industries, operation of radio and TV stations, cable facilities, programming practices of radio, and Federal Communication Commission (FCC) organization and regulatory activity. Also includes career opportunities in broadcasting and cable and the impact of the new media. (3 Lec.)

RTVB 1329 Writing for Electronic Media (3)
(This is a WECM Course Number.)
An introduction to the writing of commercials, public service announcements, promos, news documentaries, and other broadcast and film materials. Emphasis on the format and style of each type of writing and development of a professional writing style. (3 Lec.)

RTVB 1345 Broadcast Engineering (3)
(This is a WECM Course Number.)
Prerequisite: RTVB 1305, RTVB 1325, RTVB 1409. Instruction in the basics of engineering video productions including the basic alignment/adjustment of cameras, test equipment, storage devices, and other studio equipment. Also includes basic system design and construction and digital standards for broadcast, cable, satellite, and network distribution. (2 Lec., 3 Lab.)

RTVB 1347 Audio/Radio Production II (3)
(This is a WECM Course Number.)
Audio production theories regarding multitrack recording, studio live production and equipment operation. (2 Lec., 3 Lab.)

RTVB 1371 Television Lighting (3)
(This is a WECM Local Need Course.)
Prerequisite: RTVB 1305, concurrent enrollment in RTVB 1305 or with approval from instructor. This course introduces students to the theory and application of lighting for television production. Topics include basic lighting equipment for studio and location productions and the application of lighting to a variety of production environments. Choices of color, angle, intensity, distribution, and the proper use of lighting control scrim, screens, and gels are emphasized. (2 Lec., 3 Lab.)

RTVB 1380 Cooperative Education - Radio and Television (3)
(This is a WECM Course Number.)
Career related activities encountered in the students area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. (1 Lec., 15 Ext.)

RTVB 1381 Cooperative Education – Radio and Television (3)
(This is a WECM Course Number.)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
(1 Lec., 15 Ext.)

RTVB 1391 Special Topics in Radio and Television Broadcasting (3)
(This is a WECM Course Number.)
Prerequisite: RTVB 1305, concurrent enrollment in RTVB 1305 or with approval from instructor.
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 3 Lab.)

RTVB 1392 Special Topics in Radio and Television Broadcasting Technology/Technician (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(3 Lec.)

RTVB 1409 Audio/Radio Production I (4)
(This is a WECM Course Number.)
Prerequisite: RTVB 1305, concurrent enrollment in RTVB 1305 or with approval from instructor. An introduction the concepts and techniques of sound production including basic recording, mixing, and editing techniques. (2 Lec., 3 Lab.)

RTVB 1421 TV Field Production (4)
(This is a WECM Course Number.)
A study of the pre-production, production, and post-production process involved in field television production. Topics include field camera setup and operation, field audio, television directing, and in-camera or basic continuity editing with an emphasis on underlying principles of video technology.
(2 Lec., 4 Lab.)

RTVB 1425 TV Studio Production (4)
(This is a WECM Course Number.)
A study of basic television production as it applies to live and taped studio programming. Topics include studio camera operation, television audio, and television directing with an emphasis on underlying principles of video technology. (2 Lec., 4 Lab.)

RTVB 2335 TV Production (3)
(This is a WECM Course Number.)
A study of the pre-production, production, and post-production process involved in single and multiple-camera studio or field television production. Advanced instruction in camera operation, lighting, audio, television directing, and single and multiple-source editing with emphasis on underlying principles of video technology. (2 Lec., 4 Lab.)

RTVB 2343 Commercial Recording Techniques (3)
(This is a WECM Course Number.)
Development of advanced skills in multi-track recording production for the commercial sound recording industry. (2 Lec., 2 Lab.)

RTVB 2345 Advanced Broadcast Engineering (3)
(This is a WECM Course Number.)
Prerequisite: RTVB 1345. Continuation of Broadcast Engineering with emphasis on detailed application of problem solving, troubleshooting, and adjustments associated with video system components. Also includes analysis of specific broadcast, cable, satellite, and network issues. (2 Lec., 4 Lab.)

RTVB 2382 Cooperative Education - Radio and Television Broadcasting Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 12 hours of Video Technology courses. The student should secure an internship position in the industry prior to enrolling. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. (1 Lec., 15 Ext.)

RTVB 2383 Cooperative Education - Radio and Television Broadcasting Technology/Technician (3)
(This is a WECM Course Number.)
Prerequisite: Completion of at least 12 hours of Video Technology courses. The student should secure an internship position in the industry prior to enrolling. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. (1 Lec., 20 Ext.)

RTVB 2430 Non-Linear Video Editing (4)
(This is a WECM Course Number.)
Principles of non-linear editing process including selection of clips, editing segments, creating special effects, and mixing audio for video. (3 Lec., 3 Lab.)

RTVB 2437 TV Production Workshop I (4)
(This is a WECM Course Number.)
Prerequisite: RTVB 1321. Study of advance application and design of video productions in location or studio shoots with real deadlines and quality control restrictions. (2 Lec., 6 Lab.)

RTVB 2455 TV Production Workshop II (4)
(This is a WECM Course Number.)
Prerequisite: RTVB 1325 or with approval from instructor. Production of a variety of final projects demonstrating mastery of field and/or studio competence. Development of a video portfolio to present in job interviews, perfection of production techniques, and development of an individual production style. (2 Lec., 6 Lab.)

RUSS 1311 Introduction to Russian (3)
(This is a Texas Common Course Number.)
RUSS 1311 is an introduction to the regular Russian course sequence; it is not a substitute for RUSS 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in RUSS 1411. This course is cross-listed as Russian 1411. The student may register for either Russian 1311 or Russian 1411, but may receive credit for only one of the two. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1604025113)

RUSS 1411 Beginning Russian (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. This course is cross-listed as Russian 1311. The student may register for either Russian 1411 or Russian 1311, but may receive credit for only one of the two. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1604025113)

RUSS 1412 Beginning Russian (4)
(This is a Texas Common Course Number.)
Prerequisite: Russian 1411 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Russian 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1604025113)

RUSS 2311 Intermediate Russian (3)
(This is a Texas Common Course Number.)
Prerequisite: Russian 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1604025213)

RUSS 2312 Intermediate Russian (3)
(This is a Texas Common Course Number.)
Prerequisite: Russian 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Russian 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture. (3 Lec.)
(Coordinating Board Academic Approval Number 1604025213)

SCIT 1307 Human Anatomy and Physiology I (3)
(This is a WECM Course Number.)
In-depth coverage of the structure and function of the human body. Topics include cell structure and function; tissues; body organization; and the integumentary, skeletal, muscular, nervous, and endocrine systems. Emphasis on homeostasis. This course is cross-listed as SCIT 1407. The student may register for either SCIT 1307 or SCIT 1407, but may receive credit for only one of the two. (2 Lec., 4 Lab.)

SCIT 1407 Human Anatomy and Physiology I (4)
(This is a WECM Course Number.)
In-depth coverage of the structure and function of the human body. Topics include cell structure and function; tissues; body organization; and the integumentary, skeletal, muscular, nervous and endocrine systems. Emphasis is on homeostasis. This course is cross-listed as SCIT 1307. The student may register for either SCIT 1407 or SCIT 1307, but may receive credit for only one of the two. (3 Lec., 3 Lab.)

SCIT 1408 Human Anatomy and Physiology II (4)
(This is a WECM Course Number.)
Prerequisite: SCIT 1407, Human Anatomy and Physiology I. A continuation of Human Anatomy and Physiology I with in-depth coverage of the structure and function of the human body. Topics include the digestive, respiratory, cardiovascular, lymphatic, immune, excretory, and reproductive systems. Emphasis is on homeostasis. (3 Lec., 3 Lab.)

SCWK 1301 Adolescent Life Cycle (3)
(This is a WECM Course Number.)
Study of the developmental phases from adolescence through young adulthood and the tasks and goals to be achieved during these stages. Topics include physiological and psychological changes, interpersonal relationships, and the individual's ability to relate to the social environment. Emphasis on critical areas of the adolescent period of the life cycle. (3 Lec.)

SCWK 1305 Group Work Intervention (3)
(This is a WECM Course Number.)
Examination of the various stages of the group work treatment process with emphasis on roles, tasks, and potential problem areas. Topics include mechanics of group function, structure of groups, communication patterns within groups, effective group facilitation skills, and techniques used to address special population issues and needs. (3 Lec.)

SCWK 1313 Introduction to Social Work (3)
(This is a WECM Course Number.)
An overview of the social work profession and introduction to the terms, concepts, people, and critical events that have shaped the profession. Topics include the role of the National Association of Social Workers (NASW) and the Council on Social Work Education (CSWE) in maintaining and strengthening social work education and standards; the importance of human service agencies in fostering or diminishing the quality of services; and developing an understanding of poverty and the impact of institutional racism, sexism, ageism. (3 Lec.)

SCWK 1321 Orientation to Social Services (3)
(This is a WECM Course Number.)
Introduction to the basic concepts, information, and practices within the field of social services. Topics include a survey of the historical development of social services; social, legal, and clinical definitions, and review of current information regarding indications for and methods of treatment and/ or services. (3 Lec.)

SCWK 1364 Practicum (or Field Experience)- Social Work (3)
(This is a WECM Course Number.)
Prerequisite: SCWK 1305, SCWK 1313, SCWK 1321, SCWK 2311, and SCWK 2301. The 336 contact hours must be completed at an approved practicum site. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experience to the student's general and technical course of study. The guided external experience may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. Roundtable seminar mandatory. (1 Lec., 20 Ext.)

SCWK 1365 Practicum (or Field Experience) - Social Work (3)
(This is a WECM Course Number.)
Prerequisite: SCWK 1305, SCWK 1313, SCWK 1321, SCWK 2311, and SCWK 2301. The 336 contact hours must be completed at an approved practicum site. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. Roundtable seminar mandatory. (1 Lec., 20 Ext.)

SCWK 2301 Assessment and Case Management (3)
(This is a WECM Course Number.)
Exploration of procedures to identify and evaluate an individual's and/or family's strengths, weaknesses, problems, and needs in order to develop an effective plan of action. Topics include oral and written communications essential for assessment, screening, intervention, client information, and referral. (3 Lec.)

SCWK 2305 Special Problems of Youth (3)
(This is a WECM Course Number.)
Examination of the particular problems of youth and their implications for social service workers delivering services to this population. Topics include youth serving in social institutions of both a preventative and rehabilitative nature and issues related to alcohol, tobacco, and other drugs and their effects. (3 Lec.)

SCWK 2307 Human Behavior and the Social Environment (3)
(This is a WECM Course Number.)
A basic framework for creating and organizing knowledge of human behavior and the social environment. Introduction of social system, life span, and strength approaches to understanding human behavior and environment impact. Emphasis on the impact of human diversity, discrimination, and oppression on the individual's ability to reach or maintain optimal health and well-being. (3 Lec.)

SCWK 2311 Interviewing and Counseling Theories (3)
(This is a WECM Course Number.)
An introduction to Major theories of various treatment modalities including client-centered, psychodynamic, rational-emotive, and reality therapy. Topics include cognative/behavioral approaches such as behavior modification, life skills training, and an introduction to experimental therapies. (3 Lec.)

SCWK 2331 Abnormal Behavior (3)
(This is a WECM Course Number.)
An introduction to the literature concerning maladaptive behavior including characteristics, classification, diagnosis, and treatment modalities. Topics include factors associated with defining and identifying abnormal behavior. (3 Lec.)

SGNL 1301 Beginning American Sign Language I (3)
(This is a Texas Common Course Number.)
An introduction to the basic skills in production and comprehension of American Sign Language (ASL). Includes fingerspelling and numbers. Develops conversational ability, culturally appropriate behaviors and exposes students to ASL grammar. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1616035113)

SGNL 1302 Beginning American Sign Language II (3)
(This is a Texas Common Course Number.)
Prerequisite: SGNL 1301 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of SGNL 1301. Develops receptive and expressive ability and allows recognition and demonstration of more sophisticated grammatical features of American Sign Language (ASL). Increases fluency and accuracy in fingerspelling and numbers.
(3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1616035113)

SLNG 1211 FINGERSPELLING (2)
(This is a WECM Course Number.)
Develops expressive and receptive fingerspelling skills. Receptive skills focus on whole word and phrase recognition as well as reading fingerspelling in context. Expressive skills focus on the development of speed, clarity, and fluency. (2 lec., 1 Lab.)

SLNG 1315 Visual/Gestural Communication (3)
(This is a WECM Course Number.)
Prerequisite: SLNG 1404. A course in the development of skills in non-verbal communications. Emphasizes the use and understanding of facial expression, gestures, pantomime, and body language. Creation or performance of stories using these elements. (3 Lec.)

SLNG 1317 Introduction to the Deaf Community (3)
(This is a WECM Course Number.)
Prerequisite: or concurrent enrollment: ENGL 1301. An overview of the physical, educational, social and cultural implications of deafness and hearing loss within the context of the individual's personal life, family, and community in today's multicultural world. Emphasis on current educational and vocational programs, legislation, technology, and other issues. (3 Lec., 1 Lab.)

SLNG 1321 Introduction to the Interpreting Profession (3)
(This is a WECM Course Number.)
Prerequisite: SLNG 1317. Concurrent enrollment SLNG 1445. An overview of the field of sign language interpretation. Provides a historical framework for the principles, ethics, roles, responsibilities, and standard practices of the interpreting profession. (3 Lec.)

SLNG 1347 Deaf Culture (3)
(This is a WECM Course Number.)
Prerequisite: SLNG 1317. Provides a historical and contemporary perspective of American deaf culture using a sociocultural mode. Includes cultural identity, values, group norms, communication, language, and significant contributions made by deaf people to the world. (3 Lec.)

SLNG 1404 American Sign Language (ASL): Beginning I (4)
(This is a WECM Course Number.)
Prerequisite: or concurrent enrollment: ENGL 1301. Concurrent enrollment: SLNG 1111. An introduction to the basic skills in production and comprehension of American Sign Language (ASL). Includes the manual alphabet and numbers. Develops conversational ability, culturally appropriate behaviors and exposes students to ASL grammar. (3 Lec., 2 Lab.)

SLNG 1405 American Sign Language (ASL): Beginning II (4)
(This is a WECM Course Number.)
Prerequisite: SLNG 1111 and SLNG 1404 with a grade of "C" or better. Develops receptive and expressive ability and allows recognition and demonstration of more sophisticated grammatical features of American Sign Language (ASL). Increases fluency and accuracy in fingerspelling and numbers. Provides opportunities for interaction within the deaf community. (3 Lec., 2 Lab.)

SLNG 1444 American Sign Language (ASL): Intermediate I (4)
(This is a WECM Course Number.)
Prerequisite: SLNG 1404, SLNG 1405 and ENGL 1301 with a grade of "B" or better. Prerequisite or concurrent enrollment SLNG 1315. Integrates and refines expressive and receptive skills in American Sign Language (ASL), including recognition of sociolinguistic variation. A practice oriented approach to language acquisition, including the use of multimedia.
(3 Lec., 2 Lab.)

SLNG 1445 American Sign Language (ASL): Intermediate II (4)
(This is a WECM Course Number.)
Prerequisite: SLNG 1444. Concurrent enrollment SLNG 1321. An integration of expressive and receptive skills with emphasis on literature, discourse styles, and contextualization at an intermediate level. Provides students with information on idiomatic/colloquial usage for signs and grammatical structures for complex sentences. (3 Lec., 2 Lab.)

SLNG 2301 Interpreting I (3)
(This is a WECM Course Number.)
Prerequisite: SLNG 1321, SLNG 1347 and SLNG 1445. Concurrent enrollment: SLNG 2302, SLNG 2411 and SPCH 1342. An overview of the interpreting process and current models. Introduces the skills necessary to achieve message equivalency in interpreting. This class emphasizes Sign to Voice interpreting. (3 Lec.)

SLNG 2302 Interpreting II (3)
(This is a WECM Course Number.)
Prerequisite: SLNG 1321, SLNG 1347 and SLNG 1445. Concurrent enrollment: SLNG 2301, SLNG 2411 and SPCH 1342. Enhancement of interpreting skills and discourse analysis to increasingly complex tasks utilizing simulated interpreting experiences via multimedia materials. Emphasis on skill analysis and peer evaluation. Voice to Sign skills are stressed. (3 Lec.)

SLNG 2371 Transliterating I (3)
(This is a local need course number.)
Prerequisite: SLNG 2301, SLNG 2302, SLNG 2411 and SPCH 1342. Concurrent enrollment SLNG 2372 (Transliterating II). An overview of the transliterating process and current models. Introduces the skills necessary to achieve message equivalency in transliterating. Sign to Voice skills are emphasized.
(3 Lec.)

SLNG 2372 Transliterating II (3)
(This is a WECM Local Need Course.)
Prerequisite: SLNG 2301, SLNG 2302, SLNG 2411 and SPCH 1342. Concurrent enrollment SLNG 2371 (Transliterating I). The acts of interpreting and transliterating are compared and contrasted. Transliteration skills and appropriate inclusion of interpreting components will be discussed and practiced. Multimedia materials are used to simulate interpreting experiences. Voice to Sign skills are emphasized.
(3 Lec.)

SLNG 2388 Internship - Sign Language Interpreter (3)
(This is a WECM Course Number.)
Prerequisite: SLNG 2371 and SLNG 2372. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. (18 Ext)

SLNG 2411 Specialized Interpreting/Transliterating (4)
(This is a WECM Course Number.)
Prerequisite: SLNG 1321, SLNG 1347, and SLNG 1445. Concurrent enrollment: SLNG 2301, SLNG 2302 and SPCH 1342. A focus on interpreting/tranliterating with special populations (e.g. deaf/blind, high visual, oral) in special settings (e.g. religious, artistic, medical, legal, mental health). Reinforce basic theories and techniques in relation to the special population(s) and/or settings.
(3 Lec., 2 Lab.)

SMER 1366 Practicum - Small Engine Mechanic and Repairer (3)
(This is a WECM Course Number.)
A basic or intermediate type of non-health professions work-based instruction that provides basic career exploration or helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience. Indirect supervision is provided by the work supervisor. A practicum may be a paid or unpaid learning experience. (1 Lec., 20 Ext.)

SMER 1371 Service Department Operations (3)
(This is a WECM Local Need Course.)
Prerequisite: Successful completion of 16 credit hours in Engine Technology courses. This course combines the study of the operations of a service department including repair orders, service scheduling, customer relations, parts department operations, PC based parts systems, and warranty policy with the performance of Capstone service projects. (1 Lec., 8 Lab.)

SMER 1380 Cooperative Education - Small Engine Mechanic and Repairer (3)
(This is a WECM Course Number.)
An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience. (1 Lec., 20 Ext.)

SMER 1401 Outboard Tune-Up (4)
(This is a WECM Course Number.)
An introductory course in tune up procedures for both two and four stroke outboard motors including analysis, valve train, ignition, fuel, cooling, and drive systems service. Emphasis is on appropriate equipment and procedures. (3 Lec., 4 Lab.)

SMER 1404 Outboard Service Principles (4)
(This is a WECM Course Number.)
Principles of operation of two- and four- stroke outboard motors and their associated systems. Emphasis is on troubleshooting and analysis of faulty systems and their individual components. (3 Lec., 4 Lab.)

SMER 1407 Outboard Powerhead Overhaul (4)
(This is a WECM Course Number.)
An introductory course in overhaul procedures for two stroke outboard powerhead overhaul. Emphasis is on proper shop procedures for disassembly, inspection, servicing, and assembly of two stroke outboard powerheads. (3 Lec., 4 Lab.)

SMER 1410 Outboard Lower Units (4)
(This is a WECM Course Number.)
Operation, service, troubleshooting, and overhaul of all systems of an outboard motor located below the powerhead. Emphasis on the use of proper tools and procedures when servicing the mid section, lower unit, trim and tilt systems. (3 Lec., 4 Lab.)

SMER 1413 Outboard Electrical Systems (4)
(This is a WECM Course Number.)
Theory of operation and test procedures and equipment used in the diagnosis and repair of the various circuits which make up an outboard motor's electrical systems. (3 Lec., 4 Lab.)

SMER 1416 Motorcycle Two-Stroke Engine/Transmission (4)
(This is a WECM Course Number.)
Overhaul procedures for two-stroke motorcycle engines and transmissions. Emphasis is on proper shop procedures for servicing the piston, cylinder, crankshaft assembly, and transmission during the course of an overhaul. (3 Lec., 4 Lab.)

SMER 1419 Motorcycle Four-Stroke Engine/Transmission (4)
(This is a WECM Course Number.)
Overhaul procedures for four-stroke motorcycle engines and transmissions. Emphasis is on approved shop procedures for disassembly, assembly, component inspection, measurement, servicing, and transmission troubleshooting in transmission inspection.
(3 Lec., 4 Lab.)

SMER 1422 Motorcycle Electrical Systems (4)
(This is a WECM Course Number.)
Theory of operation and test procedures and equipment used in the diagnosis and repair of the various circuits which make up a motorcycle electrical system.
(3 Lec., 4 Lab.)

SMER 1425 Small Engine Electrical Systems (4)
(This is a WECM Course Number.)
Theory of operation and test procedures and equipment used in the diagnosis and repair of the various circuits which make up a small engine electrical system.
(3 Lec., 4 Lab.)

SMER 1428 Small Engine Service Principles (4)
(This is a WECM Course Number.)
Principles of operation of two- and four- stroke small engines and their associated systems. Emphasis on troubleshooting and the analysis of faulty systems and their components. (3 Lec., 4 Lab.)

SMER 1431 Small Engine Tune-Up (4)
(This is a WECM Course Number.)
Tune-up procedures for two- and four- stroke small engines including analysis, valve train, ignition fuel, starter, cutter, and safety compliance systems. Emphasis is on the use of appropriate equipment and procedures. (3 Lec., 4 Lab.)

SMER 1434 Small Engine Two-Stroke Overhaul (4)
(This is a WECM Course Number.)
Overhaul procedures for two-stroke small engines as used in lawn and garden applications. Emphasis is on proper shop procedures for disassembly, inspection, servicing, and assembly of two stroke small engines and their applicable drive systems. (3 Lec., 4 Lab.)

SMER 1437 Small Engine Four-Stroke Overhaul (4)
(This is a WECM Course Number.)
Overhaul procedures for four-stroke small engines, transmissions, and transaxles. Emphasis is on shop procedures for disassembly, assembly, component inspection, component measurement, component servicing, transmission troubleshooting, transmission inspection, and transaxle inspection. (3 Lec., 4 Lab.)

SMFT 1343 Semiconductor Manufacturing Technology I (3)
(This is a WECM Course Number.)
A study of the processes, materials, and equipment used in the manufacturing of semiconductors, including an overview of the semiconductor industry, related terminology, and standard safety practice.
(2 Lec., 2 Lab.)

SMFT 2231 RF Power Systems (2)
(This is a WECM Course Number.)
Prerequisite: CETT 1429. This course is a study of RF power systems and their applications in the semiconductor manufacturing industry. Topics include plasma physics, RF power amplifiers and oscillators, transmission lines, impedance matching and safety. The student will describe the applications of RF power systems in the semiconductor industry; describe hazards and required safety precautions in RF power systems; analyze the operation of power RD generators; explain the principles of resonance, filter applications, transmission line characteristics, and impedance matching in RF power systems. (2 Lec.)

SMFT 2343 Semiconductor Manufacturing Technology II (3)
(This is a WECM Course Number.)
Prerequisite: SMFT 1343 and CETT 1429. The continuation of Semiconductor Manufacturing I covering the processes, materials, and equipment used in the manufacturing of semiconductors. Topics address process-yield analysis and process troubleshooting. (2 Lec., 2 Lab.)

SOCI 1301 Introduction to Sociology (3)
(This is a Texas Common Course Number.)
Prerequisite: Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading and Writing. This course is a sociological study of social behavior processes and structures, emphasizing diversity and commonality among human beings. Topics are examined through several sociological perspectives, encouraging critical thinking and personal responsibility about social issues. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015125)

SOCI 1306 Contemporary Social Issues (3)
(This is a Texas Common Course Number.)
This course is a sociological study of social issues which typically include criminal behavior, social justice, poverty, social stratification, demographic shifts, health care, public policy, civil rights and social activism. Specific topics may vary from semester to semester to address contemporary social concerns. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015225)

SOCI 2301 Marriage, Family, and Close Relationships (3)
(This is a Texas Common Course Number.)
Marriage, choosing of a partner, love and attachment, parenting, communication, conflict and conflict resolution are analyzed. Family forms, relationships, and functions are included. Sociocultural differences in close relationships and family behavior are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015425)

SOCI 2306 Human Sexuality (3)
(This is a Texas Common Course Number.)
Topics include physiological, psychological, and sociological aspects of human sexuality. This course is cross-listed as Psychology 2306. The student may register for either Sociology 2306 or Psychology 2306, but may receive credit for only one of the two. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015325)

SOCI 2319 Race, Ethnicity and Community (3)
(This is a Texas Common Course Number.)
This course focuses on cultural, social, and institutional factors affecting relationships within and among ethnic, cultural, and racial groups. Emphasis is on current problems and intergroup relations, social movements, and related social changes, as well as community building and conflict resolution. The historic contributions of the groups may be presented. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015325)

SOCI 2320 Field Studies in American Minorities (3)
(This is a Texas Common Course Number.)
Experience is provided in various minority community centers. Work is under professional supervision in a task-oriented setting. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015325)

SOCI 2326 Social Psychology (3)
(This is a Texas Common Course Number.)
Prerequisite: Psychology 2301. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. This course is cross-listed as Psychology 2319. The student may register for either Sociology 2326 or Psychology 2319, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4216015125)

SOCI 2372 Communication and Negotiation Skills for Conflict Resolution (3)
(This is a Unique Need Course.)
This course teaches how to recognize negative communication styles and the technique necessary to break impasses, and create options or agreement; skills include how to build an atmosphere that fosters negotiation and how to mediate "win-win" solutions. This course is cross-listed as Psychology 2372. The student may register for either Sociology 2372 or Psychology 2372, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4511019225)

SOCI 2373 Introduction to Mediation (3)
(This is a Unique Need Course.)
This course defines the process of mediation, its history and development, and examines theories of conflict resolution and negotiation. Explores the use of mediation in domestic, commercial, educational, and other settings. Within each of these contexts, laws, ethics, gender considerations, psychology, sociology, and cultural diversity will be explored. This course is cross-listed as Psychology 2373. The student may register for either Sociology 2373 or Psychology 2373, but may receive credit for only one of the two. (3 Lec.)
(Coordinating Board Academic Approval Number 4511019125)

SOCI 2389 Applied Sociology Practicum (3)
(This is a WECM Course Number.)
An instructional program designed to integrate on-campus study with practical field experience in sociology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior, and/or social institutions, and in the practice of community service.
(1 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4501015125)

SOCW 2361 Introduction to Social Work (3)
(This is a Texas Common Course Number.)
The development of the field of social work is studied. Topics include the techniques of social work and the requirements for training in social work. (3 Lec.)
(Coordinating Board Academic Approval Number 4407015124)

SPAN 1100 Spanish Conversation (1)
(This is a Texas Common Course Number.)
Prerequisite: Spanish 1411 or Spanish 1412. This course is a further exploration of the Spanish language through creative problem-solving while utilizing the basic elements of the Spanish language. The course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 1609055413)

SPAN 1311 Introduction to Spanish (3)
(This is a Texas Common Course Number.)
SPAN 1311 is an introduction to the regular Spanish course sequence; it is not a substitute for SPAN 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in SPAN 1411. This course is cross-listed as Spanish 1411. The student may register for either Spanish 1311 or Spanish 1411, but may receive credit for only one of the two.
(3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1609055113)

SPAN 1411 Beginning Spanish (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. This course is cross-listed as Spanish 1311. The student may register for either Spanish 1411 or Spanish 1311, but may receive credit for only one of the two. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609055113)

SPAN 1412 Beginning Spanish (4)
(This is a Texas Common Course Number.)
Prerequisite: Spanish 1411 or the equivalent or demonstrated competence approved by the instructor This course continues the oral practice, reading, writing, grammar and cultural studies begun in Spanish 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609055113)

SPAN 2306 Spanish Conversation (3)
(This is a Texas Common Course Number.)
Prerequisite: Spanish 1411 and 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to strengthen and improve oral skills in the language. Oral activities focus on current events, cultural, historical and social issues. Audio-visual media are used to explore Hispanic life and society. This course is intended to complement Spanish 2311. Topics vary from semester to semester. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055413)

SPAN 2311 Intermediate Spanish (3)
(This is a Texas Common Course Number.)
Prerequisite: Spanish 1412 or the equivalent or demonstrated competence approved by the instructor This course is designed to further develop students' overall language proficiency and cultural knowledge though advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055213)

SPAN 2312 Intermediate Spanish (3)
(This is a Texas Common Course Number.)
Prerequisite: Spanish 2311 or the equivalent or demonstrated competence approved by the instructor This course is a continuation of Spanish 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055213)

SPAN 2316 Spanish for Business I (3)
(This is a Texas Common Course Number.)
Prerequisite: Spanish 2311 or the equivalent or demonstrated competence approved by the instructor. This course exposes students to the Spanish language used in business, including the terminology and idioms of Spanish business language in special oral and written communication. Emphasis is placed on the structure and content of Spanish business correspondence. Authentic materials are used to give students a contemporary view of business as it is conducted in Hispanic society. This course is not a substitute for Spanish 2311 or 2312. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055413)

SPAN 2317 Spanish for Business II (3)
(This is a Texas Common Course Number.)
Prerequisite: Spanish 2316 or the equivalent or demonstrated competence approved by the instructor. This course is devoted to the continued development of business language skills with a focus on the accurate use of business vocabulary and business style. Emphasis is on preparing students to function using Spanish in a business setting via practice of receptive and productive linguistic skills. The course also provides training in cross-cultural communication skills and is designed to help students achieve levels of proficiency to meet foreign language needs for business and international trade. This course is not a substitute for Spanish 2311 or 2312. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055413.)

SPAN 2321 Introduction to Spanish Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: Spanish 2312 or the equivalent or demonstrated competence approved by the instructor. This course is an introduction to Spanish literature. It includes readings in Spanish literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055313)

SPAN 2322 Introduction to Spanish Literature (3)
(This is a Texas Common Course Number.)
Prerequisite: Spanish 2312 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 2321. It includes readings in Spanish literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055313)

SPAN 2324 Spanish Conversation and Culture Through Reading (3)
(This is a Texas Common Course Number.)
Prerequisite: Three semesters of college Spanish or the equivalent. A reading and conversation course focusing on discussion of contemporary prose. This course seeks to improve comprehension and speaking skills in Spanish. This course may be repeated for credit.
(3 Lec.)
(Coordinating Board Academic Approval Number 1609055313)

SPCH 1144 Speech Communication Workshop I (1)
(This is a Texas Common Course Number.)
This laboratory course offers students a wide variety of applied speech communication experiences. (2 Lab.)
(Coordinating Board Academic Approval Number 2310016012)

SPCH 1145 Speech Communication Workshop II (1)
(This is a Texas Common Course Number.)
This laboratory course offers students a wide variety of applied speech communication experiences. (2 Lab.)
(Coordinating Board Academic Approval Number 2310016012)

SPCH 1311 Introduction to Speech Communication (3)
(This is a Texas Common Course Number.)
Prerequisite: One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards. Theory and practice of speech communication behavior in one-to-one, small group, and public communication situations are introduced. Students learn more about themselves, improve skills in communicating with others, and prepare and deliver formal public speeches. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015112)

SPCH 1315 Fundamentals of Public Speaking (3)
(This is a Texas Common Course Number.)
Prerequisite: One of the following must be met: (1) Developmental Reading 0093 AND Developmental Writing 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) Reading and Writing standards. An introductory course to develop the student's skills, knowledge, and understanding of the public speaking process. Topics include the principles of reasoning, audience analysis, collection of materials, outlining, and delivery. Emphasis is on the oral presentation of well-prepared speeches, using computer technology when appropriate. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015312)

SPCH 1318 Interpersonal Communication (3)
(This is a Texas Common Course Number.)
This course presents theories and exercises in verbal and nonverbal communication with focus on interpersonal relationships. (3 Lec.)
(Coordinating Board Approval Number 2310015412)

SPCH 1321 Business and Professional Communication (3)
(This is a Texas Common Course Number.)
Theories and skills of speech communication as applied to business and professional situations will be studied. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015212)

SPCH 1342 Voice and Articulation (3)
(This is a Texas Common Course Number.)
Students may register for either Speech Communication 1342 or Drama 2336 but may receive credit for only one of the two. The mechanics of speech are studied. Emphasis is on improving voice and pronunciation. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015812)

SPCH 2144 Speech Communication Workshop III (1)
(This is a Texas Common Course Number.)
This laboratory course offers students a wide variety of applied speech communication experiences. (3 Lab.)
(Coordinating Board Academic Approval Number 2310016012)

SPCH 2145 Speech Communication Workshop IV (1)
(This is a Texas Common Course Number.)
This laboratory course offers students a wide variety of applied speech communication experiences. (3 Lab.)
(Coordinating Board Academic Approval Number 2310016012)

SPCH 2335 Discussion and Debate (3)
(This is a Texas Common Course Number.)
Public discussion and argumentation are studied. Both theories and techniques are covered. Emphasis is on evaluation, analysis,and logical thinking. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015912)

SPCH 2341 Performance of Literature (3)
(This is a Texas Common Course Number.)
Various types of literature are examined. Practice is provided in preparing and presenting selections orally. Emphasis is on individual improvement. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015712)

SPCH 2389 Academic Cooperative in Communication (3)
(This is a WECM Course Number.)
This instructional program is designed to integrate on-campus study with practical hands-on work experience in Communication. In conjunction with class seminars, the student will set specific goals and objectives in the study of Communication. (1 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2401035212)

SPFT 1371 Sprinkler Fitter I (3)
(This is a WECM Local Need Course.)
Introduction to the trade, safety and math for sprinkler fitters, tools and equipment, hanger supports, restraint and guides, measuring and threading steel pipe, types and uses of flanged grooved and plain end fittings. Lab required. (2 Lec., 3 Lab.)

SPFT 1372 Sprinkler Fitter II (3)
(This is a WECM Local Need Course.)
This course covers the types and uses of plastic pipe, copper tubing, in fire sprinkler systems, underground pipe, discusses soils in sprinkler fitting work, proper handling and storage and installation of underground piping. Lab required. (2 Lec., 3 Lab.)

SPFT 1373 Sprinkler Fitter III (3)
(This is a WECM Local Need Course.)
This course covers an introduction to types and components of sprinklers systems, types and methods used to install standard sprinklers and special sprinklers, types and methods for installation of nozzles, types of general-purpose valves. Lab required. (2 Lec., 3 Lab.)

SPFT 1374 Sprinkler Fitter IV (3)
(This is a WECM Local Need Course.)
This course covers the proper safety, tools and equipment necessary when installing wet and dry-pipe fire systems, the function and operation of wet and dry-pipe fire systems also studies the components and methods of installing a wet and dry-pipe fire systems. Lab required. (2 Lec., 3 Lab.)

SPFT 2370 Sprinkler Fitter V (3)
(This is a WECM Local Need Course.)
This course covers the use of construction blueprints and math in sprinkler fitting, necessary tools and equipment, the study of water and types of water storage and water supplies. Lab required. (2 Lec., 3 Lab.)

SPFT 2371 Sprinkler Fitter VI (3)
(This is a WECM Local Need Course.)
This course covers the materials, methods used to install wet and dry standpipes fire systems, building construction and related building codes, types, of preaction/deluge systems, and methods used in troubleshooting wet and dry standpipe systems. Lab required. (2 Lec., 3 Lab.)

SPFT 2372 Sprinkler Fitter VII (3)
(This is a WECM Local Need Course.)
This course covers types and methods of installation of fire pumps, special extinguishing systems, testing, maintenance and troubleshooting of fire pumps, developing a maintenance checklist for fire system equipment. Lab required. (2 Lec., 3 Lab.)

SPFT 2373 Sprinkler Fitter VIII (3)
(This is a WECM Local Need Course.)
This course covers design, inspection and maintenance of fire systems, principles of hydraulics in fire systems, and introduction to the role and responsibilities of a supervisor. Lab required. (2 Lec., 3 Lab.)

SPNL 1391 Special Topics in Spanish Language and Literature (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

SRGT 1166 Practicum (or Field Experience) - Surgical Technology/Technologist (1)
(This is a WECM Course Number.)
Prerequisite: Acceptance to the Surgical Technologist program and a minimum "C" grade or better in ENGL 1301, SPCH 1311, SCIT 1407, HPRS 1204 and HPRS 2231. Concurrent enrollment in, or a minimum "C" grade or better in SCIT 1408 and HPRS 2300. Concurrent enrollment in SRGT 1505 and 1509. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (10 Ext.)

SRGT 1167 Practicum (or Field Experience) – Surgical Technology/Technologist (1)
(This is a WECM Course Number.)
Prerequisite: Current R. N. licensure by the Board of Nurse Examiners for the State of Texas, or graduate nurse pending NCLEX-RN examination. Current CPR certification. Acceptance into the Perioperative Nursing program. Concurrent enrollment in Perioperative Nursing I (SRGT 1340). Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (10 Ext.)

SRGT 1201 Medical Terminology (2)
(This is a WECM Course Number.)
Study of basic structure of medical words including prefixes, suffixes, roots, combining forms, plurals, pronunciation, spelling, and the definitions of medical terms. Emphasis is on building a professional vocabulary required for employment within the allied health care field. May be taken as a continuing education course. (2 Lec.)

SRGT 1340 Perioperative Nursing I (3)
(This is a WECM Course Number.)
Prerequisite: Current R.N. licensure by the Board of Nurse Examiners for the State of Texas, or graduate nurse pending NCLEX-RN examination. Current CPR certification. Acceptance into the Perioperative Nursing Program. Concurrent enrollment in Practicum (SRGT 1167). Introduction of the registered nurse or new graduate nurse to the operating room environment. The intraoperative aspect of perioperative nursing is emphasized. Included are basic principles of sterile technique, sterilization, preparation, care and use of surgical instruments, supplies and equipment; ethical/legal implications; surgical pharmacology and anesthetic agents; basic care and safety of the patient in the operating room. The scrub role is emphasized. (3 Lec.)

SRGT 1343 Perioperative Nursing II (3)
(This is a WECM Course Number.)
Prerequisite: A minimum "C" grade or better in Perioperative Nursing I (SRGT 1340) and Practicum (SRGT 1167). Concurrent enrollment in Practicum (SRGT 2366). Expansion of the principles and skills learned in Perioperative Nursing I. Included are specific patient preparations and care for given surgical procedures; wound healing; complications of surgical interventions; and pre- and post-operative visits. Selected surgical procedures will incorporate all human body systems. The circulating role is emphasized. (3 Lec.)

SRGT 1367 Practicum (or Field Experience) - Surgical Technology/Technologist (3)
(This is a WECM Course Number.)
Prerequisite: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technologist course work. Concurrent enrollment in, or a minimum "C" grade or better in HPRS 1202. Concurrent enrollment in SRGT 1441 and 1442. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (21 Ext.)

SRGT 1441 Surgical Procedures I (4)
(This is a WECM Course Number.)
Prerequisite: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technologist course work. Concurrent enrollment in, or a minimum "C" grade or better in HPRS 1202. Concurrent enrollment in SRGT 1442 and 1367. Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, and orthopedic surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. (4 Lec.)

SRGT 1442 Surgical Procedures II (4)
(This is a WECM Course Number.)
Prerequisite: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technologist course work. Concurrent enrollment in, or a minimum "C" grade or better in HPRS 1202. Concurrent enrollment in SRGT 1441 and 1367. Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the thoracic, peripheral vascular, plastic/reconstructive, EENT, cardiac, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. (4 Lec.)

SRGT 1505 Introduction to Surgical Technology (5)
(This is a WECM Course Number.)
Prerequisite: Acceptance to the Surgical Technologist program and a minimum "C" grade or better in ENGL 1301, SPCH 1311, SCIT 1407, HPRS 1204 and HPRS 2231. Concurrent enrollment in, or a minimum "C" grade or better in SCIT 1408 and HPRS 2300. Concurrent enrollment in SRGT 1509 and 1165. Orientation to surgical technology theory, surgical pharmacology and anesthesia, technological sciences, and patient care concepts. (4 Lec., 3 Lab.)

SRGT 1509 Fundamentals of Perioperative Concepts and Techniques (5)
(This is a WECM Course Number.)
Prerequisite: Acceptance to the Surgical Technologist program and a minimum "C" grade or better in ENGL 1301, SPCH 1311, SCIT 1407, HPRS 1204 and HPRS 2231. Concurrent enrollment in, or a minimum "C" grade or better in SCIT 1408 and HPRS 2300. Concurrent enrollment in SRGT 1505 and 1166. In-depth coverage of perioperative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. (4 Lec., 3 Lab.)

SRGT 2130 Professional Readiness (1)
(This is a WECM Course Number.)
Prerequisite: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technologist course work. Concurrent enrollment in SRGT 2266. Exploration of issues and situations faced as surgical technologists. Topics may include job-seeking skills and written professional portfolios, pros/cons of malpractice insurance, reality shock of employment, coping with issues of death and dying, organ procurement issues, and preparation for national certification. A capstone experience may be included. (1 Lec.)

SRGT 2266 Practicum (or Field Experience) - Surgical Technology/Technologist (3)
(This is a WECM Course Number.)
Prerequisite: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technologist course work. Concurrent enrollment in SRGT 2130. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. An external experience capstone is included. (20 Ext.)

SRGT 2366 Practicum (or Field Experience) – Surgical Technology/Technologist (3)
(This is a WECM Course Number.)
Prerequisite: A minimum "C" grade or better in Perioperative Nursing I (SRGT 1340) and Practicum (SRGT 1167). Concurrent enrollment in Perioperative Nursing II (SRGT 1343). Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. (21 Ext.)

SRVY 1301 Introduction to Surveying (3)
(This is a WECM Course Number.)
An overview of the surveying profession. The history of surveying and its impact on the world. Review of the mathematics used in surveying. Introduction to basic surveying equipment with emphasis on measurements. Instruction on surveying procedures and the limitation of errors. Calculation to determine precision and error of closure. (2 Lec., 3 Lab.)

SRVY 1309 Surveying Measurement Practice (3)
(This is a WECM Course Number.)
An introductory lab course covering the equipment and hardware of the profession necessary to measure horizontal and vertical distances, in accordance with prevailing and applicable professional standards, e.g. standards of the National Geodetic Survey, state and local statues and regulations, professional standards, such as the Texas Society of Professional Surveyors. (2 Lec., 3 Lab.)

SRVY 1313 Plane Surveying (3)
(This is a WECM Course Number.)
An introductory overview of surveying equipment and measurement techniques used in mapping. Emphasis on leveling and traversing for preparing a map. Lab required. (2 Lec., 3 Lab.)

SRVY 1315 Surveying Calculations I (3)
(This is a WECM Course Number.)
An introduction to the mathematics used in surveying and mapping, e.g., algebra, plane trigonometry, and plane, solid, and analytical geometry. (3 Lec.)

SRVY 1419 Introduction to Geographic Information Systems (4)
(This is a WECM Course Number.)
A study of the theory of geographic information systems, including conceptual understanding and database development, terms, definitions, classifications, use and client requirements, and prevailing and applicable professional standards. Projects and procedures to establish maps based upon geographic information systems. (3 Lec., 3, Lab.)

SRVY 1491 Special Topics in Surveying (4)
(This is a WECM Course Number.)
Prerequisite: SRVY 1419. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec., 3, Lab.)

SRVY 2305 Geographic Information Systems Applications (3)
(This is a WECM Course Number.)
A hands-on course with computer applications providing additional conceptual understanding of geographic information systems and practical applications using a variety of Geographic Information System software.
(2 Lec., 4 Lab.)

SWAH 1470 Beginning Swahili I (4)
(This is a Unique Need Course.)
This course is an introductory course intended for students with little or no knowledge in the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number is to be assigned.)

SWAH 1471 Beginning Swahili II (4)
(This is a Unique Need Course.)
Prerequisite: Swahili 1470 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Swahili 1470. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number is to be assigned.)

TECA 1303 Family and the Community (3)
(This is an academic transfer credit course number.)
A study of the relationship between the child, the family, the community, and early childhood educators, including a study of parent education, family and community lifestyles, child abuse, and current issues. (3 Lec.)
(Coordinating Board Academic Approval Number 1907015109)

TECA 1311 Introduction to Early Childhood Education (3)
(This is an academic transfer credit course number.)
An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues. If you enroll in this academic transfer credit course, you may also be required to enroll in course CDEC 1174. (3 Lec.)
(Coordinating Board Academic Approval Number 1907085109)

TECA 1318 Nutrition, Health and Safety (3)
(This is an academic transfer credit course number.)
A study of nutrition, health, and safety, including community health, universal health precautions, and legal implications. Practical applications of these principles in a variety of settings. (3 Lec.)
(Coordinating Board Academic Approval Number 1907085209)

TECA 1354 Child Growth and Development (3)
(This is an academic transfer credit course number.)
A study of the principles of normal child growth and development from conception to adolescence. Focus on physical, cognitive, social, and emotional domains of development. (3 Lec.)
(Coordinating Board Academic Approval Number 1907065209)

TECM 1303 Technical Mathematics (3)
(This is a WECM Course Number.)
A review of mathematical functions including fractions, decimals, proportions, perimeters, areas, volumes of geometric figures, and certain algebraic/trigonometric functions, as required by specific businesses and industries for successful on-the-job performance.
(3 Lec.)

TECM 1317 Technical Trigonometry (3)
(This is a WECM Course Number.)
Prerequisite: TECM 1341. Study of triangular measurement and calculation in technical applications. Presentation of trigonometry ratio, solution of right triangles, oblique triangles, and vector analysis as used in industrial applications. (3 Lec.)

TECM 1341 Technical Algebra (3)
(This is a WECM Course Number.)
Prerequisite: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 0097 or Developmental Mathematics 0091 or equivalent. Application of algebra to technical occupations. Topics include principles of linear equations, simultaneous equations, and manipulation of powers and roots. Emphasis on stated word problems relevant to technical and vocation occupations. (3 Lec.)

TECM 1349 Technical Math Applications (3)
(This is a WECM Course Number.)
Prerequisite: TECM 1317. Fundamentals of trigonometry and geometry as used in a variety of technical settings. Topics include the use of plane and solid geometry to solve areas and volumes encountered in industry.
(3 Lec.)

TECM 1391 Special Topics in Applied Mathematics, General (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(3 Lec.)

TRVM 1101 Customer Sales and Service (1)
(This is a WECM Course Number.)
Practical information and techniques to create excellent customer sale and service unique to the travel public.
(1 Lec.)

TRVM 1117 Cruises (1)
(This is a WECM Course Number.)
Current issues and trends related to the cruise industry. Includes a discussion of the many types of cruise lines and the reasons for the popularity of this mode of travel.
(1 Lec.)

TRVM 1191 Special Topics in Travel and Tourism (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec., 16 Ext.)

TRVM 1291 Special Topics in Travel and Tourism (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec., 2 Lab.)

TRVM 1300 Introduction to Travel and Tourism (3)
(This is a WECM Course Number.)
An overview of the travel industry. Emphasis on travel careers and the impact on society. In addition, this course includes transportation, lodging, hospitality, cruise, group, tours, parks convention centers, governmental agencies and associations. (3 Lec.)

TRVM 1306 Travel Automation I (3)
(This is a WECM Course Number.)
Prerequisite: POFT 1127. An introduction to computer training using one of the major computer reservation systems for the travel industry. (2 Lec., 3 Lab.)

TRVM 1308 Travel Destinations I - Western Hemisphere (3)
(This is a WECM Course Number.)
Study of countries located in the Western Hemisphere including Canada, United States, Latin America, South America, and the Caribbean Islands. Emphasis on the culture, customs, climate, physical features, language, currency, tourist, and seasonal attractions. In addition this course includes the study of tourism destination including natural and man-made attractions in each country. (3 Lec.)

TRVM 1323 Group Tour Operations (3)
(This is a WECM Course Number.)
A study of the role of the group planner, selling to groups, and planning itineraries, including components of a tour package, tour costing, advertising, and promotion, group dynamics, and tour guide qualifications. (3 Lec.)

TRVM 1325 Exposition and Trade Show Management (3)
(This is a WECM Course Number.)
A broad-based introduction to the principles and skills required for the management of expositions. Examination of the fundamental business philosophy of expositions and their position in the marketplace. An overview of the major issues in exposition management including needs assessment, budget strategies, site selection, floor plan development, contractor relationships, sales and marketing and related management issues. (3 Lec.)

TRVM 1327 Special Events Design (3)
(This is a WECM Course Number.)
Focus on planning and managing special events in the meeting planning area. An overview of the entire sequence of events from conceptual stage of the first meeting through completion of the event. Emphasis on technical planning skills including site selection, negotiating with suppliers, devising meeting specifications, preparing a budget, and working with facility staff to manage a successful event. (3 Lec.)

TRVM 1331 Introduction to Hospitality Industry (3)
(This is a WECM Course Number.)
An exploration of the hospitality industry with emphasis on history and development. Topics include food, beverage, and lodging management. (3 Lec.)

TRVM 1341 Travel Destinations II - Eastern Hemisphere (3)
(This is a WECM Course Number.)
Study of countries located in the Eastern Hemisphere including Europe, Asia, Africa, Middle East, Commonwealth of Independent States, Australia, and New Zealand. Emphasis on the culture, customs, climate, physical features, language, currency, tourist and specific seasonal attractions. In addition this course will include the study of tourism destinations including natural and man-made attractions in countries located in the Eastern Hemisphere. (3 Lec.)

TRVM 1345 Travel and Tourism Sales and Marketing Techniques (3)
(This is a WECM Course Number.)
A study of marketing, sales techniques, promotions, and advertising theories as applied to the travel and tourism industry. Coverage of the marketing mix in travel, market segmentation, market planning, and the use of advertising and other communication techniques. Emphasis on buyer motivation, telephone sales techniques, profitable travel counseling, and the use of promotional material in selling travel. (3 Lec.)

TRVM 1391 Special Topics in Travel and Tourism (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

TRVM 1491 Special Topics in Travel and Tourism (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (4 Lec.)

TRVM 2300 Applied Industry On-Line and Software Products (3)
(This is a WECM Course Number.)
Prerequisite: ITSC 1401 or knowledge of Microsoft Office. Overview of the on-line and software products used to assist the industry professional. (2 Lec., 2 Lab.)

TRVM 2301 Introduction to Convention/Meeting Management (3)
(This is a WECM Course Number.)
Overview of the meetings and conventions industry and the various aspects and skills involved in planning and managing meetings and conventions. Emphasis on types of meetings, meeting markets, industry suppliers, budget and program planning, site selection and contract negotiations, registration and housing, food and beverage requirements, functions and meeting room setup, and audiovisual requirements. (3 Lec.)

TRVM 2331 Convention and Exposition Law and Ethics (3)
(This is a WECM Course Number.)
Application of general legal principles and statutory requirement for meetings, conventions and trade shows. Emphasis on ethical considerations to problems faced by meeting planners, hotels, and convention centers in the negotiation and implementation of agreements for meetings and similar events. In addition this course will cover legal issues for travel and suppliers. (3 Lec.)

TRVM 2333 Applied Convention/Meetings Management (3)
(This is a WECM Course Number.)
Prerequisite: TRVM 2301. Discussion of meeting planning with emphasis on the key areas of meeting management. Topics include needs assessment, identifying meeting objectives, program development, facility selection, negotiations, contracts, meeting and function space set-up, promotion and publicity, budgeting, evaluation, and legal issues. (3 Lec.)

TRVM 2341 International Convention/Meeting Management (3)
(This is a WECM Course Number.)
Prerequisite: TRVM 2301. A discussion of meeting planning notes and responsibilities in an international context. Topics address foreign currency, customs and laws, shipping, international planning resources, marketing, and language interpretation. (3 Lec.)

TRVM 2343 Exposition Service Contracting (3)
(This is a WECM Course Number.)
Prerequisite: TRVM 1325. A study of logistical support systems of expositions and trade shows. Topics include designing floor plans, installation and dismantling of exhibits, freights, and drayage abilities, contracting labor, and working with unions. Instruction in selecting service contractors and hall management. (3 Lec.)

TRVM 2355 Exposition and Trade Show Operations (3)
(This is a WECM Course Number.)
Prerequisite: TRVM 1325. A discussion of management of the specific problems of trade shows and exhibitions, including design, construction, and regulation. Logistics for planning events, including crowd control, special effects, lighting, decorations and audio. Procedures for conduction fairs, festivals, sporting events, and grand openings. (3 Lec.)

TRVM 2380 Cooperative Education - Travel and Tourism (3)
(This is a WECM Course Number.)
Prerequisite: Student must have completed basic courses including: TRVM 1300 and TRVM 2301. Career related activities encountered in the student's area of specialization are offered though a cooperative agreement between college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through paid work experience. (1 Lec., 15 Ext.)

TRVM 2435 Travel Automation II (4)
(This is a WECM Course Number.)
Required prerequisite: TRVM 1306. A continuation of the study of airline computer reservation systems. Emphasis on reserving cars and hotels, using queues, creating passenger profiles, interpreting air fares, rules, and routing, and explaining these to passengers.
(3 Lec., 2 Lab.)

VIET 1311 Introduction to Vietnamese (3)
(This is a Texas Common Course Number.)
VIET 1311 is an introduction to the regular Vietnamese course sequence; it is not a substitute for VIET 1411. The focus is on pronunciation and the communications skills using basic vocabulary and grammar. Customs and cultural insights are also presented. Students who wish to continue their studies will next enroll in VIET 1411. This course is cross-listed as Vietnamese 1411. The student may register for either Vietnamese 1311 or Vietnamese 1411, but may receive credit for only one of the two. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1614085113)

VIET 1411 Beginning Vietnamese I (4)
(This is a Texas Common Course Number.)
This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented. This course is cross-listed as Vietnamese 1311. The student may register for either Vietnamese 1411 or Vietnamese 1311, but may receive credit for only one of the two. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1614085113)

VIET 1412 Beginning Vietnamese II (4)
(This is a Texas Common Course Number.)
Prerequisite: Vietnamese 1411 or the equivalent or demonstrated competence approved by the instructor. This course continues the oral practice, reading, writing, grammar and cultural studies begun in Vietnamese 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1614085113.)

VIET 2311 Intermediate Vietnamese I (3)
(This is a Texas Common Course Number.)
Prerequisite: Vietnamese 1412 or the equivalent or demonstrated competence approved by the instructor. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1614085213)

VIET 2312 Intermediate Vietnamese II (3)
(This is a Texas Common Course Number.)
Prerequisite: Vietnamese 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Vietnamese 2311. The stress is on reading, composition, grammatical omplexities, and intense oral practice, with continued studies of theculture. (3 Lec.)
(Coordinating Board Academic Approval Number 1614085213)

NOTE: HPRS 1204, 1291, 1202, 2300, 2231, 2201 are all health occupations core curriculum courses. These courses are listed and described in a separate section of the college catalog: Health Occupations Core Curriculum.

VNSG 1163 Clinical – Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS) (1)
(This is a WECM Course Number.)
Prerequisite: VNSG 1406. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Focus is on caring for the patient in the maternal-child setting. (3 Ext.)

VNSG 1227 Essentials of Medication Administration (2)
(This is a WECM Course Number.)
General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement. (2 Lec.)

VNSG 1263 Clinical – Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS) (2)
(This is a WECM Course Number.)
Prerequisite: VNSG 1334. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Focus is on the care of pediatric clients. A clinical rotation focused on transition to the role of the vocational nurse is also included. (6 Ext.)

VNSG 1304 Foundations of Nursing (3)
(This is a WECM Course Number.)
Introduction to the nursing profession including history, standards of practice, legal and ethical issues, and role of the vocational nurse. Topics include mental health, therapeutic communication, cultural and spiritual diversity, nursing process, and holistic awareness. (3 Lec.)

VNSG 1323 Basic Nursing Skills (3)
(This is a WECM Course Number.)
Mastery of entry level nursing skills and competencies for a variety of health care settings. Utilization of the nursing process as the foundation of all nursing interventions. (2 Lec., 2 Lab.)

VNSG 1334 Pediatrics (3)
(This is a WECM Course Number.)
Prerequisite: Completion of all Level II Vocational Nursing courses. Study of childhood diseases and childcare from infancy through adolescence. Focus on the care of the well and the ill child utilizing the nursing process. (3 Lec.)

VNSG 1360 Clinical – Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS) (3)
(This is a WECM Course Number.)
VNSG 1323 and VNSG 1509 must be taken concurrently with VNSG 1360. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Includes independent study activity, focused on the care of the elderly in the community. (9 Ext.)

VNSG 1406 Maternal/Newborn Nursing (4)
(This is a WECM Course Number.)
Prerequisite: All Level II Vocational Nursing courses. A study of the biological, psychological and sociological concepts applicable to basic needs of the family including childbearing and neonatal care. Topics include physiological changes related to pregnancy, fetal development, and nursing care of the family during labor and delivery and the purpureum. (3 Lec., 2 Lab.)

VNSG 1509 Nursing in Health and Illness II (5)
(This is a WECM Course Number.)
Introduction to common health problems of the adult requiring medical and surgical interventions. (5 Lec.)

VNSG 1510 Nursing in Health and Illness III (5)
(This is a WECM Course Number.)
Prerequisite: All Level I Vocational Nursing Courses. Corequisite: VNSG 2460. Continuation of Nursing in Health and Illness II. Further study of common medical-surgical health problems of the adult including concepts of mental illness. Incorporates knowledge necessary to make the transition from student to graduate vocational nurse. (4 Lec., 3 Lab.)

VNSG 2460 Clinical – Licensed Practical/Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS) (4)
(This is a WECM Course Number.)
VNSG 1510 must be taken concurrently with VNSG 2460. A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concept. Direct supervision is provided by the clinical professional. Focus is on the care of the client with more complex medical-surgical health problems. (24 Ext.)

VTHT 1105 Veterinary Medical Terminology (1)
(This is a WECM Course Number.)
Introduction to word parts, directional terminology, and analysis of common veterinary terms. The student will define, apply, and analyze common veterinary terms. (1 Lec.)

VTHT 1317 Veterinary Office Management (3)
(This is a WECM Course Number.)
Practical experience in management of the veterinary hospital. Emphasis on client relations, record keeping, inventory, employment skills, and computer skills in the veterinary environment. The student will demonstrate effective client relation, communication, and computer skills; apply basic business principles such as the proper maintenance of medical records; and display employment skills including interviewing, resume writing, and proper dress. (3 Lec.)

VTHT 1321 Equine Reproduction (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval. Introduction to common reproductive management techniques of equine reproduction including natural and artificial insemination. Emphasis on practical reproductive techniques in laboratory settings. The student will demonstrate knowledge of mare and stallion reproductive anatomy and physiology; perform handling techniques for and management of brood mares and stallions; and implement artificial insemination and natural breeding programs. (2 Lec., 3 Lab.)

VTHT 1341 Anesthesia and Surgical Assistance (3)
(This is a WECM Course Number.)
Prerequisite: Introduction to Veterinary Technology, Veterinary Pharmacology, and Advanced Veterinary Anatomy and Physiology. In-depth application of surgical, obstetrical, and anesthesia techniques including identification and use of instruments and equipment. The student will identify instruments used in veterinary surgery; demonstrate operating room etiquette and the use of sterile technique; perform pre-anesthesia evaluation, administer and monitor anesthesia, and provide post-anesthesia care; recognize and respond appropriately to anesthetic emergencies; and assist with routine surgical and obstetrical procedures. (2 Lec., 4 Lab.)

VTHT 1345 Veterinary Radiology (3)
(This is a WECM Course Number.)
Prerequisite: Anesthesia and Surgical Assistance. Presentation of theory and principles and practical application of radiology within the field of veterinary medicine. The student will implement and follow recommended safety procedures; prepare and use technique charts; take and process diagnostic radiographs using stationary and portable X-ray machines; properly care for radiographic equipment; and label, file, and store radiographs. (2 Lec., 3 Lab.)

VTHT 1349 Veterinary Pharmacology (3)
(This is a WECM Course Number.)
Prerequisite: Mathematics and Advanced Veterinary Anatomy and Physiology. Fundamentals of pharmacology including recognition, calculation, labeling, packaging, and administration of common veterinary drugs, biologics, and therapeutic agents. Discussion of normal and abnormal responses to these agents. The student will recognize general types and groups of drugs; prepare, label, package, and dispense pharmaceuticals in an ethical/legal manner; calculate dosages using proper weights, units, and measures; explain and use appropriate routes and methods of drug administration; and differentiate between normal and abnormal responses to medication. (3 Lec., 1 Lab.)

VTHT 1401 Introduction to Veterinary Technology (4)
(This is a WECM Course Number.)
Prerequisite: Program Acceptance. Survey of the profession of veterinary technology with emphasis on basic techniques, handling and care of domestic animals, and ethical and professional requirements. The student will demonstrate basic restraint, medication, and treatment techniques for domestic animals; identify breeds of domestic animals; and specify the distinct job responsibilities of a veterinary technician in a modern veterinary practice including physical exams, basic care, feeding, sanitation, public and/or client relations, and ethical and legal issues. (3 Lec., 3 Lab.)

VTHT 1413 Veterinary Anatomy and Physiology (4)
(This is a WECM Course Number.)
Gross anatomy of domestic animals including physiological explanations of how each organ system functions. The student will identify and describe the major anatomical and physiological systems of domestic animals and apply this knowledge to common disease processes. (3 Lec., 3 Lab.)

VTHT 2201 Canine and Feline Clinical Management (2)
(This is a WECM Course Number.)
Prerequisite: Introduction to Veterinary Technology. Survey of feeding, common management practices, and care of canines and felines in a clinical setting. Review of common diseases of canines and felines encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of canines and felines in a clinical setting; and recognize common disease pathophysiology.
(2 Lec., 1 Lab.)

VTHT 2205 Equine Clinical Management (2)
(This is a WECM Course Number.)
Prerequisite: Introduction to Veterinary Technology. Survey of feeding, common management practices, and care of equines in a clinical setting. Review of common diseases of equines encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; and implement knowledge of nutrition, behavior, and reproduction of equines in a clinical setting. (2 Lec., 1 Lab.)

VTHT 2209 Food Animal Clinical Management (2)
(This is a WECM Course Number.)
Prerequisite: Introduction to Veterinary Technology. Survey of feeding, common management practices, and care of food producing animals in a clinical setting. Review of common diseases of food producing animals encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of food producing animals in a clinical setting; and recognize common disease pathophysiology. (2 Lec., 1 Lab.)

VTHT 2213 Lab Animal Clinical Management (2)
(This is a WECM Course Number.)
Prerequisite: Introduction to Veterinary Technology. Survey of feeding, common management practices, and care of laboratory animals in a clinical setting. Review of common diseases of laboratory animals encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of laboratory animals in a clinical setting; and recognize common disease pathophysiology.
(2 Lec., 1 Lab.)

VTHT 2217 Exotic Animal Clinical Management (2)
(This is a WECM Course Number.)
Prerequisite: Instructor approval. Survey of feeding, common management practices, and care of exotic animals in a clinical or zoological setting. Review of common diseases of exotic animals encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of exotic animals in a clinical setting; and recognize common disease pathophysiology.
(2 Lec., 1 Lab.)

VTHT 2321 Veterinary Parasitology (3)
(This is a WECM Course Number.)
Prerequisite: Program acceptance. Study of parasites common to domestic animals including zoonotic diseases. The student will identify internal and external parasites and parasites of public health importance; and apply knowledge of basic life cycles to the study of parasites. (2 Lec., 3 Lab.)

VTHT 2323 Veterinary Clinical Pathology I (3)
(This is a WECM Course Number.)
Prerequisite: Program acceptance. In-depth study of hematology and related chemistries with emphasis on lab procedures. The student will perform complete blood counts (CBC's); recognize abnormal blood conditions; perform common blood chemistries; demonstrate appropriate use of diagnostic equipment; and perform pre-anesthesia evaluation. (2 Lec.,4 Lab.)

VTHT 2331 Veterinary Clinical Pathology II (3)
(This is a WECM Course Number.)
Prerequisite: Program acceptance and Advanced Veterinary Anatomy and Physiology. In-depth study of urinalysis and cytology. Survey of microbiological techniques. Emphasis on laboratory procedures. The student will perform urinalysis, cytological, and basic microbiological techniques; review abnormal blood conditions and common blood chemistries; demonstrate appropriate use of diagnostic equipment; and perform pre-anesthesia evaluation. (2 Lec., 4 Lab.)

VTHT 2380 Cooperative Education - Veterinarian Assistant/Animal Health Technician (3)
(This is a WECM Course Number.)
Prerequisite: Instructor approval, Anesthesia and Surgical Assistance, and Veterinary Clinical Pathology II. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the particular occupation and the business/industry; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable technical language of the occupation and the business or industry. (1 Lec., 15 Ext.)

VTHT 2425 Large Animal Assisting Techniques (4)
(This is a WECM Course Number.)
Prerequisite: Introduction to Veterinary Technology, Veterinary Pharmacology, and Advanced Veterinary Anatomy and Physiology. Study of basic restraint and proper management; treatment, and medication techniques for farm animals. The student will perform basic restraint of farm animals; demonstrate proper treatment and medication techniques; and identify common diseases of and management techniques for farm animals. (3 Lec., 4 Lab.)

VTHT 2435 Advanced Veterinary Anatomy and Physiology (4)
(This is a WECM Course Number.)
Prerequisite: Veterinary Anatomy and Physiology. Continuation of anatomy of domestic animals including physiological explanations of the functioning of each system. The student will identify and describe each anatomical and physiological system of domestic animals and apply this knowledge to common disease processes. (3 Lec., 3 Lab.)

VTHT 2439 Veterinary Nursing Care (4)
(This is a WECM Course Number.)
Prerequisite: VTHT 2425, VTHT 1341, and VTHT 2331. Capstone course requiring integration of course work in the field of veterinary technology. The student will apply surgical and anesthesia principles with special attention to pharmacological care; and demonstrate competencies expected of an entry level registered veterinary technician. (3 Lec., 3 Lab.)

WDWK 1115 Trim and Millwork (1)
(This is a WECM Course Number.)
Topics include millwork, molding, and specialty trim work and floor covering. Other topics include job planning, blueprints and specifications for use in determining material requirements. Lab required. (2 Lab.)

WDWK 1313 Cabinet Making (3)
(This is a WECM Course Number.)
Includes the design and construction of base cabinets and wall cabinets for kitcg equipment and processes, basic welding gases, fluxes, rods, electrodes, symbols, and blueprints. Lab required. (2 Lec., 3 Lab.)

WDWK 2451 Cabinet Making II (4)
(This is a WECM Course Number.)
Advanced skills in machine woodworking and hand craftsmanship. Emphasizes advanced design and door and drawer construction, laminate laying, and customer and co-workers relations. Lab required. (3 Lec., 2 Lab.)

WLDG 1191 Special Topics in Welder/Welding Technologist (1)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec., 1 Lab.)

WLDG 1217 Introduction to Layout and Fabrication (2)
(This is a WECM Course Number.)
A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction. Lab required. (1 Lec., 4 Lab.)

WLDG 1221 Introduction to Welding Fundamentals (2)
(This is a WECM Course Number.)
An introduction to the fundamentals of equipment used in oxyacetylene and arc welding, including welding and cutting safety, basic oxyacetylene welding and cutting, basic arc welding processes and basic metallurgy. (1 Lec., 3 Lab.)

WLDG 1222 Introduction to Welding Fundamentals (2)
(This is a WECM Course Number.)
Prerequisite: None. A continuation of Welding 1221, an introduction to the fundamentals of equipment used in oxyacetylene and arc welding, including welding and cutting safety, basic oxyacetylene welding and cutting, basic arc welding processes and basic metallurgy. (1 Lec., 3 Lab.)

WLDG 1225 Introduction to Oxy-Fuel Welding and Cutting (2)
(This is a WECM Course Number.)
An introduction to oxy-fuel welding and cutting, including history and future in welding, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies. (1 Lec., 3 Lab.)

WLDG 1230 Introduction to Gas Metal Arc (MIG) Welding (2)
(This is a WECM Course Number.)
A study of the principles of gas metal arc welding, setup and use of GMAW equipment, and safe use of tools/equipment. Instruction in various joint designs. This course is cross-listed as WLDG 1430. The student may register for either WLDG 1230 or WLDG 1430, but may receive credit for only one of the two. (1 Lec., 3 Lab.)

WLDG 1234 Introduction to Gas Tungsten Arc (TIG) Welding (2)
(This is a WECM Course Number.)
An introduction to the principles of gas tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs. This course is cross-listed as WLDG 1434. The student may register for either WLDG 1234 or WLDG 1434, but may receive credit for only one of the two.
(1 Lec., 3 Lab./1 Lec., 4 Lab.)

WLDG 1257 Intermediate Shielded Metal Arc (SMAW) Welding (2)
(This is a WECM Course Number.)
A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. Lab required. This course is cross-listed as WLDG 1457. The student may register for either WLDG 1257 or WLDG 1457, but may receive credit for only one of the two. (1 Lec., 4 Lab.)

WLDG 1273 Introduction to Layout and Fabrication (2)
(This is a WECM Local Need Course.)
A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction. (1 Lec., 3 Lab.)

WLDG 1274 Intermediate Layout and Fabrication (2)
(This is a WECM Local Need Course.)
A continuation of the introductory Layout and Fabrication course which covers design and production of shop layout and fabrication. Emphasis placed on symbols, blueprints, and written specifications. (1 Lec., 3 Lab.)

WLDG 1291 Special Topics in Welder/Welding Technologist (2)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec., 3 Lab.) (1 Lec., 2 Lab.)

WLDG 1307 Introduction to Welding Using Multiple Processes (3)
(This is a WECM Course Number.)
An overview of the basic welding processes, including oxy-fuel welding and cutting, shielded metal arc (SMAW), gas metal arc (GMAW), and gas tungsten arc welding (GTAW). (2 Lec., 3 Lab.)

WLDG 1313 Introduction to Blueprint Reading for Welders (3)
(This is a WECM Course Number.)
A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes, including systems of measurement and industry standards. Interpretation of plans and drawings used by industry. (2 Lec., 4 Lab.) (3 Lec., 1 Lab.)

WLDG 1323 Welding Safety, Tools, and Equipment (3)
(This is a WECM Course Number.)
An introduction to welding careers and safety practice, including welding safety; OSHA and the Hazardous Communication Act; Material Safety Data Sheets (MSDS); basic mathematics; measuring systems; shop operations; use and care of precision measuring tools; and the use and care of hand and power tools. Instruction on various types of welding equipment and processes, basic welding gases, fluxes, rods, electrodes, symbols, and blueprints. Lab required. (2 Lec., 3 Lab.)

WLDG 1337 Introduction to Metallurgy (3)
(This is a WECM Course Number.)
A study of ferrous and nonferrous metals from the ore to the finished product. Emphasis on metal alloys, heat treating, hard surfacing, welding techniques, forging, foundry processes, and mechanical properties of metal including hardness, machinability, and ductility.
(1 Lec., 6 Lab.)

WLDG 1371 Welding Standards (3)
(This is a WECM Local Need Course.)
Topics will address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.
(1 Lec., 6 Lab.)

WLDG 1381 Cooperative Education-Welder/Welding Technologist (3)
(This is a WECM Course Number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid workexperience. (1 Lec., 20 Lab.)

WLDG 1391 Special Topics in Welder/Welding Technologist (3)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(1 Lec., 6 Lab.) (2 Lec., 3 Lab.)

WLDG 1425 Introduction to Oxy-Fuel and Cutting (4)
(This is a WECM Course Number.)
An introduction to oxy-fuel welding and cutting, including history and future in welding, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies. (2 Lec., 6 Lab.)

WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW) (4)
(This is a WECM Course Number.)
An introduction to shielded metal arc welding process. Emphasis placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions.
(2 Lec., 6 Lab.)

WLDG 1430 Introduction to Gas Metal Arc (MIG) Welding (4)
(This is a WECM Course Number.)
A study of the principles of gas metal arc welding, setup and use of GMAW equipment, and safe use of tools/equipment. Instruction in various joint designs. This course is cross-listed as WLDG 1230. The student may register for either WLDG 1430 or WLDG 1230, but may receive credit for only one of the two. (2 Lec., 6 Lab.)

WLDG 1434 Introduction to Gas Tungsten Arc (TIG) Welding (4)
(This is a WECM Course Number.)
An introduction to the principles of gas tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs. This course is cross-listed as WLDG 1234. The student may register for either WLDG 1434 or WLDG 1234, but may receive credit for only one of the two. (2 Lec., 6 Lab.)

WLDG 1435 Introduction to Pipe Welding (4)
(This is a WECM Course Number.)
An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes. Lab required. (3 Lec., 2 Lab.)

WLDG 1457 Intermediate Shielded Metal Arc Welding (SMAW) (4)
(This is a WECM Course Number.)
A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. This course is cross-listed as WLDG 1257. The student may register for either WLDG 1457 or WLDG 1257, but may receive credit for only one of the two. (2 Lec., 6 Lab.)

WLDG 1471 Welding Qualifications (4)
(This is a WECM Local Need Course.)
Topics covered will include interpretation of applicable welding specifications, electrode use, current/polarity characteristics, performing a wide range of welding operations, weld quality analysis, welding supplies/materials conservation practices, and operational safety practices. (2 Lec., 6 Lab.)

WLDG 1491 Special Topics in Welder/Welding Technologist (4)
(This is a WECM Course Number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.
(2 Lec., 6 Lab.)

WLDG 2206 Intermediate Pipe Welding (2)
(This is a WECM Course Number.)
A comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds 1G, 2G 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices.
(1 Lec., 3 Lab.)

WLDG 2207 Intermediate Pipe Welding (2)
(This is a WECM Course Number.)
A continuation of Welding 2206, a comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds 1G, 2G 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices. (1 Lec., 3 Lab.)

WLDG 2213 Intermediate Welding Using Multiple Processes (2)
(This is a WECM Course Number.)
Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process. This course is cross-listed as WLDG 2413. The student may register for either WLDG 2213 or WLDG 2413, but may receive credit for only one of the two. (1 Lec., 3 Lab.)

WLDG 2214 Intermediate Welding Using Multiple Processes (2)
(This is a WECM Course Number.)
Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process. (1 Lec., 4 Lab.)

WLDG 2331 Advanced Blueprint Interpretation and Cost Analysis (3)
(This is a WECM Course Number.)
A continuation of the Blueprint for Welders course. Emphasis placed on inspection, cost analysis, and estimating, including instruction in basic drafting skills. (2 Lec., 4 Lab.)

WLDG 2413 Welding Using Multiple Processes (4)
(This is a WECM Course Number.)
Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding, gas metal arc welding, flux-cored arc welding, gas tunsten arc welding, or any other approved welding process. This course is cross-listed as WLDG 2213. The student may register for either WLDG 2413 or WLDG 2213, but may receive credit for only one of the two. (2 Lec., 6 Lab.)

WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW) (4)
(This is a WECM Course Number.)
Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions. (2 Lec., 6 Lab.)

WLDG 2447 Advanced Gas Metal Arc (MIG) Welding (4)
(This is a WECM Course Number.)
Advanced topics in GMAW welding, including welding in various positions and directions. (2 Lec., 6 Lab.)

WLDG 2451 Advanced Gas Tungsten Arc (TIG) Welding (4)
(This is a WECM Course Number.)
Advanced topics in GTAW welding, including welding in various positions and directions. (2 Lec., 6 Lab.)

WLDG 2455 Advanced Welding Metallurgy (4)
(This is a WECM Course Number.)
A study of metallurgy as it applies to welding, including structure, identification, and testing of metals; temperature changes and their effect on welded metals; properties of metals, and factors affecting weldability of ferrous and nonferrous metals. (2 Lec., 4 Lab.)

Texas Department of Health

Recommended Adult Immunization Schedule

Vaccine/ Toxoid/ Biological	Primary Schedule & Boosters	Indications	Major Precautions & Contraindications Other Than Primary Allergies	Special Considerations
Tetanus-Diphtheria Toxoid	2 doses (IM) 4 weeks apart with 3rd dose (booster) 6-12 months then a booster every 10 years.	All Adults		Consider Human Tetanus Immune Globulin (TIG) for dirty wounds in patients with incomplete immunizations.
Measles Mumps Rubella (MMR) Vaccine	1 dose (SC); boosters for measles are necessary for certain adults.	Measles/Mumps for adults born after 1/1/57 who lack a vaccine history for measles and mumps since their 1st birthday OR serological proof of immunity OR a physician validated statement of Measles/ Mumps illness. 2 doses of measles vaccine are recommended for persons at high risk of exposure (e.g. medical personnel). Rubella for any adult who lacks documentation of rubella vaccine since the 1st birthday OR serological proof of immunity.	Pregnancy; immuno-compromised hypersensitivity to neomycin and/or eggs	Persons vaccinated with killed measles vaccine (1963-1967) should be revaccinated with live measles vaccine; MMR is the vaccine of choice if the person is likely to be susceptible to more than 1 agent
Hepatitis B Vaccine	2 doses (IM) 4 weeks apart; 3rd dose 5 months after 2nd.	Adults at increased risk of occupational, environmental, social, or family exposure		
Influenza Vaccine (Split or Whole Vaccine)	1 dose annually (IM)	Adults with high-risk conditions; adults > or = 65 years old; health care workers	Hypersensitivity to eggs; may be given during pregnancy to high-risk patients.	
Pneumo-Coccal Poly-saccharide Vaccine (23 Valent)	1 dose (IM or SC); boosters after 6 years indicated for certain	Underlying health conditions; adults 65 years old and older; adults with anatomic or functional asplemia	Pregnancy	Immune response is better if vaccinated prior to splenectomy

ALERT!!

MEASLES (aka. rubella, Red Measles, Hard Measles, 10-day Measles)

Measles is a highly contagious viral disease. Antibiotics are NOT available to treat persons infected with this organism. Recent outbreaks of this illness have included many hospitalizations and several deaths among college-aged persons, for these reasons it is strongly recommended that students of Institutions of Higher Education have two doses of the vaccine prior to beginning classes. Most young adults have had only one dose.

The measles vaccine is most often given in combination with the vaccines for mumps and rubella which are also caused by viruses.

TETANUS (aka. Lockjaw)

The illness caused by tetanus results from the poison produced by a bacteria. Again this is a very difficult illness to treat once it occurs and prevention is the most appropriate choice. The vaccine is effective for about 10 years and needs to be boosted at that interval. It is now common for older adults to develop Tetanus in the United States as many adults do not receive the recommended 10 year boosters. The Tetanus vaccine should be given in combination with the diphtheria vaccine.

POLIOMYELITIS

In the United States, polio immunization is not routinely recommended for persons 18 years of age or older. However, if travel to other parts of the world is planned, a physician should be contacted for specific recommendations.

SECTION 51.933 TEX. EDU. CODE

The campus health centers have information regarding local providers of immunization services. Check with the health center for specific local information.

COLLEGE POLICIES AND PROCEDURES

Policies

Equal Educational and Employment Opportunity Policy

Educational opportunities are offered by the Dallas County Community College District without regard to race, color, age, national origin, religion, sex, disability or sexual orientation. The college provides equal opportunity in accord with federal and state laws. Equal educational opportunity includes admission recruitment, extra-curricular programs and activities, access to course offerings, counseling and testing, financial aid, employment, health and insurance services and athletics. Existing administrative procedures of the college are used to handle student grievances. To file a grievance, refer to the student grievance procedure in the catalog.

Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records.

These rights include:

1. The right to inspect and review the student's education records within 45 days of the day the College receives a request for access.

Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written, requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student's education records that the student believes is inaccurate.

   Students may ask the College to amend a record that they believe is inaccurate. They should write the College official responsible for the records, clearly identify the part of the record they want changed, and specify why it is inaccurate.

   If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of a right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including campus law enforcement personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing a task.

   A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill the official's professional responsibility.

4. The right to file a complaint with U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA are:

   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Avenue, SW
   Washington, D.C. 20202-4605

5. Directory information includes:
   a. name;
   b. home address;
   c. home telephone number;
   d. e-mail addresses;
   e. field of study;
   f. photograph;
   g. date and place of birth;
   h. dates of attendance;
   i. enrollment status, i.e., full-time, part-time, undergraduate, graduate
   j. degrees, certificates and other honors and awards received;
   k. the type of award received, i.e., academic, technical, tech-prep, or continuing education;
   l. participation in officially recognized activities;
   m. weight and height of members of athletic teams;
   n. student classification;
   o. name of the most recent previous institution attended; or,
   p. similar information.

   Students may request that all or any part of the directory information be withheld from the public by giving written notice to the Registrar's Office during the first 12 class days of a fall or spring semester or the first four class days of a summer session.

Student Consumer Information Services

Pursuant to the Educational Amendment of 1980, Public Law 96-374, the college provides all students with information about its academic programs and financial aid available to students.

Student Right-to-Know Act

Under the terms of the Student Right to Know Act, the college maintains and updates on an annual basis, student persistence, graduation rates, transfer rates and other relevant statistics. To obtain copies of these reports, contact the District Office of Research. College crime statistics may be obtained from college police/security offices. (Published in compliance with the Student Right-to-Know and Campus Security Act; Public Law 101-542.)

Equity in Athletics Disclosure Act

All coeducational institutions of higher education that participate in any Federal student financial aid program and have intercollegiate programs must provide information concerning their intercollegiate athletics programs under the Equity in Athletics Disclosure Act of 1994, Section 360B of Public Law 103-382. This Act and accompanying federal regulations requires that intercollegiate athletics information be made available for inspections by students, prospective students and the public. The college web site or Physical Education Office can provide this information.

Drug-Free Schools and Communities Act

To satisfy the requirements of the "Drug Free Schools and Communities Act," the colleges and facilities are committed to creating an educational and work environment free from use or distribution of illicit drugs and

abuse of alcohol. The college prohibits the unlawful possession, use or distribution of illicit drugs and alcohol by students and employees on its property or as part of any of its activities. Information and confidential referrals concerning counseling and treatment programs for drug and alcohol abuse may be obtained from the Counseling/Advisement Center, Health Center, and location Human Resources Office.

Standard of Conduct

As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the Code of Student Conduct published in this catalog.

If you are unable to complete the course (or courses) for which you have registered, it is your responsibility to withdraw formally from the course (or courses). Failure to do so will result in your receiving a performance grade, usually an "F".

Children on Campus

The institution strives to protect an environment most conducive to teaching and learning for all enrolled students. Children who are taking part in organized scheduled activities or who are enrolled in specific classes are welcomed. Minor children, however, should not be brought to the institution unless closely supervised by their parent. Minor children should not be brought into classrooms, laboratories, or other facilities of the college. This practice is disruptive to the learning process. In the case of an emergency where the student-parent has no alternative but to bring the child to campus, classroom faculty or the administrative heads of other units have full discretion as to whether a child may be allowed to quietly stay in the location. These individuals may require that children be removed by the student-parent from the setting if, in their opinion, the presence of the child is deemed to be disruptive to the learning process. For reasons of security and child welfare the institution will not permit unattended children to be left anywhere on the premises. Parents who have problems with childcare should visit the advisement/counseling center to receive referrals to childcare services in the area.

CODE OF STUDENT CONDUCT

Educational opportunities are offered by the Dallas County Community College District without regard to race, color, age, national origin, religion, sex, disability or sexual orientation.

The Code of Student Conduct, Student Grievance Procedure, Computer Use Policy, Computer Software Policy, Firearms Policy and Communicable Disease Policy are common to all the colleges of the Dallas County Community College District. Certain words in the policies and procedures have been changed to reflect a college perspective; for instance, "District" may have been changed to "college." A complete listing of policies and procedures may be found in the DCCCD Policies and Procedures Manual in the college president's Office.

Purpose

The purpose of policies about student conduct and discipline are to provide guidelines for the educational environment of the college. This environment views students in a holistic manner, encouraging and inviting them to learn and grow independently. Such an environment presupposes both rights and responsibilities. Free inquiry and expression are essential parts of this freedom to learn, to grow and to develop. However, this environment also demands appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. Students must exercise these freedoms with responsibility.

Policies, Rules, and Regulations

Interpretation of Regulations: Disciplinary regulations at the college are set forth in writing in order to give students general notice of prohibited conduct. The regulations should be read broadly and are not designed to define misconduct in exhaustive terms.

Inherent Authority: The college reserves the right to take necessary and appropriate action to protect the safety and well-being of the campus community.

Student Participation: Students are asked to assume positions of responsibility in the college judicial system in order that they might contribute their skills and insights to the resolution of disciplinary cases. Final authority in disciplinary matters, however, is vested in the college administration and in the Board of Trustees.

Standards of Due Process: Students who allegedly violate college policy are entitled to fair and equitable proceedings. The focus of inquiry in disciplinary proceedings shall be the guilt or innocence of those accused of violating disciplinary regulations. Formal rules of evidence shall not be applicable, nor shall deviations from prescribed procedures necessarily invalidate a decision or proceeding, unless significant prejudice to a student respondent or the college may result.

Accountability: Students may be accountable to both civil authorities and to the college for acts which constitute violations of law and this code. Disciplinary action at the college will normally proceed during the pendency of criminal proceedings and will not be subject to challenge on the ground that criminal charges involving the same incident have been dismissed or reduced. Students who participate in a college course through the R. Jan LeCroy Center for Educational Telecommunications are subject to the code of student conduct and are assigned a college for that purpose.

Definitions

Definitions to be used in this policy are as follows:

1. "Designated administrator or DA" shall mean an administrator or the officer or officer directly responsible for student affairs in the college.
2. A "student" shall mean one who is currently enrolled in the college. This includes credit, non-credit, and dual credit students, regardless of method of delivery. These policies and regulations shall also apply to any prospective or former student who has been accepted for admission or readmission to any component institution while he or she is on the campus of any component institution.
3. "College-sponsored activity" means any activity on or off campus which is initiated, aided, authorized, or supervised by the college.
4. A "college" or "institution" means the colleges of the Dallas County Community College District, including the Bill J. Priest Institute of Economic Development.
5. "College premises" means buildings or grounds owned, leased, operated, controlled, or supervised by the college.
6. "Published college regulation or policy" means standards of conduct or requirements located in the:
   a. College catalog.
   b. Board of Trustees policies and administrative procedures manual.
   c. Student handbook.
   d. Any other official publication.

Bill J. Priest Institute for Economic Development

The president of the Bill J. Priest Institute for Economic Development (BPI) and college presidents are authorized to promulgate written regulations which apply only to students who are subject to provisions of the federal Workforce Investment Act (WIA), as amended, its regulations, and other similar federal programs. BPI or college regulations should be designed to foster good work habits, promote skills desired by local employers, and encourage success in obtaining and maintaining a job. WIA students are subject to conduct standards in the code of student conduct as well as BPI or College regulations; however, the remainder of the code is not applicable to such students. A WIA student who allegedly violates the code and/or BPI or College regulations must be given an opportunity to appeal expulsion, suspension, or other disciplinary sanctions in a manner determined by the college president. WIA students may file grievances with the WORKSOURCE of Dallas, North Texas Consortium and other WIA authorized WIA program managers.

Responsibility

Each student shall be charged with notice and knowledge of the contents and provisions of the District's policies, procedures, and

regulations concerning student conduct.

All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. In addition to activities prohibited by law, the following types of behavior shall be prohibited.

1. Intentionally causing physical harm to any person on college premises or at college-sponsored activities, or intentionally or recklessly causing reasonable apprehension of such harm or hazing.
2. Unauthorized use, possession, or storage of any weapon on college premises or at college-sponsored activities.
3. Intentionally initiating or causing to be initiated any false report, warning, or threat of fire, explosion, or other emergency on college premises or at college-sponsored activities.
4. Intentionally interfering with normal college or college-sponsored activities, including but not limited to, studying, teaching, research, college administration, or fire, security, or emergency services.
5. Knowingly violating the terms of any disciplinary sanction imposed in accordance with college policies, regulations, and procedures.
6. Unauthorized distribution or possession for purposes of distribution of any controlled substance or illegal drug on college premises or at college-sponsored activities.
7. Intentionally or maliciously furnishing false information to the college.
8. Sexual harassment.
9. Forgery, unauthorized alteration, or unauthorized use of any college document or instrument of identification.
10. Unauthorized use of computer hardware or software.
11. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by college policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion. "Cheating on a test" shall include:
    a. Copying from another student's test paper.
    b. Using test materials not authorized by the person administering the test.
    c. All forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.
    d. Collaborating with or seeking aid from another student during a test without permission from the test administrator.
    e. Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an unadministered test.
    f. The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
    g. Substituting for another student, or permitting another student to substitute for one's self, to take a test.
    h. Bribing another person to obtain an unadministered test or information about an unadministered test.

    "Plagiarism" shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another's work and the unacknowledged submission or incorporation of it in one's own written work.

    "Collusion" shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements.
12. Intentionally and substantially interfering with the freedom of expression of others on college premises or at college-sponsored activities.
13. Theft of property or of services on college premises or at college-sponsored activities; having possession of stolen property on college premises or at college-sponsored activities.
14. Intentionally destroying or damaging college property or property of others on college premises or at college-sponsored activities.
15. Failure to comply with the direction of college officials, including campus security/safety officers, acting in performance of their duties.
16. Violation of published college regulations or policies. Such regulations or policies may include those relating to entry and use of college facilities, use of vehicles and media equipment, campus demonstrations, misuse of identification cards, and smoking.
17. Use or possession of any controlled substance or illegal drug on college premises or at college-sponsored activities.
18. Unauthorized presence on or use of college premises.
19. Nonpayment or failure to pay any debt owed to the college with intent to defraud. (Appropriate personnel at a college may be designated by college or District officials to notify students of dishonored checks, library fines, nonpayment of loans, and similar debts. Such personnel may temporarily "block" admission or readmission of a student until the matter is resolved. If the matter is not settled within a reasonable time, such personnel shall refer the matter to the DA for appropriate action under this code. Such referral does not prevent or suspend proceeding with other appropriate civil or criminal remedies by college personnel.)
20. Use or possession of an alcoholic beverage on college premises with the exception of:
    a. Specific beverage-related courses with the El Centro food service program or the International Sommelier Guild's Diploma Program at Bill Priest Institute; or
    b. A course that requires the use of alcohol and is approved by the Texas Commission on Law Enforcement Officers' Standards and Education.

Disciplinary Proceedings Investigation, Conference and Complaint

Any student violating this policy shall be subject to disciplinary sanctions including suspension, in accordance with The Code of Student Conduct. A "violation" means an act or omission which is contrary to a published college regulation or policy.

Sanctions for violations of prohibited conduct for (1) through (6) may result in expulsion; for (7) through (13) may result in suspension; (14) through (20) may result in sanctions other than expulsion or suspension.

Repeated or aggravated violations of any provision of this code may also result in expulsion or suspension or in the imposition of such lesser penalties as are appropriate.

"Aggravated violation" means a violation which resulted or foreseeable could have resulted in significant damage to persons or property or which otherwise posed a substantial threat to the stability and continuance of normal college or college-sponsored activities.

Disciplinary Proceedings Investigation, Conference and Complaint

When the Designated Administrator (DA) directly responsible for student affairs or discipline receives information that a student has allegedly violated a published college regulation or policy, the DA shall investigate the alleged violation, that may include a discussion with a student. After completing the preliminary investigation, the DA may:

1. Dismiss the allegation as unfounded, either before or after conferring with the student;

or

2. Proceed administratively, which includes a summons, conference and disposition.
3. Upon appeal, prepare a complaint based on the alleged violation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.
4. The DA will notify the individual who filed the complaint of the disposition of the complaint. If the DA dismisses the allegation, the individual may appeal, in writing, to the President within five (5) working days after disposition.

The president or a designee may suspend a student immediately and without prior notice for an interim period pending disciplinary proceedings, when there is evidence that the continued presence of the student on college premises poses a substantial threat to himself or herself, to others, or to the stability and continuance of normal college functions. A student who is suspended on an interim basis shall be given an opportunity to appear before the president or a designee within five (5) working days from the effective date of the interim suspension. A

hearing with the President shall be limited to the following issues only:

1. The reliability of the information concerning the student's conduct, including the matter of his or her identity; and
2. Whether the conduct and surrounding circumstances reasonably indicate that the student's continued presence on college premises poses a substantial threat to himself or herself, to others or to the stability and continuance of normal college functions.

After the hearing, the President or designee may modify the interim suspension as reasonable to protect the student, public, and college.

No person shall search a student's personal possessions for the purpose of enforcing this code unless the student's prior permission has been obtained or unless a law enforcement officer conducts the search as authorized by law.

Summons

The DA shall summon a student regarding an alleged violation of this code by sending the student a letter. The letter shall be sent by certified mail, return receipt requested, addressed to the student at his or her last known address as it appears in the records of the Registrar's Office or shall be delivered personally to the student.

The letter shall direct a student to appear at a specific time and place not less than five (5) working days after the date of the letter, unless the student can show good cause as prescribed below. The letter shall describe briefly the alleged violation and cite the published college regulation or policy which allegedly has been violated. The DA has authority to place a student on disciplinary probation if the student fails, without good cause, to comply with a letter of summons, or to apply sanctions against the student as provided in this code.

Disposition

At a conference with a student in connection with an alleged violation of this code, the DA shall provide the student with a copy of this code and discuss administrative disposition of the alleged violation.

1. If a student accepts the administrative disposition, the student shall sign a statement that he or she understands the charges, his or her right to a hearing or to waive same, and the penalty or penalties imposed, and that he or she waives the right to appeal. The student shall return the signed form by 5:00 p.m. of the day following administrative disposition. Failure to return this form, waives the student's right to appeal.
2. If a student refuses administrative disposition of the alleged violation, the student is entitled to a hearing as provided herein. The DA shall note the date of refusal in writing and the student shall acknowledge in writing such date.
3. Administrative disposition means:
   a. The voluntary acceptance of the penalty or penalties provided in this code.
   b. Other appropriate penalties administered by the DA.
   c. Without recourse by the student to hearing procedures provided herein.

The DA shall prepare an accurate, written summary of each administrative disposition and send a copy to the student (and, if the student is a minor, to the parent or guardian of the student), to the Director of Campus Security, to the complainant, and to other appropriate officials.

Hearing Committee

When a student refuses administrative disposition of a violation, the student is entitled to a hearing before the Student Discipline Committee. The hearing request must be made to the Designated Administrator (DA) (or officer directly responsible for student affairs or discipline) in writing, on or before the sixth (6th) working day after the date of refusal of administrative disposition. The committee shall be composed of equal number of students, administrators and faculty of the college. The committee and its chair shall be appointed by the President for each hearing on a rotating basis or on the basis of availability. The committee chair will be selected from the administration or faculty.

The chairman of the committee shall rule on the admissibility of evidence, motions, and objections to procedure, but a majority of the committee members may override the chairman's ruling. All members of the committee are expected to attend all meetings and are eligible to vote in the hearing.

The chairman shall set the date, time, and place for the hearing and may summon witnesses and require the production of documentary and other evidence.

The DA shall represent the college before the Student Discipline Committee and present evidence to support any allegations of violations.

Notice

The committee chairman shall notify the student of the date, time, and place for the hearing by sending the student a letter by certified mail, return receipt requested, addressed to the student at his or her address appearing in the Registrar's Office records. The letter shall specify a hearing date not less than five (5) nor more than ten (10) working days after date of the letter. If a student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian of the student.

The chairman may for good cause postpone the hearing as long as all interested parties are notified of the new hearing date, time, and place.

Content of Notice

The notice shall advise the student of the following right:

1. To a private hearing or a public hearing (as he or she chooses).
2. To appear alone or with legal counsel if the alleged violation subjects the student to expulsion or suspension. The role of legal counsel is limited as provided in the code.
3. To have a parent or legal guardian present at the hearing.
4. To know the identity of each witness who will testify.
5. To cause the committee to summon witnesses, and to require the production of documentary and other evidence possessed by the College.
6. To cross-examine each witness who testifies.

Failure to Comply with Notice

A student who fails to appear after proper notice and without good cause will be deemed to have pleaded guilty to the violation pending against the student. The committee shall impose appropriate penalty and notify the student in the same manner as the notice of hearing.

Role of Legal Counsel

Legal counsel who represents a student in a hearing where the alleged violation subjects the student to expulsion or suspension is limited to advising and assisting the student. This limitation means that legal counsel shall not cross-examine witnesses, make objections, testify, or perform other similar functions generally associated with legal representation. The same preceding limitation applies to counsel who represents the college. Student representation by legal counsel is not permitted in a hearing where the alleged violation does not subject the student to expulsion or suspension.

Preliminary Matters

Charges arising out of a single transaction or occurrence, against one or more students, may be heard together, or, upon request by one of the students-in-interest, separate hearings may be held.

There will be disclosure of all evidence to both sides prior to the hearing.

At least by 12:00 noon, five (5) full working days before the hearing date, the student concerned shall furnish the committee chairman with:

1. The name of each witness he or she wants summoned and a description of all documentary and other evidence possessed by the college which he or she wants produced.
2. An objection that, if sustained by the chairman of the Student Disciplinary Committee, would prevent the hearing.
3. The name of the legal counsel, if any, who will appear with the student.
4. A request for a separate hearing, if any, and the grounds for such a

request.

Hearing Procedure

The hearing shall be conducted by the chairman who shall provide opportunities for witnesses to be heard. The college will be represented by legal counsel if the student is represented by legal counsel in a hearing where the student is subject to expulsion or suspension.

If a hearing may result in expulsion or suspension of a student, the college will have a court reporter present to transcribe the proceedings. If a hearing will not result in expulsion or suspension of a student, legal representation is not permitted and recording of the hearing by any means is not permitted unless authorized by law.

If the hearing is a private hearing, the committee shall proceed generally as follows:

1. Persons present shall be the complainant, the DA, and the student with a parent or guardian if desired.
2. Before the hearing begins, the DA or the student may request that witnesses remain outside the hearing room.
3. The DA shall read the complaint.
4. The DA shall inform the student of his or her rights, as stated in the notice of hearing.
5. The DA shall present the institution's case.
6. The student may present his or her defense.
7. The DA and the student may present rebuttal evidence and argument.
8. The committee, by majority vote, shall determine the guilt or innocence of the student regarding the alleged violation.
9. The committee shall state in writing each finding of a violation of a published college regulation or policy. Each committee member concurring in the finding shall sign the statement. The committee may include in the statement its reasons for the finding. The committee shall notify the student in the same manner as the notice of hearing.
10. A determination of guilt shall be followed by a supplemental proceeding in which either party may submit evidence or make statements to the committee concerning the appropriate penalty to be imposed. The past disciplinary record of a student shall not be submitted to the committee prior to the supplemental proceeding. The committee shall determine a penalty by majority vote and shall inform the student, in writing, of its decision as in 9 above.

If the hearing is a public hearing, the committee shall proceed generally as follows:

1. Persons present shall be the complainant, the DA and the student with a parent or guardian if desired. Designated college representative for the following groups may have space reserved if they choose to attend:
   a. Faculty Association
   b. College Newspaper
   c. College President

   Other persons may attend based on the seating available. The Chairman may limit seating accommodations based on the size of the facilities;
2. Before the hearing begins, the DA or the student may request that witnesses remain outside the hearing room.
3. The DA shall read the complaint.
4. The DA shall inform the student of his or her rights, as stated in the notice of hearing.
5. The DA shall present the college's case.
6. The student may present his or her defense.
7. The DA and the student may present rebuttal evidence and argument.
8. The committee, by majority vote, shall determine the guilt or innocence of the student regarding the alleged violation.
9. The committee shall state in writing each finding of a violation of a published college regulation or policy. Each committee member concurring in the finding shall sign the statement. The committee may include in the statement its reasons for the finding. The committee shall notify the student in the same manner as the notice of hearing.
10. A determination of guilt shall be followed by a supplemental proceeding in which either party may submit evidence or make statements to the committee concerning the appropriate penalty to be imposed. The past disciplinary record of a student shall not be submitted to the committee prior to the supplemental proceeding. The committee shall determine a penalty by majority vote and shall inform the student, in writing, of its decision as in 9 above.

Evidence

Legal rules of evidence shall not apply to hearings under this code. Evidence that is commonly accepted by reasonable persons in the conduct of their affairs is admissible. Irrelevant, immaterial, and unduly repetitious evidence may be excluded.

The committee shall recognize as privileged communications between a student and a member of the professional staff of the Health Center, Counseling or Guidance Center where such communications were made in the course of performance of official duties and when the matters discussed were understood by the staff member and the student to be confidential. Committee members may freely question witnesses.

The committee shall presume a student innocent of the alleged violation until there is a preponderance of evidence, presented by the DA, that the student violated a published college regulation or policy.

All evidence shall be offered to the committee during the hearing.

A student defendant may choose not to testify against himself or herself. The committee will make a determination based on the evidence presented.

Record

The hearing record shall include: a copy of the notice of hearing; all documentary and other evidence offered or admitted in evidence; written motions, pleas, and other materials considered by the committee; and the committee's decisions.

Petition for Administrative Review

A student is entitled to appeal in writing to the President who may alter, modify, or rescind the finding of the committee and/or penalty imposed by the committee. A student is ineligible to appeal if the penalty imposed by the appeals committee is less than suspension or expulsion. The President shall automatically review every penalty of expulsion. Sanctions will not be imposed while appeal is pending.

A student is entitled to appeal in writing to the Board through the President, the Chancellor, and the Chairman of the Board. An appeal from the Student Discipline Committee is by review of the record (not de novo).

A petition for review is informal but shall contain, in addition to the information required, the date of the Student Discipline Committee's action and the student's reasons for disagreeing with the committee's action. A student shall file his or her petition with the President on or before the third working day after the day the Discipline committee determines the penalty. If the President rejects the petition, and the student wishes to petition the Chancellor, he or she shall file the petition with the Chancellor on or before the third working day after the President rejects the petition in writing. If the Chancellor rejects the petition, and the student wishes to petition the Board of Trustees, he or she shall file the petition with the Chairman of the Board on or before the third working day after the day the Chancellor rejects the petition in writing.

The President, the Chancellor, and the Board in their review may take any action that the Student Discipline Committee is authorized to take; however, none may increase the penalty. They may receive written briefs and hear oral argument during their review.

The President, Chancellor and Board of Trustees shall modify or set aside the finding of violation, penalty, or both, if the substance rights of a student were prejudiced because of the Student Discipline Committee's finding of facts, conclusions or decisions were:

1. In violation of federal or state law or published college regulation or policy;

2. Clearly erroneous in view of the reliable evidence and the preponderance of the evidence; or
3. Capricious, or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

Authorized Disciplinary Penalties

The DA or the student discipline committee may impose one or more of the following penalties for violation of a Board policy, college regulation, or administrative rule:

1. An "admonition" means a written reprimand from the DA to the student on whom it is imposed.
2. "Warning probation" means further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires.
3. "Disciplinary probation" means further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students may be placed on disciplinary probation for engaging in activities as illustrated by, but not limited to, the following: being intoxicated, misuse of I.D. card, creating a disturbance in or on college premises, and gambling.
4. "Withholding of transcript or degree" may be imposed upon a student who fails to pay a debt owed the college or who has a disciplinary case pending final disposition or who violates the oath of residency. The penalty terminates on payment of the debt or the final disposition of the case or payment of proper tuition.
5. "Bar against readmission" may be imposed on a student who has left the college on enforced withdrawal for disciplinary reasons.
6. "Restitution" means reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.
7. "Suspension of rights and privileges" is an elastic penalty which may impose limitations or restrictions to fit the particular case.
8. "Suspension of eligibility for official athletic and non-athletic extracurricular activities" prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization; taking part in a registered student organization's activities, or attending its meetings or functions; and from participating in an official athletic or non-athletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year. Students may be placed on disciplinary suspension for engaging in activities as illustrated by, but not limited to, the following: having intoxicating beverages in any college facility, with the exception of specific beverage-related courses within the El Centro food service program; giving false information in response to requests from the college; instigating a disturbance or riot; stealing; any attempt at bodily harm, which includes taking an overdose of pills or any other act where emergency medical attention is required; and conviction of any act which is classified as a misdemeanor or felony under state or federal law.
9. "Denial of degree" may be imposed on a student found guilty of scholastic dishonesty and may be imposed for any length of time up to and including permanent denial.
10. "Suspension from the college" prohibits, during the period of suspension, the student on whom it is imposed from being initiated into an honorary or service organization; from entering the college campus except in response to an official summons; and from registering, either for credit or for noncredit, for scholastic work at or through the college.
11. "Expulsion" is permanent severance from the college.

A sanction imposed at one college shall apply to all colleges of the College District.

Hazing

1. **Personal Hazing Offense**

   A person commits an offense if the person commits any of the following:

   1. Engages in hazing.
   2. Solicits, encourages, directs, aids, or attempts to aid another person in engaging in hazing.
   3. Recklessly permits hazing to occur.
   4. Has firsthand knowledge of the planning of a specific hazing incident involving a student, or firsthand knowledge that a specific hazing incident has occurred, and knowingly fails to report said knowledge in writing to the DA or other appropriate official of the institution.
2. **Definition**

   "Hazing" means any intentional, knowing, or reckless act, occurring on or off the campus of an educational institution, directed against a student, by one person alone or acting with others, that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into, affiliating with, holding office in, or maintaining membership in any organization whose members are or include students at an educational institution. The term includes but is not limited to:

1. Any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity.
2. Any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small place, calisthenics, or any other activity that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.
3. Any activity involving consumption of a food, liquid, alcoholic beverage, liquor, drug, or any other substance which subjects the student to an unreasonable risk of harm or which adversely affects the mental or physical health or safety of the student.
4. Any activity that intimidates or threatens the student with ostracism, that subjects the student to extreme mental stress, shame, or humiliation, or that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered in an educational institution, or that may reasonably be expected to cause a student to leave the organization or the institution rather than submit to acts described above.
5. Any activity that induces, causes, or requires the student to perform a duty or task which involves a violation of the Penal Code.

Student Grievance Procedure

Definition

A student grievance is a college-related problem or condition which a student believes to be unfair, inequitable, discriminatory, or a hindrance to the educational process. A grievance also includes discrimination on the basis of race, color, age, national origin, religion, sex, disability or sexual orientation.

Scope

The student grievance procedure is not intended to supplant the Code of Student Conduct, which allows the student procedural due process in disciplinary proceedings initiated by the college. This student grievance procedure is designed to provide the student with the opportunity to file a grievance, as defined above, and to provide a process for resolution of the grievance. A student may file a grievance concerning a policy, procedure, rule or grade if discrimination on the basis of race, color, age, national origin, religion, sex, disability or sexual orientation is the basis for the grievance. This student grievance procedure is not designed to include changes in policy nor does it apply to grading practices. Recommendations for initiating new policy or changing established policy are handled through normal administrative channels. A grade dispute that is not established policy are handled through normal administrative channels. A grade dispute that is not based on an allegation of discrimination is handled under the Grade Dispute Resolution listed below.

Grade Dispute Resolution

Students who wish to dispute a credit course grade may sequentially follow the steps below unless the dispute is resolved at a preceding step:

1. Discuss the dispute with the instructor who awarded the grade.
2. Discuss the dispute with the appropriate division dean.
3. Appeal, in writing, to the appropriate vice-president.
4. Appeal, in writing, to the college president whose decision is final.

A student will receive a written response within ten (10) working days after a written appeal. The appropriate faculty member will be notified in writing regarding the resolution of the matter. A grade dispute will not be considered later than the end of the semester following the semester in which the grade was awarded. In a summer session, the dispute must be initiated not later than the end of the following fall semester. By law, the Board is not required to take any action concerning a grade dispute, but is required to listen if the grade dispute is presented at a public meeting.

Sexual Harassment

The student grievance procedure is not applicable to complaints of sexual harassment. All students shall report complaints of sexual harassment informally to location human resources personnel or location representatives selected by the highest level administrator at the location or formally to the vice chancellor of educational affairs as provided in the sexual harassment procedure.

Informal Procedures

Students who wish to file a college-related grievance should, but are not required, to discuss it with the college employee most directly responsible for the condition which brought about the alleged grievance. If the grievance is not resolved to the student's satisfaction, the student may appeal to the next level of authority. The student may consult with the administrative offices to determine the next level of authority. If an appeal does not resolve the grievance, the student may proceed to the appropriate vice-president with a written presentation of the grievance. If the vice-presidential level of appeal does not prove satisfactory to the student, the student may seek review under the formal procedures below.

Other Procedural Matters

If a student files a grievance informally by discussing it with the college employee most directly responsible, etc., the following procedures apply. The student shall discuss the grievance fully at each level in the process. At each level of authority, a decision shall be made based on common sense and good judgement of a reasonable person. Each level may seek the appropriate authority, if necessary, to resolve the grievance. The entire informal procedure should take no longer than 30 days.

Formal Procedures

Procedures for appeals are as follows:

1. A student who wishes a grievance to be heard by an appeal committee must submit a request in writing to the vice-president of student development (VPSD) or employee who is responsible for student development.
2. The VPSD or responsible employee will convene and chair the appeal committee.
3. The appeal must be heard by the committee within ten class days of the request unless extended with the agreement of both the student and the VPSD or responsible employee.
4. The committee will be ad hoc and will consist of two students, two faculty members, and one staff member who is either an administrator or a noncontractual employee. It is the responsibility of the college president or designee to appoint all committee members and the appointor shall examine each member to ensure their impartiality.
5. The appeal committee will make findings and send its decision to the college president. A grievant may seek review of an adverse decision through the president. The decision of the president shall be final.

Board Action

By law, the board of trustees is not required to take any action concerning a grievance, but is required to listen if the grievance is presented at a public meeting.

Appeal Committee Procedures

1. If a student requests a hearing by an appeal committee, a grievance must be in writing and contain:
   a. the student's name and address;
   b. the nature of the grievance, including the date it occurred;
   c. the corrective action sought; and
   d. any other relevant information.
2. A grievance filed, either informally or formally, will not be considered unless it is filed not later than 120 days after the event or occurrence giving rise to the grievance or knowledge of the event or occurrence. The entire formal procedure should take no longer than 30 days.
3. In conducting the appeal committee hearing, the VPSD or responsible employee is authorized to:
   a. require any student or employee to provide a written statement along with any documents concerning the events and circumstances that may have given rise to the grievance;
   b. require any student or employee to appear and testify;
   c. question each individual who testifies; and
   d. copy all documents.

This is not an adversarial proceeding. A VPSD or responsible employee shall conduct a hearing in a professional and cooperative manner and all participants are expected to do likewise.

1. Failure to comply with a summons or order from the VPSD or responsible person may result in disciplinary action.
2. The appeal committee shall base its decisions during a hearing and make a recommendation upon the common sense and good judgement of a reasonable person.
3. The VPSD or responsible employee shall ensure that all relevant evidence is obtained from parties during the hearing.
4. An attorney or other representative of a grievant may present a grievance to the appeal committee, but this presentation does not include questioning or cross-examining witness (including the grievant), objecting to testimony or documents, or similar actions undertaken by an attorney to represent a client.

Coordinators

Coordinator(s) for the Rehabilitation Act of 1973 (Section 504), Americans with Disabilities Act of 1990 (Title II) and Education Amendments of 1972 (Title IX)

Bill J. Priest Institute

Genie M. Dillon - Director of Solutions Development
Section 504, Title II, and Title IX Coordinator

Brookhaven College

George Herring - Vice President of Business Services
Title II Coordinator

Kathleen Whitson - Dean of Instructional Support & Outreach Services
Section 504

Roger Bennett - Executive Dean for Fine Arts & Physical Education
Title IX Coordinator

Cedar Valley College

Dr. Claire Gauntlett – Dean of Institution Effectiveness & Research
Section 504, Title II, and Title IX Coordinator

Eastfield College

Jim Jones - Vice-President of Business Services
Section 504, Title II, and Title IX Coordinator

El Centro College

Jim Handy - Assistant Dean of Student Services
Section 504

Robert Garcia - Human Resources Director
Title II Coordinator

Bettie Tully - College Ombudsperson
Title IX Coordinator

Mountain View College

Dr. John Pruit - Executive Dean of Learning Support Services
Section 504, Title II Coordinator, and Title IX Coordinator

North Lake College

Mary Ciminelli - Interim Dean of Student, Enrollment, Development and Student Retention
Section 504, Title II

Dan Joutras - Athletic Director
Title IX Coordinator

Richland College

Oscar Lopez – Director of Disability Services

Wes Hayes – Director of Facilities
Section 504 and Title II Coordinators

Tom McLaughlin – Dean of Students
Title IX Coordinator

Computer Use Policy

Purpose of Computer Use Policy

The college is committed to providing an educational and work climate that is conducive to the personal and professional development of each individual. To fulfill its multiple missions as an institution of higher learning, the college encourages a climate that values and nurtures collegiality, diversity, pluralism and the uniqueness of the individual within our state, nation and world. The college also strives to protect the rights and to enhance the self-esteem of all its members. Faculty, staff and students should be aware that any form of illegal harassment or discrimination against any individual is inconsistent with the values and ideals of our community.

As an institution of higher education, the college encourages, supports, and protects First Amendment rights and an open environment to pursue scholarly inquiry and to share information. Access to networked computer information in general and to the Internet, in particular, supports the academic community by providing a link to electronic information in a variety of formats and covering all academic disciplines. As with any resource, it is possible to misuse computing resources and facilities and to abuse access to the Internet. The following statements address, in general terms, the institution's policies concerning computing use.

The chancellor is authorized to promulgate policies and procedures to implement this policy. Refer to the Business Procedures Manual for additional information.

Use of College Resources

Use of college computing resources and facilities requires that individual users act in compliance with college policies and procedures, and failure to comply may result in restriction or revocation of access to college resources. Computing "resources and facilities" include, but are not limited to college-owned host computer systems, networks, peripheral equipment (such as modems, terminals, and printers), computers and workstations, software, data sets, storage devices (such as CD-ROMS, hard and soft disks and the like), and all computer communications controlled, administered, or accessed directly or indirectly by the college or by any user. The college provides users with an account that permits use of the computing resources and facilities within policies and procedures established by the college. Any person who uses college computing resources and facilities through college-owned equipment (such as public access computers at the libraries and computer labs) is also a user and is permitted to use the computing resources and facilities within policies and procedures established by the college. Users must respect the integrity of computing resources and facilities, respect the rights of other users, and comply with all relevant laws (local, state, federal and international), college policies and procedures, and contractual agreements. Employees who use college computers or facilities must comply with the Texas Public Information Act and the Local Government Records Act as described in CR (Regulation). The college reserves the right to limit, restrict, or deny computing resources and facilities for those who violate college policies, procedures, or local, state or federal laws.

Freedom of Expression

Censorship is not compatible with the goals of the college. The college shall not limit adult users' voluntary access to any information due to its content when it meets the standard of legality. A minor's parent may permit a minor user to have voluntary access to any information that meets the standard of legality.

Privacy

The general right to privacy is extended to the electronic environment to the extent possible. Users have a lessened expectation of privacy when using computer resources and facilities owned by public institutions such as the college. Issuance of a password or other means of access is to ensure appropriate confidentiality of college files and information. It is not a guarantee of privacy nor a license for abuse or improper use of the institution's computing resources and facilities. Privacy is mitigated by the Texas Public Information Act, administrative review, computer system administration, audits, and the nature of he electronic medium itself. Contents of electronic files will be examined or disclosed only when authorized by the user, approved by designated college officials, or required by law.

Intellectual Property

All users should be aware that property laws apply to the electronic environment. Users must abide by all software licenses, college copyright and software policies and procedures, and applicable federal and state law. Users should assume that works communicated through a network are subject copyright unless specifically stated otherwise. Unless permission of the author is obtained, use of any electronically transmitted information must comply with the "fair use" principle found in federal copyright law and CR Regulation.

Criminal and Illegal Acts

Computing resources of the college, which include the hardware, software, and network environment, shall not be used for illegal activities. Any illegal use of these resources will be dealt with by the appropriate college authorities and/or other legal and law enforcement agencies. Criminal and illegal use may involve, but is not limited to: unauthorized access, intentional corruption or misuse of computing resources, theft, defamation, obscenity, child pornography, and harassment based upon race, ethnicity, national origin, disability, age, religion or sex.

Authorized Use

Computing resources are provided by the college to accomplish tasks related to the institution's mission. Some computers may be dedicated to specific enterprises or teaching missions that limit their use. Incidental personal use of computing resources is acceptable if the use:

1. imposes no measurable cost on the college;
2. is not harmful to the college;

3. is not a hindrance to the daily operations of the college; and
4. has no adverse effect upon an individual' s job or educational performance.

Unauthorized Use

Unauthorized use of the institution's computing resources and facilities includes but is not limited to: illegal activities; failure to comply with laws, license agreements, and contracts governing network software and hardware use; abuse of communal resources; use of computing resources for unauthorized commercial purposes or personal gain; failure to protect the user's password or use of the user's account; breach of computer security, harmful access or invasion of privacy; use of computing resources for anonymous or identity-masked messages to other college users; or unauthorized encryption. Refer to the Business Procedures Manual for additional information.

Individual Responsibility for Use of Computing Resources and Facilities

All users will use these resources and facilities in accordance with college policies and procedures as well as all laws. Failure to fulfill these responsibilities may lead to the cancellation of computer access, other disciplinary action by the college and/or referral to legal and law enforcement agencies, in accord with existing college policies and procedures. Individuals using the institution's computing resources or facilities shall:

1. Use college computing resources and facilities in accord with this policy, and respect the rights of other computer users by complying with laws, license agreements and contracts.
2. Use communal resources with respect for others. Disruptive mailings and print jobs, typing up work stations, and other disproportionate use of computing facilities prevent others from using these resources.
3. Use of college computing accounts must be limited to authorized purposes. Use of college-owned resources and facilities shall be limited to college-related business or incidental personal use as defined in this policy. Use of computing resources for unauthorized commercial purposes or personal gain is prohibited.
4. Protect the individual's password and use of the individual's account. The user shall not use another person's identification, account or password without his or her permission. Confidential information contained on various computers shall not be shared with others except when those persons are authorized to receive the information. Users shall not intentionally seek, read, provide, remove, reconfigure or modify information in or obtain copies of any files, accounts, software, hardware, programs, or passwords belonging to other computer users or the college without the permission of those other computer users or the college. A user must obtain written permission from the owner of a file to alter or copy a file if the file does not belong to the user or the file has been sent to the user by the owner.
5. Report improper use of computer resources and facilities which may include:
   a. Breach of computer security
   b. Unauthorized access to computing resources
   c. Release of password or other confidential information on computer security
   d. Harmful access
   e. Alteration, damage, or destruction of data
   f. Injection of a destructive computer virus
   g. Invasion of privacy
   h. Reading files without authorization
   i. Criminal and illegal acts
6. Comply with requests concerning computing from the system operator.
7. Report any incidents of harassment and/or discrimination using college computing resources and facilities in accord with the institution's policy. It may be harassment if the behavior:
   a. is unwelcome;
   b. interferes with the user's ability, or the ability of others to work or study;
   c. creates an intimidating, hostile or offensive environment.

Alternatively, users may file a grievance through appropriate channels.

8. Respect the forum (talk groups, bulletin boards, public computing facilities) when communicating ideas to others via college computing facilities and resources (includes access to external networks). All communications should reflect high ethical standards and mutual respect and civility. Users may use external network (e.g., BITNET, Internet) links solely for the purposes permitted in these policies and in the external network guidelines. Users are responsible for obtaining and adhering to all of he policies published by the external networks they use. The ability to connect to external systems through the college systems does not imply the right to connect to these systems or to make use of these systems unless properly authorized by the owners of those systems.

Computer Software and Copyright Law

The college respects the copyrights of others. With very few exceptions, all computer software and documentation is protected by federal copyright law. The unauthorized or unlicensed use, duplication or copying of computer software or documentation is contrary to college policy and is a violation of the law. Violators of any copyright are subject to both civil and criminal penalties and/or disciplinary action. College regulations and procedures will establish guidelines for the use of computer resources and local area networks.

Computer Software Policy

It is the policy of the college to respect the copyrights of others. With very few exceptions, all computer software and documentation is protected by federal copyright law. The unauthorized or unlicensed use, duplication or copying of computer software or documentation is contrary to college policy and is a violation of the law. Violators are subject to both civil and criminal penalties and/or disciplinary action. Students may use individually owned software on college computers only if the user can provide proof of a license from the copyright owner or will sign a statement to that effect. Additionally, installation of any individually software may need to first be approved by the appropriate college official. Students may have access to computer networks only to further the institutional goals of the college.

Communicable Disease Policy

Purpose: The college acknowledges the serious threat to our community and nation posed by the AIDS epidemic. This policy and other procedures developed by the president shall emphasize educating employees and students concerning AIDS and managing each case of AIDS individually with sensitivity, flexibility, and concern for the individual as well as employees and students. In addition, this policy defines and addresses other communicable diseases which from time to time arise in the colleges and District among students and employees.

Philosophy: Decisions concerning a person who has a communicable disease shall be based upon current and well-informed medical judgment which includes the nature of the disease, risk of transmission to others, symptoms, and special circumstances of the person, and balancing identifiable risks and available alternatives to respond to a student or employee with a communicable disease.

Nondiscrimination

Students: No student will be required to cease attending a college or participating in college functions solely on the basis of diagnosis of a communicable disease.

Employees: An employee who has a communicable disease will be treated in the same manner as other employees who have other illnesses or injuries.

Confidentiality

The college shall comply with applicable statutes and regulations which protect the privacy of persons who have a communicable disease.

Education

The president shall develop and maintain a comprehensive educational program regarding HIV infection for students and employees. Each college shall have a communicable disease coordinator. The coordinator shall be a registered nurse who has received training in communicable disease is strongly encouraged to report the disease to the coordinator.

Counseling

The communicable disease coordinator shall refer students and employees to sources of testing for HIV infection and counseling upon voluntary request. An individual shall bear the expenses of such testing and counseling.

Firearms Policy

Firearms are strictly forbidden upon any campus (including all buildings and grounds) and all other locations owned, operated or leased by the Dallas County Community College District. This prohibition applies to any person including a person who processes a license to carry a handgun under the Concealed Handgun Law.

Sexual Offender Registration Act

A registered sex offender who is present at a college or District Office as a student, employee, volunteer or contract worker, is required to register at the college police department where the offender is present according to the Texas Code of Criminal Procedure.

BROOKHAVEN COLLEGE

Mission Statement

Brookhaven College is committed to the highest standard of performance in educational programs including college preparatory, academic transfer, career training, and lifelong learning. The college will maintain a supportive educational environment which emphasizes the processes of reflection, creativity, and responsible decision making. Within this environment the college seeks to serve a diversity of students by offering a broad spectrum of learning experiences.

The college recognizes the worth and dignity of all persons and seeks to be responsive to their needs as well as to those of organizations and businesses in the community. By providing the educational environment described above, Brookhaven College seeks to prepare its students to accept the challenges of the future as responsible and productive members of society and to value and enjoy the contributions of all members of our multicultural community.

Within the overall mission, Brookhaven College provides the following:

1. technical programs up to two years in length leading to associate degrees or certificates;
2. vocational programs leading directly to employment in semi-skilled and skilled occupations;
3. freshman and sophomore courses in arts and sciences, including core and field of study curricula leading to associate and toward baccalaureate degrees;
4. continuing adult education programs for occupational upgrading or personal enrichment;
5. compensatory education programs designed to fulfill the commitment of an admissions policy allowing the enrollment of disadvantaged students;
6. a continuing program of counseling and guidance designed to assist students in achieving their individual educational goals;
7. workforce development programs to meet local and statewide needs; and
8. adult literacy and other basic skills programs for adults.

The Texas Higher Education Coordinating Board or the Dallas County Community College District Board, in the best interest of post-secondary education in Texas, may prescribe other purposes.

About Brookhaven College

Brookhaven College, the seventh college of the Dallas County Community College District, is conveniently located north of the city of Dallas in Farmers Branch. Its primary service area is northwest Dallas County — the core of one of the fastest growing business communities in the nation.

The outstanding faculty, innovative programs and excellent facilities offered at Brookhaven College over the past 25 years combine to make an impressive educational package. The college is equipped to serve the changing, growing community with a wide variety of educational, cultural and recreational opportunities. Brookhaven College is recognized as a valuable community resource, providing credit programs as well as corporate and continuing education.

Faculty

The college employs 119 full-time and about 400 adjunct faculty members. Faculty credentials, typically for those teaching transfer courses, include a master's or doctoral degree, with at least 18 graduate hours in the teaching discipline. In non-transfer and developmental programs, faculty may hold a baccalaureate or an associate's degree in the teaching field depending on accreditation standards and industry standards.

Instruction

You will find a full range of accredited freshman- and sophomore-level college courses offered at Brookhaven College, which are fully transferable to four-year colleges and universities. A 48-hour core curriculum is guaranteed to transfer to any public university in Texas. Students also may pursue a two-year associate degree; work toward certification in technical/occupational programs; gain a new skill or refresh an existing one; or simply explore an area of interest.

Customized training programs also are available for businesses on the college campus or at the job site. The BHC Teacher Certification Program prepares professionals in math and science to teach grades 4-12 after an intensive semester of study.

Student Services

Brookhaven College student services include advisement for all students, as well as career counseling and job placement assistance, special programs and services for women, veterans, returning adults, senior adults, students for whom English is a second language, and those with disabilities. Counseling referrals, health services and opportunities to qualify for scholarships and financial aid also are available.

Cultural Enrichment

A variety of student and community cultural enrichment offerings complement Brookhaven College's academic program. Through the School of the Arts, Brookhaven College presents a variety of cultural and entertainment events for the Dallas community. Offerings include workshops, lectures, visual arts exhibitions, concerts, dance and theatrical performances by student, national and international artists. Those who have been showcased include Earl Klugh, guitarist, Chet Atkins, country guitarist, Mark O'Connor, violinist, and jazz greats Bela Fleck and the Flecktones, and Spyro Gyra.

Facilities

Brookhaven College is situated on a 200-acre campus at 3939 Valley View Lane, just north of LBJ Freeway (IH-635). Facilities include a 65,000-square-foot Student Services Center, a computing/communications center, a 680-seat performance hall, and an automotive laboratory with the latest technical equipment. The campus is fully accessible to those with physical disabilities.

Instructional laboratories include a business studies computer center, which houses more than 200 student computers.

School of the Arts facilities include a 2,400 square-foot gallery, a renovated ceramics/kiln yard, a Macintosh computer lab, and studios for painting, drawing, printmaking and photography.

The Learning Resources Center houses a 58,000 volume library that incorporates state-of-the art equipment including access to more than 100 databases and an on-line catalog.

Brookhaven College's Parent-Child Study Center is a licensed childcare facility and learning lab for child development and childcare training.

Set in a winding path around the college, the two-mile jogging/exercise trail serves students, employees and members of the community. Other athletic facilities include three soccer fields, one baseball diamond, one softball field and eight tennis courts.

The Brookhaven College North Center, located at Marsh Lane and Frankford Road, serves the educational needs of the population of far northwest Dallas. The Brookhaven College East Center, located at Midway and Alpha roads, provides additional classroom space.

The Ellison Miles Geotechnology Institute moved to its new 20,000 square foot facility on the Brookhaven College campus in January 2001. The Institute provides continuing education for oil and gas professionals with a specialization in computational methods for assessing oil and gas exploration and production data.

Institutional Memberships & Affiliations

- American Association of Community Colleges
- Association of Automotive Service Providers of Texas
- Automotive Service Association, Texas Chapter
- Dallas Black Chamber of Commerce
- Farmers Branch Chamber of Commerce
- Ford Automotive Student Service Educational Training (ASSET)
- Greater Dallas Hispanic Chamber of Commerce
- International Association of General Motors Automotive Service Excellence Programs (ASEP)
- League for Innovation in the Community College
- Metrocrest Chamber of Commerce
- Texas Association of Colleges and Universities
- Texas Public Community/Junior College Association

National Certifications

- National Automotive Technical Education Foundation (Automotive Sevice Excellence)

Brookhaven College is recognized and sanctioned by the Coordinating Board of the Texas Higher Education Agency.

INSTRUCTIONAL AREAS

Automotive Technology	972-860-4189	Room Q100
Business Studies	972-860-4160	Room M110
Communications	972-860-4555	Room L366
Corporate & Continuing Education	972-860-4600	Room S022
Health & Human Services	972-860-4239	Room A219
Physical Education/Nutrition	972-860-4120	Room T315
School of the Arts	972-860-4730	Room D123
Science/Mathematics	972-860-4750	Room K224
Social Science	972-860-4130	Room K240
World Languages	972-860-4770	Room L420

STUDENT AND CAMPUS SERVICES

Advising and Counseling Center	972-860-4830	bhcAdvising@dcccd.edu	Room S113
Admissions and Registrar	972-860-4883	bhcAdmissions@dcccd.edu	Room S041
Athletics Department	972-860-4121		Room T202
Bookstore, on campus	972-484-7652		Room S238
Box Office (School of the Arts, Performance Hall)	972-860-4118	BHC_Boxoffice@dcccd.edu	Room C202
Business Office	972-860-4814		Room S057
Cashier's Office	972-860-4819		Room S054
Career Development Center	972-860-4894	bhc_jobs@dcccd.edu	Room S065
Corporate/Contract Training	972-860-4600		Room S022
Dual Credit	972-860-4372	bhcDualCredit@dcccd.edu	Room S143
East Center	972-860-7840		13608 Midway Rd.

STUDENT AND CAMPUS SERVICES (Continued)

EXCEL/Exemplary Programs Office	972-860-4626	bhcEXCEL@dcccd.edu	Room S124
Facilities Services	972-860-4798		Room R110
Financial Aid- See Scholarships			
Health Center	972-860-4195	bhcHealthCenter@dcccd.edu	Room S072
Human Resources	972-860-4813		Room A224
Library	972-860-4863		Room L200
Media Distribution	972-860-4860		Room L253
Multicultural Center	972-860-4845	bhcMulticulturalCenter@dcccd.edu	Room S136
North Center	972-860-7817		18106 Marsh Lane
Police Department	972-860-4290		Room B200
Public Information Office	972-860-4700	bhcPubInfo@dcccd.edu	Room S241
Resource and Economic Development	972-860-4851		Room A217
Scholarship/Financial Aid Office	972-860-4110	bhcScholarshipFinAid@dcccd.edu	Room S018
Senior Adult Education Office	972-860-4698/4807	bhcSeniorAdultEducation@dcccd.edu	Room M203
Student Programs & Resources (SPAR)	972-860-4115	bhcSPAR@dcccd.edu	Room S201
Special Services	972-860-4847	bhcADAservices@dcccd.edu	Room S124
Teacher Academy	972-860-4674	bhcTeacherAcademy@dcccd.edu	Room S126
Testing Center	972-860-4865	bhcTesting@dcccd.edu	Room S080
Tours	972-860-4823	bhcTours@dcccd.edu	Room A219
Veterans Services	972-860-4707	bhcVeterans@dcccd.edu	Room S048

BROOKHAVEN COLLEGE ADMINISTRATION

President	Alice W. Villadsen	972-860-4809
Executive Vice President, Vice President for Instruction	H. Eugene Gibbons	972-860-4808
Vice President for Business Services	George T. Herring	972-860-4634
Vice President for Resource and Economic Development	Mary Brumbach	972-860-4857
Vice President for Student Development	Claude Caffee	972-860-4832
Assistant to the President	Carrie Schweitzer	972-860-4848
Assistant to the President	Thomas Anderson	972-860-4154

BROOKHAVEN COLLEGE FACULTY AND ADMINISTRATORS

The faculty and administrator listings reflect up-to-date information at press time. For the most current directory, please refer to the Brookhaven College web site. Enter the site and click the "A" tab or the "F" tab.

Abedin, Haven ..... Faculty, English
Univ. of Texas at Austin, B.A.; Univ. of North Texas, M.A.

Anderson, Thomas I. ..... Assistant to the President
State Univ. of New York/Albany, B.A.; Brown Univ., M.A.;
Nashotah House Theological Seminary, M.Div.

Arndt, Joy ..... Director, Student Programs and Resources
Eastfield College, A.A.; Univ. of Texas at Dallas, B.G.S.

Attner, Raymond F., Jr. ..... Faculty Dean, Business Studies
California State Univ. at Long Beach, B.S.;
N.E. Louisiana State Univ., M.B.A.

Austin, Robert F. ..... Faculty, Music
Univ. of North Texas, B.Mus., M.M., D.M.A.

Avera, Mary Lou ..... Faculty, Management
Illinois Institute of Technology, B.S.; Governor's State Univ., M.B.A.

Barlow, Nancy ..... Faculty, English/History
Univ. of Texas at Dallas, B.A., M.A.

Barnes, Ben ..... Executive Dean, Administrative & Educational Technology
Indiana Univ., B.M.E., M.A.

Baxter, Gerald S. ..... Faculty, Automotive Technology
Brookhaven College, A.A.S.

Bennett, Rodger . Exec. Dean, School of the Arts and Physical Ed. & Athletics
Southern Methodist Univ., B.M., M.M.

Brown, Betty ..... Director, Financial Aid
Brookhaven College, A.A.S.

Brownlee, Diane K. ..... Director, Ellison Miles Geotechnology Institute
Colorado School of Mines, B.S.

Brumbach, Mary A. Vice President for Resource and Economic Development
Mary Hardin-Baylor College, B.A.; Univ. of North Texas, M.A., Ph.D.

Burks, Patti ..... Faculty, Computer Information Technology
Univ. of North Texas, B.B.A.; Univ. of Texas at Dallas, M.S.

Burton, Hurshel ..... Faculty, English
Penn. State Univ., B.A.; Texas Wesleyan Univ., M.Ed.

Burton, Sharon ..... Faculty, New Program Development
Lamar Univ., B.B.A.; Univ. of North Texas, M.B.E.

Byars, Pat ..... Faculty, Office Technology
Univ. of Texas at Austin, B.B.A.

Cadenhead, Charles ..... Faculty, Computer Information Technology
Texas Tech Univ., B.S.; Univ. of North Texas, M.S.

Caffee, Claude ..... Vice President for Student Development
Texas A&M Univ. at Commerce, B.S., M.E., Ed.D.

Campbell, Cristina ..... Faculty, Spanish
Baylor Univ., B.A.; Texas A&M Univ., M.A.

Carlos, Hazel ..... Faculty, English
Jackson State Univ., B.A.; Western Michigan Univ., M.A.

Cheng, Elaine L. ..... Faculty, Mathematics
Univ. of Southwestern Louisiana, B.S.; McNeese State Univ., M.S.

Chu, Chong Keun ..... Faculty, Art
Southern Methodist Univ., B.F.A.; Temple Univ., M.F.A.

Cinclair, Carol L. ..... Faculty, English for Speakers of Other Languages
Mount Mary College, B.S.; Northern State College, M.S.;
Univ. of North Texas, Ed.D.

Clarke, Winifred ..... Director, Testing Center
William Woods College, B.A.; Lincoln Univ., M.Ed.

Coder, Ann ..... Librarian III
Univ. of Texas at Austin, B.A.; Univ. of California, M.L.S.;
San Francisco State Univ., M.A.; Univ. of San Francisco, Ed.D.

Cofer, Don E. ..... Faculty, Automotive
Brookhaven College, A.A.S.

Coffey, Sylvia ..... Director, Multicultural Center
Catholic Univ. of Puerto Rico, B.S.

Collins, Lauri ..... Faculty, Visual Communications
North Texas State Univ., B.F.A., M.F.A.

Cuellar-McGuire, Adrien ..... Faculty, Fine Arts/Humanities
Southern Methodist Univ., B.A., M.A.

Cyriaque, Christopher ..... Faculty, English for Speakers of Other Languages
Grambling State Univ., B.A., M.A.

Dalton, Brenda ..... Director, Academic Advising/TASP
Univ. of Texas at Dallas, B.A.; Amberton Univ., M.S.

Dalton, Brenda ..... Director, Academic Advising/TASP
Univ. of Texas at Dallas, B.A.; Amberton Univ., M.S.

Dodd, Patricia ..... Faculty, English
Midwestern State Univ., B.A.; M.A.; Univ. of Nottingham, M.A.;
Univ. of North Texas, Ph.D.

Drago, Margaret ..... Librarian III
Texas Woman's Univ., B.S.; Univ. of North Texas, M.I.S.

Drescher, Nita ..... Faculty, Reading
Univ. of Texas/Austin, B.S., M.Ed.; Univ. of North Texas, Ph.D.

Dwyer, James ..... Director, Facilities Services

Edrich, Teresa ..... Director, Human Resources
Brookhaven College, A.A.S.

Ehrich, Lisa ..... Faculty, Art
Univ. of Texas/Austin, B.F.A.; Univ. of North Texas, M.F.A.

Ferguson, Sarah A. ..... Executive Dean, Educational Resources
Texas Woman's Univ., B.A., M.L.S.

Fleming, Delryn ..... Faculty, English/Speech
Southwestern Univ., B.A.; East Texas State Univ., M.A.

Flint, Juanita Zapata ..... Exec. Dean, Health & Human Svcs.
Texas Woman's Univ., M.S., R.N., F.N.P.C.

Fociños, Juan Carlos ..... Assistant Dean, World Languages
Universidad Autonoma de Madrid, B.S.

Garcia, Edward H. ..... Faculty, English
Univ. of Texas/Austin, B.A.; Ohio State Univ., M.A.;
Univ. of Texas/Austin, Ph.D.

Gardner-Morales, Elaine Martina ..... Faculty, Music
Univ. of North Texas, B.M.; East Texas State Univ., M.M.

Garza, Mike ..... Faculty, Psychology
Univ. of Corpus Christi, B.S.; East Texas State Univ., M.S., Ed.D.

Gibbons, H. Eugene ..... Exec. Vice President for Instruction
Ouachita College, B.A.; Oklahoma City Univ., M.A.;
Univ. of Oklahoma, Ph.D.

Gill-King, H. ..... Faculty, Biology/Anthropology
Southern Methodist Univ., B.A., M.A., Ph.D.

Gonzales, Adam ..... Assistant Dean, Resource and Economic Development
Texas Tech Univ., B.A., M.A.

Goodwin, Randall ..... Faculty, Automotive

Graff, Nancy ..... Faculty, Chemistry
Southern Methodist Univ.; B.S., M.S.

Green, Charlotte ..... ECC Satellite, Associate Dean Nursing
Texas Woman's Univ., B.S.N.; Southern Methodist Univ., M.L.A.

Gutierrez, Octavio ..... Faculty, Music
Univ. of North Texas, B.A., M.M.

Hamm, D. Michael ..... Executive Dean, Science & Mathematics
Univ. of Texas at Arlington, B.A., M.A.; Univ. of North Texas, Ph.D.

Hammerschlag, Bill ..... Faculty, Computer Information Technology
Carnegie Mellon Univ., B.S.E.E.; Southern Methodist Univ., M.S.E.E.;
Univ. of Texas/Arlington, Ph.D.

Hammond, Jay ..... Faculty, History
Univ. of Missouri, B.S., M.A.

Hanus, Debbie ..... Faculty, Mathematics
Lamar Univ., B.S.; Texas A&M Univ., M.S.

Hellmund, Roy ..... Faculty, Automotive
Southern Illinois Univ., B.S.

Herd, Stephen M. ..... Faculty, Automotive
Eastfield College, A.A.S.

Herring, George T. ..... Vice President for Business Services
Eastfield College, A.A.S.; Univ. of Texas, Arlington, B.S.;
Amberton Univ., M.B.A.

Herring, Gus W. ..... Faculty, Economics
St. Edward's Univ., B.S.; Univ. of Dallas, M.B.A., M.S.

Hill, Jerry ..... Faculty, Visual Communications
Univ. of Houston, B.S.; North Texas State Univ., M.S.

Hueston, Robert Stewart ..... Faculty, Physical Education
Univ. of Texas at Austin, B.S.; Univ. of North Texas, M.Ed.;
Southern Methodist Univ., M.L.A.

Jackson, Mary ..... Faculty, Mathematics
Univ. of Dallas, B.A.; Texas A&M Univ. at Commerce, M.S.

Jacobs, Greg ..... Faculty, Social Science/Sociology
Univ. of North Texas, B.A., M.Ed.

Jamieson, Avis T. ..... Faculty, Physical Education
Univ. of Texas atAustin, B.S., M.Ed.; Southern Methodist Univ., M.F.A.

Johnson, Marvin ..... Faculty, Automotive
California State Univ./Long Beach, B.A.

Jones, Donald ..... Faculty, Automotive
Univ. of North Texas, B.A.A.S.

Kahla, Steven ..... Associate Dean, Workforce Development
Abilene Christian Univ., B.S.; Auburn Univ., M.B.A.

Kasparian, Glenn D. ..... Faculty, Biology
Tufts Univ., B.S.; Univ. of Texas/Dallas, M.S.

Kelley, Mildred ..... College Nurse, Health Services
Brookhaven College, A.A.S.

Kim, Ji-Eun ..... Visiting Faculty Scholar, Korean/English for Speakers of Other Languages
Univ. of Texas at Arlington, M.Ed.

Knickel, Rebecca ..... Faculty, Accounting
Univ. of North Texas, M.B.A.; Southern Methodist Univ., B.B.A.

Lee, Linda Hope ..... Director, Training & Development
Fisk Univ., B.A.; American Univ., M.A.

Levesque, Lynne ..... Director, Athletics
Southern Connecticut St. College, B.S.; Indiana State Univ., M.S.

Link, Stephen William ..... Faculty, Psychology
State Univ. of New York/Oneonta, B.A.;
State Univ. of New York/Albany, M.S., E.D.S.; Univ. of North Texas, Ph.D.

Little, Robert ..... Faculty, Government
Univ. of North Texas, B.S.; State Univ. of New York/Buffalo, Ed.M.

Long, Kathleen A. ..... Faculty, Developmental Math
West Texas State Univ., B.S.; Texas Woman's Univ., M.S.

Love, Cynthia H. ..... Executive Dean, Corporate & Continuing Education
Abilene Christian Univ., B.S.; Louisiana Tech, M.A.
Texas Tech Univ., Ed.D.

Lynch, Eileen ..... Faculty, Government
Univ. of North Texas, B.A., M.A., Ph.D.

Lynch, Marilyn Kolesar ..... Executive Dean, Career Resources/Title III
Univ. of North Texas, B.B.A., M.B.E.

Maness, Marie Y. ..... Faculty, Physical Education
Florida Atlantic Univ., B.S.; Georgia State Univ., M. Ed.;
Texas Woman's Univ., Ph.D.

Mannering, Monique ..... Faculty, Dev. Reading/Writing
Stephen F. Austin Univ., B.A.; Univ. of North Texas, M.Ed.

Maxey, Susan ..... Faculty, Geology
Univ. of Texas at Austin, B.S.; Univ. of Dallas, M.A.T.

Maxwell, Rick ..... Faculty, Art
Univ. of Dallas, B.A.; Southern Methodist Univ., M.F.A.

McAdams, Charles D. ..... Faculty, Fine Arts/Humanities
Louisiana State Univ., B.M.Ed.; Memphis State Univ., M.A.;
Texas A&M Univ. at Commerce, Ph.D.

McClung, Brian ..... Faculty, English for Speakers of Other Languages/Italian
Wesleyan Univ., B.A.; Univ. of California/Berkeley, M.A.

McCoy, M. Clarice ..... Faculty, Accounting
S.E. Oklahoma State Univ., B.S.;
Texas A&M Univ. at Commerce, M.B.A.

McGillicuddy, Ji-Yeon ..... Visiting Faculty Scholar, Humanities
Kon-Kuk Univ., B.A.; Univ. of North Texas, M.M.

McLelland, Sue Annette ..... Associate Dean, Nursing
Baylor Univ., B.S.N.; Texas Woman's Univ., M.S.N., R.R.T., R.C.P.

McNabb, David ..... Faculty, Automotive
Brookhaven, College, A.A.S.; Texas Tech Univ., B.A.

Meersman, Key ..... Faculty, Dance
Marymount Manhattan College, B.A.; Southern Methodist Univ., M.F.A.

Meltzer, Lisa ..... Director, Career Development Center
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CEDAR VALLEY COLLEGE

A rewarding educational experience awaits you at Cedar Valley College.

Cedar Valley is one of seven colleges in the Dallas County Community College District (DCCCD). Approximately 4,000 students benefit from our comprehensive curriculum, which includes academic transfer, career programs, including work force development training for area employers and non-credit continuing education courses.

Our dedicated faculty and innovative programs combine to create an exciting learning environment, including:

- Affordable, with opportunities for personal growth and/or transfer to a baccalaureate program. Half price tuition for afternoon and weekend courses during specified times
- Mini-mesters between the traditional fall and spring semesters
- Guarantees that every class listed in the schedule will be offered, plus guarantees for transfer credit and job competency
- Special services, including tutoring and note-taking, for disabled students
- Distance learning from home by telecourse, computer and live TV, as well as the DCCCD's only completely on-line biology course
- Veterinary Technology Program accredited by the American Veterinary Medical Association and the Texas Veterinary Medical Association. One of only three accredited Distance Education Veterinary Technology Programs nationwide
- Computer Graphics program with emphasis on learning the skills and techniques of computer graphics, electronic imaging and production
- Nationally recognized Music and Fine Arts program with two internationally known artists on the faculty
- Law Enforcement Academy
- Student Resource Center with state-of-the-art computers with internet access
- Programs for high school students, including Tech Prep, Concurrent Credit and TAAS/TASP preparation and Upward Bound
- Career and Job Placement Center, Advisement Counseling Center and Student Support Services
- Tutoring Services.

The Campus

Cedar Valley is located on 353 acres in southern Dallas County, just south of I-20. The campus plan was developed to take advantage of the site's natural beauty, which includes a gazebo and a pedestrian walk along two sides of a 17-acre lake. Cedar Valley has a 400-seat performance hall, gymnasium, baseball field, and a surgery facility and barn for the Veterinary Technology program.

Cedar Valley College Mission

The Mission of Cedar Valley College is to enrich the potential and increase the productivity of people in the communities we serve by providing quality educational experiences in a caring and innovative environment.

Cedar Valley College maintains an institutional environment of excellence which facilitates and encourages learning, which emphasizes and values quality education, which champions diversity, which promotes student well-being, and which creates a public understanding and commitment to the college and its value to the community.

Cedar Valley College will maintain a comprehensive curriculum and related support services that reflect the needs of the communities it serves and the financial capabilities of the institution. The College will strive to:

- provide a curriculum balanced with academic, occupational and continuing education offerings
- provide opportunities for learning through excellence in teaching
- provide a learner centered environment
- be responsive to current and future needs of the communities it serves
- provide developmental education for effective participation in occupational education and in further higher education
- foster critical thinking and questioning skills in all students
- prepare students personally and academically to meet the demands of a changing world

Cedar Valley is committed to providing the highest quality educational experiences for each student it serves.

The Cedar Valley College Mission Statement was developed from a Delphi study done in 1991. The study polled students, faculty, staff, administrators and community residents to gather opinions about the mission of the College. The current Mission Statement is based on this foundation of information, and was revised in 1998. It accurately reflects the culture, climate and instructional needs of the community it serves.

Cedar Valley College Statement of Purpose

As determined by the State of Texas, the purpose of each public community college shall be to provide:

1) technical programs up to two years in length leading to associate degrees or certificates;
2) vocational programs leading directly to employment in semi-skilled and skilled occupations;
3) freshman and sophomore courses in arts and sciences;
4) continuing adult education programs for occupational or cultural upgrading;
5) compensatory education programs designed to fulfill the commitment of an admissions policy allowing the enrollment of disadvantaged students;

6) a continuing program of counseling and guidance designed to assist students in achieving their individual education goals;
7) work force development programs designed to meet local and statewide needs;
8) adult literacy and other basic skills programs for adults; and
9) such other purposes as may be prescribed by the Texas Higher Education Coordinating Board of local governing boards in the best interest of post-secondary education in Texas.

Accreditation

Cedar Valley College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA 30033-4097; Telephone number 404-679-4501) to award the associate degree.

CEDAR VALLEY COLLEGE ADMINISTRATION

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Vice President of Business Services	David Browning	972-860-8007
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Dean, Continuing Education	Rhonda Jackson	972-860-8021
Dean, Educational Resources & Technology	Vacant	972-860-8051
Dean, External Relations	Jerry Cotton	972-860-8157
Dean, Institutional Effectiveness & Research	Claire Gauntlett	972-860-8128
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Director, Financial Aid	Frank Ellis	972-860-8280
Director, Human Resources	Linda Williams	972-860-8225
Director, Marketing and Public Information	Sonya Spencer	972-860-8142
Director, School Alliance & Institutional Outreach	Mwauna Maxwell	972-860-8065
Director, Small Business Development Center	Herb Kamm	972-709-5878
Director, Special Populations and TRIO	Grenna Rollings	972-860-8181
Director, Testing Center	Jonas Young	972-860-8118
Director, Veterinary Technology	Brian Heim	972-860-8019
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Continuing Education/Workforce Training	972-860-8210
Human Development	972-860-8262
Liberal Arts	972-860-8120

STUDENT SERVICES

Administration	972-860-8228
Admissions/Registrar	972-860-8201
Book Store	972-860-2900
Business Operations	972-860-8290
Career Information & Placement	972-860-8146
Counseling Center	972-860-8262
Evening Office	972-860-8230
Facilities Services	972-860-8186
Financial Aid	972-860-8280
Health Center	972-860-8277
Library	972-860-8140
Police	972-860-8286
Special Services	972-860-8119
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CEDAR VALLEY COLLEGE FACULTY AND ADMINISTRATION

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Wolf, Charles ..... Veterinary Technology
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Young, Jonas ..... Director of Testing
Paul Quinn College, B.S.

Youngblood, Mary Ann ..... English
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EASTFIELD COLLEGE

Eastfield College serves the eastern part of Dallas County, including East Dallas, Garland and Mesquite. Sometimes known as the "Educational Village" because of its unique architecture, it is located on 244 acres at the intersection of Interstate 30 and Motley Drive in Mesquite. Eastfield began operation in 1970 and has continually strived to assess the educational and cultural needs of students and the community in order to provide the finest in educational services.

Eastfield provides a full range of academic transfer programs balanced with technical/occupational programs that are designed to equip students for rewarding careers in Metroplex businesses and industries. In addition, thousands of people each semester find rewarding growth opportunities through the extensive continuing education course offerings.

Mission Statement & Expanded Goals

The mission of Eastfield College is to provide educational opportunities through high-quality instruction, services and programs in an environment conducive to student success in academic, technical, occupational, and continuing education. Our purpose is to develop responsible citizenship, to value diversity and cultural enrichment, and to be accountable and adaptable.

Eastfield College will

1. Provide access for all students and help them achieve their educational goals by offering a broad range of instructional and student support services including counseling and guidance.
2. Assist students in obtaining freshman-and sophomore-level knowledge and skills leading to employment and/or an associate degree and/or prepare them for transfer to baccalaureate degree-granting institutions.
3. Assist students in obtaining knowledge, skills, and services necessary to earn a certificate and/or applied associates degree and to succeed in technical-occupational careers.
4. Provide literacy, developmental education, and English for Speakers of Other Languages programs designed to prepare students to participate successfully in further academic and career opportunities.
5. Assist students seeking training for advancement in their current field, training for entry-level job skills, retraining for employment or personal enrichment through comprehensive continuing education, and workforce training.
6. Develop educational partnerships with business, industry, governmental entities, and civic organizations to enhance economic development.
7. Provide all students with personal, social, and cultural enrichment opportunities and encourage them to exercise their rights and responsibilities as citizens.
8. Employ a qualified, diverse staff and provide opportunities for professional development for staff members to enhance their skills and abilities.
9. Continuously study, analyze, and appraise the college's purposes, procedures, programs, activities, and organization to enhance institutional effectiveness.

The Campus

The Eastfield campus rises impressively from the plains of eastern Dallas County. Functional building clusters give students easy access to classrooms and labs and the overall aesthetic effect has earned Eastfield several architectural awards of excellence. The careful landscape planning includes terraced areas throughout the campus, a heated outdoor exercise pool, gymnasium, baseball field, jogging trail and tennis courts. In addition, the campus boasts an outstanding Performance Hall which serves the college and community for a variety of fine arts events.

Accreditation

Eastfield College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA 30033-4097; Telephone number 404-679-4501) to award the associate degree.

Institutional Memberships

- The American Association of Community Colleges
- The League for Innovation in the Community College

Eastfield is recognized and sanctioned by the Texas Higher Education Coordinating Board of the Texas College and University System and the Texas Education Agency and is an Affirmative Action Equal Opportunity Institution.

EASTFIELD COLLEGE ADMINISTRATION

President	Rodger A. Pool	972-860-7001
Vice President of Business Services	Jim Jones	972-860-7603
Vice President of Instruction	Diane Martin	972-860-7196
Vice President of Student & Institutional Development	Felix A. Zamora	972-860-7610
Dean of Educational & Administrative Technology	John Criswell	972-860-7651
Dean of Instructional Support Services	Emma Cronin	972-860-7169
Dean of Resource & Community Development	Cheryl Green	972-860-7107
Dean of Student Support Services	Reva Rattan	972-860-7032
Dean of Workforce & Economic Development	Lindle Grigsby	972-860-7198

EASTFIELD COLLEGE ADMINISTRATION (continued)

Dean of Admissions, Advisement & Testing	Linda Richardson	972-860-7105
Assistant Dean of Institutional Effectiveness	Constance Howells	972-860-8325
Director of Academic Advising & TASP	Frank Blair	972-860-7932
Director of Admissions/Evening Administration	Charles E. Helton	972-860-7010
Director of Career Services	Patsy Caropresi	972-860-7038
Director of College Police	Tyler Moore	972-860-8333
Director of Enrollment Management	Maria Arocha	972-860-7025
Director of Facilities Services	Arthur Sykes	972-860-7688
Director of Human Resources	Kate Kelley	972-860-7613
Director of Learning Assistance Center	Theresa Sternat	972-860-7062
Director of Library Services	Karla Greer	972-860-7173
Director of Marketing & Communications	Sharon Cook	972-860-7629
Director of Student Programs & Resources & Health Services	Donnine Ballance	972-860-7190
Director of Talent Search Program	Joseph Cuevas	972-860-7896
Director of Upward Bound Program	Romilio Castillo	972-860-7284
ADA Compliance Officer	Jim Jones	972-860-7603

INSTRUCTIONAL DIVISION DEANS

Academic Support and Mathematics	Vivian Dennis-Monzingo/Interim	972-860-7108
Language and Literature	Matilda Saenz	972-860-7132/7124
Business and Fine Arts	Don Baynham	972-860-7119
Communication Arts and Applied Technologies	Gerald Kozlowski	972-860-7143
Science and Physical Education	Mark Presley	972-860-7140
Social Sciences and Human Services	Richard Cinclair	972-860-7156

EASTFIELD COLLEGE FACULTY AND ADMINISTRATION

Alba, Elias ..... Automotive Technology
Cedar Valley College, A.A.S.; Univ. of North Texas, Teaching Certificate; Universal Technical Institute, Diesel Technician

Amouzgar, Moe ..... Computer Science
McGill Univ., B.E.E.E.; Southern Methodist Univ., M.E.

Arocha, Maria ..... Director of Enrollment Management
Eastfield College, A.A.; Univ. of Texas at Dallas, B.A.; Amber University, M.S.

Aurand, Eric ..... Mathematics
Univ. of Arizona, B.A.; Texas A&M Univ. at Commerce, M.S.; Univ. of North Texas, Ph.D.

Ballance, Donnine ..... Dir. of Student Programs & Resources & Health Svcs.
Baylor Univ., B.A.; Texas Woman's Univ., M.Ed.; Further study: Amber Univ., Texas A&M Univ. at Commerce

Balvin, Kenneth ..... Physical Education
Springfield College, B.S., M.S.; Further study: Ohio State Univ., Azusa Pacific College

Baynham, Don ..... Dean, Business and Information Systems
Eastfield College, A.A.S.; Abilene Christian Univ., B.B.A., M.S.
Further study: Amber Univ., Univ. of Texas at Dallas; Univ. of North Texas

Beaver, Nancy ..... Child Development
Univ. of Texas at Austin, B.S.; Univ. of North Texas, M.Ed.

Bellamy, Johnnie ..... Associate Dean of Workforce Education
Univ. of North Texas, B.B.A.; M.Ed.

Bennett, James ..... Developmental Mathematics
Univ. of Texas at Austin, B.A.; Univ. of Houston, M.S.; Further study: Texas A&M Univ. at Commerce

Blair, Frank ..... Director of Academic Advising & TASP
Univ. of Texas at Austin, B.A.

Boldt, Chris E. ..... Mathematics
Texas Tech Univ., B.B.A.; Texas Christian Univ., M.S.; East Texas State Univ., Ed.D.: Further study: Texas Christian Univ., Univ. of North Texas, Univ. of Texas at Austin, Syracuse Univ., Univ. of Colorado at Boulder, Univ. of Hawaii, Stanford Univ., Ohio Univ.

Bowers, James ..... Developmental Reading
Arizona State Univ., B.A., M.A.

Bradshaw, Curt ..... Music
Northern Iowa Univ., B.S.; Univ. of North Texas, M.M.

Brown, Harryette Stover ..... English
Southern Methodist Univ., B.A., M.A.; Texas Woman's Univ., Ph.D.; Further study: Univ. of North Texas, Texas A&M Univ. at Commerce, Texas Woman's Univ.

Brumbach, Virginia ..... English
Cumberland College, A.A.; Western Kentucky State Univ., B.A.; Baylor Univ., M.A.; Univ. of North Texas, Ed.D.; Post-doctoral, Texas Univ., North Texas Univ., Texas Christian Univ.

Budd, Rose A. ..... Developmental Writing
Shortwood College (Jamaica), Teaching Certificate; Southern Methodist Univ., B.A., M.A.; Univ. of North Texas, M.L.S.; Kellogg Institute, Appalachian State Univ., Developmental Education Specialist

Burris, Danny ..... Heating, Ventilation & AC
Eastfield College, A.A.S.; Le Tourneau Univ., B.S.

Bush, George ..... Social Work/Substance Abuse
Bishop College, B.A.; Ball State Univ., M.A.

Caratini, Maria Prado ..... Program Director, Workforce Education
Ponitifical Catholic Univ. of Puerto Rico, B.A., M.Ed.

Caropresi, Patsy ..... Director of Career Services
El Centro College, A.A.; Univ. of North Texas, B.S.; Texas Woman's Univ., M.A.; Further study: Amberton Univ.

Carpenter, Robert W. ..... Accounting
Univ. of North Texas, B.B.A., M.B.A.; C.P.A. State of Texas; Further study: Univ. of North Texas, Western State College of Colorado

Carr, Laura V. ..... Interpreter Training Program
Illinois State Univ., B.S.; New York Univ., M.A.; Further study: Univ. of Massachusetts, Gallaudet Univ., Texas A&M Univ. at Commerce, Univ. of North Texas, Univ. of LaVerne, Amberton Univ.

Castillo, Romilio ..... Director of Upward Bound Program
Univ. of Texas at Dallas, B.S.

Cate, Franklin M. ..... History
Texas A&M Univ. at Commerce, B.A.; Univ. of Virginia, M.A.; Further study: Univ. of Texas, Vanderbilt Univ.

Christian, Allen L. ..... Mathematics
Arlington State College, B.S.; Texas A&M Univ. at Commerce, M.S.; Univ. of North Texas, Ed.D.

Cinclair, Richard ..... Dean, Social Sciences and Human Services
Northern State College, B.S.; Univ. of Wisconsin, M.S.; Ball State Univ., Ph.D.

Clayton, Glenn N., Jr. ..... English
Univ. of North Texas, B.A., M.A.; Further study: Texas A&M Univ. at Commerce, Univ. of North Texas

Cook, Sharon ..... Director of Marketing and Communications
Baylor Univ., B.A.

Criswell, John ..... Dean, Educational & Administrative Technology
Sam Houston State Univ., B.S.

Cronin, Emma ..... Dean of Instructional Support Services
Univ. of Oklahoma, B.A.; Univ. of North Texas, M.L.S.; Further study: East Texas State Univ., Texas Woman's Univ., New Mexico Highlands Univ.

Cuevas, Joseph B. ..... Director of Talent Search Program
Purdue Univ., B.A.; Ball State Univ., M.A.; Univ. of Texas at Austin, M.E.; Further study: Univ. of Iowa, Univ. of Wisconsin at Madison, Texas A&M Univ. at Commerce

Dale, Charles W. ..... Electronics
Southeastern State College of Oklahoma, B.S.; Southern Illinois Univ., M.S.; Texas A&M Univ. at Commerce, Ed.D.

Danforth, David ..... Digital Imaging
Eastern New Mexico Univ., B.S.

Dean, Sherry ..... French
Asbury College, B.A.; Univ. of Texas at Arlington, M.A.; Univ. of Texas at Austin, Ph.D.

Dennis-Monzingo, Vivian ..... Mathematics
Texas A&M Univ. at Commerce, B.A., M.S., Ed.D.; Further study: Univ. of North Texas

Doroshow, Michael ..... Computer Information Systems
Univ. of Alabama, B.S., M.A.; Further study: Univ. of Alabama

Dye, Arch ..... Electronics
Mountain View College, A.A.S.; Univ. of Texas at Dallas, B.S.; Texas A&M Univ. at Commerce, M.S.

Ealey, Selena ..... Visiting Scholar, Developmental Reading
Texas A&M Univ., M.Ed.

Egedigwe, Eges ..... Computer Information Systems
Univ. of Ife (Nigeria), B.S.; Atlanta Univ., M.S., M.B.A.; Further study: Michigan State Univ.; Univ. of North Texas; Nova Southeastern Univ.

Emery, John ..... Assistant Dean of Continuing Education
Univ. of the State of New York, B.A.; Webster University, M.B.A.

Erwin, Robert J. ..... Theatre
Univ. of South Florida, B.A.; Univ. of Alberta, M.F.A.; Further study: Paul Mann's Acting Workshop, New York City

Felder, Bob ..... Economics
Sam Houston State Univ., B.A., M.A.

Fitzsimmons, Mary Ann ..... Program Director, Workforce Education
Univ. of Dayton, B.S.; Further study: Kansas State Univ.

Flickner, Robert E. ..... Physical Education
Bethel College, B.S.; Kansas Univ., M.S.; Further study: Depaul Univ., Chapman Univ., United States Sports Academy, Emporia State Univ.

Forrest, Mary L. ..... Speech
Univ. of North Texas, B.A.; Southern Methodist Univ., M.F.A.; Univ. of North Texas, Ed.D.

Fox-Balli, Christine M. ..... Spanish
Univ. of Texas at Austin, B.A.; Texas A&M Univ. at Commerce, M.A.; Further study: Texas Tech Univ.

Gammage, Judie K. ..... Computer Information Systems
Southern Methodist Univ., B.A., M.L.A.; Univ. of North Texas, Ph.D.

Green, Cheryl ..... Dean, Resource and Community Development
Yale Univ., B.A.; Ohio State Univ., M.A.; Further study: Southern Methodist Univ.

Greer, Karla ..... Director, Library Services
Texas Woman's Univ., B.S.; M.L.S.

Grigsby, Lindie ..... Dean, Workforce and Continuing Education
Univ. of North Texas, Ed.D.

Hagar, E. Alytene ..... Psychology
Texas Tech Univ., B.A.; Univ. of North Texas, M.Ed., Ed.D.

Helton, Charles E. ..... Director of Admissions/Evening Administration
Texas A&M Univ. at Commerce, B.S.; Further study: Texas A&M Univ. at Commerce

Henry, Robert ..... Physical Education
Southern Methodist Univ., B.A.; Univ. of Illinois, M.S.; Further study: Univ. of Texas, Univ. of North Texas, Texas A&M Univ. at Commerce, Texas Tech Univ., Texas A&M Univ.

Henson, Jerry C. ..... History/Religion
Hardin-Simmons Univ., B.A.; Southwestern Baptist Theological Seminary, B.D.; Baylor Univ., Ph.D.

Holman, Morris H. ..... History
Texas A&M Univ. at Commerce, B.A., M.A.; Dallas Theological Seminary, M.A.B.S.; Further study: Univ. of North Texas

Howell, James ..... Program Director, Workforce Education
Texas A&M Univ. at Commerce, B.B.A., M.B.A.

Howells, Constance ..... Director of Institutional Research
Pan American Univ., B.A.; Univ. of Texas at Dallas, M.A.

Huston, Elizabeth ..... English
Univ. of Houston, B.A.; Texas Woman's Univ., M.A., Ph.D.

Hutchins, Micheal E. ..... Computer Aided Design & Drafting
East Texas State Univ., B.S., M.S., Ed.D.

Jackson, Gloria H. ..... Social Work/Substance Abuse
Jackson State Univ., M.A.; Alcorn State Univ., B.A.

Jacquez, Mary Alice (Pinny) ..... Counselor
Eastern New Mexico Univ., B.S., M.A.; Further study: Amber Univ., Texas A&M Univ. at Commerce

Jenkins, Curt ..... Program Director, Automotive Technology
Univ. of Texas at Dallas, B.S.; Texas A&M Univ. at Commerce, M.S.

Jessen, Joel A. ..... Human Development
Univ. of Iowa, B.A., M.A.

Johnson, Chris ..... Physical Education
Northwest Missouri Univ., B.S., M.S.

Johnson, Sarah B. ..... Visiting Scholar, Psychology
Mountain View College, A.A.S.; Univ. of Texas at Arlington, B.A.; Texas A&M Univ. at Commerce, M.S.; Univ. of Texas at Austin, Ph.D.

Jones, Jim ..... Vice President of Business Services
Univ. of Texas at Arlington, B.B.A.; Amber Univ., M.S.

Jones, Mario ..... Physical Education
Southern Illinois Univ., B.S.

Joseph, Betsy ..... English
Univ. of North Texas, B.A.; Univ. of North Texas, M.A.

Jurhree, Stacey ..... Government
El Centro College, A.S.; Eastern New Mexico Univ., B.S., M.A.; The Ohio State Univ., M.A.; Clark Atlanta Univ., Ph.D.

Justice, Mahlon G. "Jay" ..... Physics
Millersville Univ., B.A.; The Pennsylvania State Univ., M.S.

Keenan, Donnelle ..... Developmental Writing
Univ. of North Carolina at Chapel Hill, B.A.; Univ. of Oklahoma, M.Ed.; Kellogg Institute, Appalachian State Univ., Developmental Specialist; Further Study: Univ. of North Texas, Univ. of Oklahoma

Kelley, Kate ..... Director of Human Resources
Univ. of Mary Hardin-Baylor, B.S.; Further study: Univ. of Mary Hardin-Baylor, Institute for Applied Management and Law

Kirk, David ..... Computer Science/Computer Information Systems
Texas A&M Univ. at College Station, B.S.; Univ. of Texas at Dallas, M.S.; Further study: Univ. of Texas at Dallas

Kirkpatrick, James Michael ..... Computer Aided Design & Drafting
Oklahoma City Univ., B.I.A.; Univ. of North Texas, M.Ed., Ed.D.

Knight, Carl E. ..... Biology
Michigan State Univ., B.S., M.S., Ph.D.

Kozlowski, Gerald ..... Dean, Communication Arts and Applied Technologies
Eastfield College, A.A.S.; Univ. of North Texas, B.A.; Texas A&M Univ. at Commerce, M.S.; Further study: Univ. of North Texas; Spanish Language Institute

Larsen, Len ..... Criminal Justice
Abilene Christian Univ., B.S.; Univ. of Texas at Dallas, M.A.; Further study: Univ. of Texas at Dallas

Leos, Camilo ..... Developmental Mathematics
Univ. of Texas at Austin, B.A.; Southern Methodist Univ., M.L.A.

Lewis, Rita R. ..... Mathematics
Sam Houston State Univ., B.S.; East Texas State Univ., M.S.

Liston, Curtis ..... Automotive Technology
Texas State Technical College, A.A.

Lucky, Harrell C. ..... Music
Southern Nazarene Univ., B.M.Ed.; Southwestern Baptist Seminary, M.C.M., D.M.E.; Further study: Academy of Music, Vienna, Austria

Madriguera, Enric F. ..... Music
Oscar Espla Conservatory of Music, Spain, Diploma; Univ. of Texas at Dallas, M.A., Ph.D.; Further study: Royal Conservatory, Madrid and NEH Fellow at Univ. of Kentucky, Lexington

Marshall, Karan ..... Child Development
Univ. of North Texas, B.A.; Texas Woman's Univ., M.S.

Martin, M. Diane ..... Vice President of Instruction
Univ. of North Texas, B.A.; California State College at Fullerton, M.A.; Univ. of Texas at Austin, Ph.D.

Martin, Michael ..... Physical Education
Louisiana Tech Univ., B.S., M.A.

Massey, Aaron W. ..... Psychology
Southwest Texas State, B.S.; Texas A&M Univ. at Commerce, M.S.; Further study: Texas A&M Univ. at Commerce, Univ. of North Texas, Abilene Christian Univ., Texas A&M Univ.

Mathus, Don L. ..... Physical Education
South Plains College, A.A.; Texas Tech Univ., B.S., M.S.; Further study: Univ. of North Texas

McCoy, David L. ..... Photography
Southeastern State College of Oklahoma, B.A.; Texas A&M Univ., M.S., Ed.D.

McMahon, Jerry D. ..... Chemistry
Texas Tech Univ., B.S.; Princeton Univ., M.A.

Mewhinney, Christina E. ..... Chemistry
Mary Washington College of the Univ. of Virginia, B.S.; Texas Woman's Univ., M.S.; Further study: Univ. of Texas at Dallas, Univ. of North Texas

Milam, William ..... Automotive Technology
Eastfield College, A.A.S.; Further Study: Texas A&M Univ. at Commerce

Mitchell, Jeff ..... Auto Body Technology
Texas A&M Univ. at Commerce, B.S., Teaching Certificate; Further study: Texas A&M Univ. at Commerce

Moorhead, Michael ..... English
Texas Tech Univ., B.A., M.A.; Further study: Texas Tech Univ.

Morris, Michael ..... English
Texas A&M Univ. at Commerce, B.A., M.A.

Mosby, Larry E. ..... Computer Aided Design & Drafting
Prairie View A&M, B.S.; Univ. of North Texas, M.S.; Further study: Univ. of Texas at Austin

Mouledous, Pierrette M. ..... Piano
Performer's Certificate, Ecole Normale de Musique; Southern Methodist Univ., M.M.

Nell, Mary Lou ..... English
Texas Christian Univ., B.A.; Univ. of Dallas, M.A.; Further study: Univ. of Dallas

Newman, Glynn ..... Government
St. Edwards Univ., B.S.; St. Mary's Univ., M.P.S.; Further Study: Univ. of Texas at Dallas

Ojeda, Carlos ..... Auto Body Technology
Eastfield College, A.A.S.

Oliver, Tammy ..... Biology
Texas Woman's Univ., B.S., M.S.

Ortiz, Phillip ..... Social Work/Substance Abuse
Univ. of Dallas, B.A.; Univ. of Texas at Arlington, M.A.

Oviedo, Sonia ..... Visiting Scholar, Sociology
Texas A&M Univ., B.S.; Univ. of North Texas, M.S.; Further study: Univ. of North Texas

Palmer, Ursula ..... Psychology
Salve Regina College, B.A.; Univ. of Arizona, M.S.; Texas A&M Univ. at Commerce, Ed.D.

Penney, Jane A. ..... Sociology
Texas A&M Univ. at Commerce, B.S., M.S.

Phillips, Jim G. ..... Counselor
Texas A&M Univ. at Commerce, B.A., M.A., Ed.D.; Further study: Univ. of North Texas

Piffardi, Ana M. ..... Spanish
Pan American Univ., B.A., M.A.; Further study: Univ. of Texas at Arlington, Univ. of Texas at Dallas

Pool, Rodger A. ..... President
New Mexico State Univ., B.S., M.A., Ed.D.

Porter, Jackie ..... Program Director, Business & Information Systems
El Centro College, A.A.S.; Bishop College, B.A.; Further study: Univ. of Dallas, Amberton Univ.

Presley, Mark W. ..... Dean, Science, Mathematics, and Physical Education
Franklin & Marshall College, A.B.; Univ. of Montana, M.S.; West Virginia Univ., Ph.D.

Preston, David E. ..... Computer Information Systems
Texas A&M Univ. at Commerce, B.S., M.S.; Univ. of North Texas, Ed.D.

Rattan, Reva O. ..... Dean of Student Support Services
Univ. of Texas Health Science Center at Dallas, B.S.

Rawlins, John Clayton ..... Electronics
Southern Methodist Univ., B.S.E.E.; Texas A&M Univ. at Commerce, M.S.Ed.

Richardson, Douglas M. ..... Management
Univ. of North Texas, B.B.A., M.B.A.; Further study: Univ. of North Texas, Texas A&M Univ. at Commerce

Richardson, Linda ..... Dean, Admissions, Advisement & Testing
Univ. of North Texas, B.A.; Amberton Univ., M.S.

Robinson, Yvonne Metoyer ..... Computer Information Systems
Univ. of the District of Columbia, B.S.; Univ. of North Texas, M.B.E.; Texas A&M Univ. at Commerce, Ed.D.; Further study: Texas A&M Univ. at Commerce

Saenz, Matilda Delgado ..... Dean, Language & Literature
Incarnate Word College, B.A.; Texas A&I Univ., M.A.; Texas Woman's Univ., Ph.D.

St. Clair, Anita J. ..... Developmental Writing
Abilene Christian Univ., B.S.E.; Univ. of North Texas, M.B.E.; Further study: Southern Methodist Univ., Univ. of North Texas, Texas A&M Univ. at Commerce

Sather, Beth ..... Program Director, Workforce Education
Ohio Univ., B.S.

Schmitt, Allan B. ..... Developmental Mathematics
Univ. of Texas at Austin, B.E.S., M.S.E.E., Ph.D.E.E.

Scott, Sandra Saucedo ..... Child Development
Texas Woman's Univ., B.A., M.A.

Sharp, Robert G. ..... American History
Whitworth College, B.A.; Purdue Univ., M.A.; Further study: Univ. of Denver, Univ. of New Mexico

Sherrill, Theodore B., III ..... Biology
Lamar State Univ., B.S.; Texas A&M Unate Univ.

Shilling, Gerald ..... Economics
Univ. of Central Oklahoma, B.B.A.; Univ. of Dallas, M.B.A.

Smith, Maryle Bea ..... Business
Univ. of North Texas, B.B.A., M.B.E.; Further study: Texas A&M Univ. at Commerce, Univ. of North Texas

Sternat, Theresa ..... Director of Learning Assistance Center
Texas State Univ., San Marcos, B.S.; Gallaudet Univ., M.A., C.A.G.S.; Further study: Texas A&M Univ. at Commerce

Swindling, James A. ..... Developmental Reading
Daytona Beach Community College, A.A.; Florida State Univ., B.A., M.S.; Kellogg Institute, Appalachian State Univ., Developmental Education Specialist; Further study: Univ. of Nevada, Texas A&M Univ. at Commerce

Sykes, Arthur ..... Director of Facilities Services
Bowling Green Univ., B.A.; Further study: Governors State Univ., Kansas State Univ., California Coast Univ.

Villalpando, Alma ..... Program Director, Workforce Education
Texas Woman's Univ., B.S.

Wadhams, John ..... Philosophy
Asbury Theological Seminary, M.S.

Wattley-Gee, Allyson K. ..... Speech Communication
Howard Univ., B.A., M.Ed., Ph.D.

Whisnant, Robert A., Jr. ..... Humanities
Univ. of South Florida, B.A., M.A.; Further study: Texas A&M Univ. at Commerce

Wilson, S. Neal ..... Program Director, Workforce Education
Abilene Christian Univ., B.S.; Texas A&M Univ. at Commerce, M.S. Further study: Texas A&M Univ. at Commerce

Wilson-Pusey, Sonia ..... Coordinator, Office Technology Program
El Centro College, A.A.A.S.; Northwood University, B.B.A.; Further study: Texas A&M Univ. at Commerce

Windrow, Kathy ..... Art and Art History
Southern Methodist Univ., B.F.A., M.F.A., M.A.

Winn, Jerry M. ..... Developmental Mathematics
Oklahoma Univ., B.S.E.E.; Southern Methodist Univ., M.S.

Winter, Sabine ..... Visiting Scholar, Journalism
Univ. of North Texas, B.A., M.J.; Further study: Univ. of North Texas, Texas Woman's Univ.

Wyatt, Susan Skinner ..... Child Development
Texas Woman's Univ., B.S., M.S., Ph.D.

Zamora, Felix A. ..... Vice President of Student & Institutional Development
School for International Training, B.I.S.; Southern Methodist Univ., M.P.A.; Further study: Univ. of Texas at Arlington

El Centro COLLEGE

Educating Dallas since 1966

El Centro, a college of the Dallas County Community College District, is centrally located in downtown Dallas and has played a vital role in the area's educational advancement since 1966.

El Centro's central location allows students from all parts of Dallas County to take advantage of pre-professional courses transferable to four-year institutions, as well as career training in over 50 exciting fields. There is no typical student at El Centro. Students are of all ages and come from all walks of life.

The campus has gained international attention for making use of a nine-story, turn-of-the-century department store, renovated to accommodate classrooms, laboratories, computer technology, student center, learning center, performance hall and administrative offices, as well as labs, arts facilities and library.

Our new student and technology center, on the south side of the campus, adds a spacious student center, technology classrooms and a new main entrance to the college's downtown setting.

Accreditation

El Centro College is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: telephone number 404-679-4501) to award the associate degree.

El Centro COLLEGE

Annual Security Report

This report includes statistics for the previous three years concerning buildings or property owned or controlled by El Centro College; and on public property within, or immediately adjacent to and accessible from, the campus. The report also includes institutional policies concerning campus security, such as policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters. You can obtain a hardcopy of this report by contacting El Centro College Police Office or by accessing the following website:
http://www.elcentrocollege.edu/safety/

Sex Offender Information for Colleges and Universities
You may obtain sex offender information provided by the State of Texas at: **http://records.txdps.state.tx.us**
(Please note that you do not need to use "www." to access this website.) This information covers any employee of an institution of higher education and any student who has been convicted of a sexual offense.

Institutional Memberships

El Centro is a member of The American Association of Community Colleges, The Association of Texas Colleges and Universities and The League for Innovation in the Community College.

El Centro is recognized and sanctioned by the Texas Higher Education Coordinating Board and the Texas Education Agency and is an affirmative action, equal opportunity institution.

El Centro's Mission

El Centro College: at the forefront of education, serving the community in an urban, multicultural setting.

El Centro's Purpose*

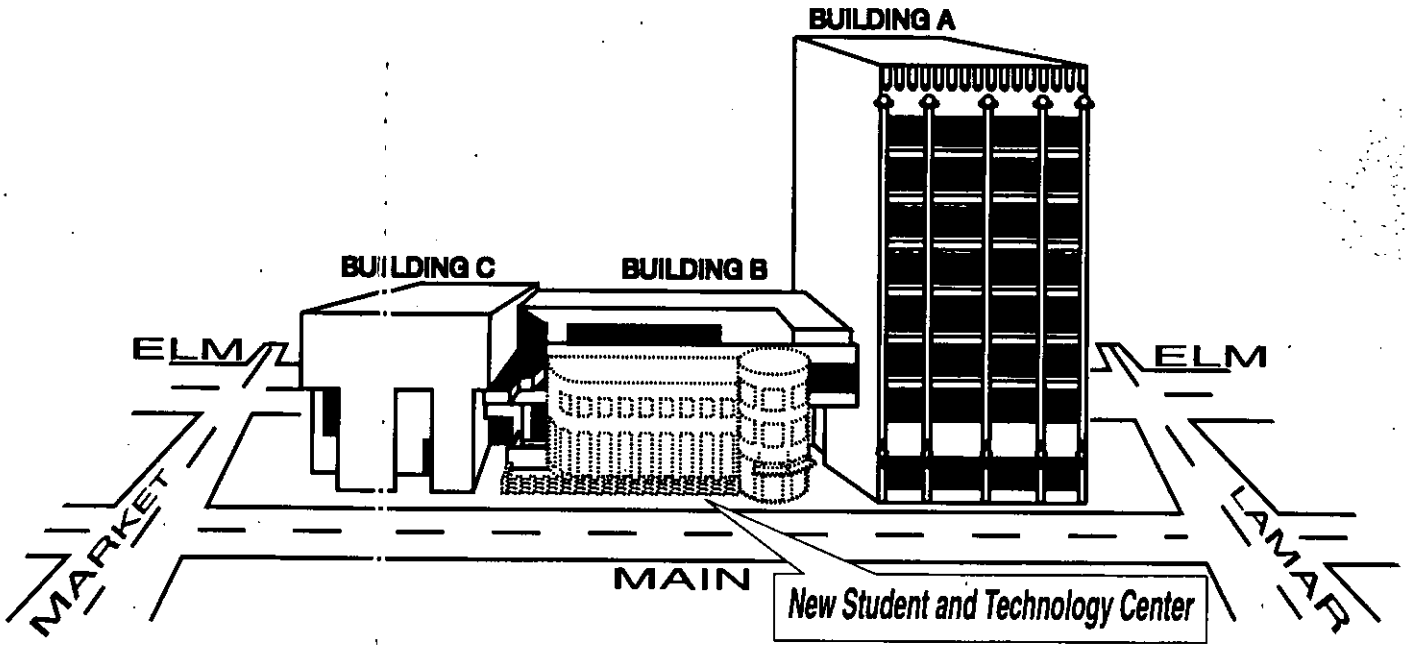
In keeping with the mission, the purpose of El Centro College is to provide:

- Freshman and sophomore courses in arts and sciences;
- Workforce education programs leading to associate degrees or certificates;
- Continuing adult education programs for occupational or cultural enrichment;
- Workforce development programs designed to meet local and statewide needs;
- Education programs designed to fulfill the commitment of an admission policy allowing the enrollment of underprepared students.
- Ongoing counseling and guidance designed to assist students in achieving their individual educational goals;
- Adult literacy and other basic skills programs; and
- Such other purposes as may be prescribed by the Texas Higher Education Coordinating Board or local governing boards in the best interest of post-secondary education in Texas.

*Purpose is adapted from Texas Education Code 130.003e.

New Student Orientation

If you're just beginning or returning to college, you'll benefit from our new student orientation program. During this three-hour session, you'll meet key student services personnel, discover the student services we offer and tour the campus. You'll also have an opportunity to ask questions about college and about El Centro. This experience will prove invaluable as you begin or resume your college career. Please check with the student programs department (SPAR, phone 214-860-2137) for the orientation schedule.



SERVICES

Office	*Room*	*214-860*
Admissions	A130	2311
Adult Resource Center	CM10	2128
Art Lab	C020	2355
Assessment Center	A152	2178
Biology/Health Occupations Computer Lab	A642	2693
Bookstore	B100	214-698-0461
Campus Police	A047	2232
Career Information Services	A210	2066
Cashier	A244	2044
Computer Laboratory	A435	2197
Continuing/Workforce Education	A260	2147
Counseling Center	A110	2084
Disability Services	A116	2411
Evening/Weekend Office	A252	2157
Financial Aid	A034	2199
Gymnasium	C220	2137
Health Occupations Admissions	A140	2272
International Center	CM60	2090
Learning Center	A350	2133
Library	B200	2175
Marketing/Communications	B260	2037
Media Services	B240	2170

SERVICES (Continued)

Office	*Room*	*214-860*
Ombudsman Office	B302	2105
Online Registration	B302	2105
Performance Hall	C130	2345
Rising Star	A110	2726
Snack & Beverage Machines	A007 & Bldg. C lobby	
Student Health Center	A270	2113
Student Programs (SPAR)	A074	2137
Ultrasound Lab	A743	2619
Veterans Affairs	A034	2122

INSTRUCTIONAL DIVISION

Office	*Room*	*214-860*
Arts	C340	2337
Business & Public Service	A442	2202
Continuing Education	A260	2147
Communications & Math	A341	2247
Health/Legal	A950	2264
Information Technology Programs & Systems Support	A430	2688
Sciences	A546	2392
Workforce Education	A090	2413

EL CENTRO COLLEGE ADMINISTRATION

President	Wright Lassiter, Jr.	214-860-2010
Executive Vice President	Ed DesPlas	214-860-2015
Vice President, Academic Affairs & Student Success	Michael Jackson	214-860-2018
Associate Vice President/Executive Dean	Sondra Flemming	214-860-2146
Executive Dean, Student & Enrollment Services	Felicitas Alfaro	214-860-2119
Dean, Resource Development	Lisa Theriot	214-860-2263
Associate Dean, Allied Health/Vocational Nursing	LaCheeta McPherson	214-860-2271
Associate Dean, Continuing/Workforce Education	Phyllis Andrews	214-860-2413
Associate Dean, Counseling and Student Development	Jim Handy	214-860-2073
Associate Dean, Nursing	Charlotte Green	214-860-2269
Associate Dean, Student Support and Auxiliary Services	Howard Finney	214-860-2136
Assistant Dean, Continuing/Workforce Education	Gretchen Riehl	214-860-2236
Assistant Dean, Educational Resources	Norman Howden	214-860-2176
Assistant Dean, Institutional Effectiveness and Research	Karen Laljiani	214-860-2016
Ombudsperson	Bettie Tully	214-860-2105
Director, Admissions and Registrar	Stevie Stewart	214-860-2618
Director, Assessment Center	Bill Wilkins	214-860-2245
Director, Business Operations	Kayle Jones	214-860-2042
Director, College Police	Calvin Richard	214-860-2232
Director, El Proximo Paso	Esperanza Zareire	214-860-2298
Director, Facilities Services	William Butler	214-860-2057
Director, Financial Aid	John W. Wells	214-860-2096
Director, Human Resources	Robert Garcia	214-860-2051
Director, Marketing & Communications	Charles Hedrick	214-860-2036
Director, Title III	Harriet Crews	214-860-2092
Director, Transitions to Technical Programs	Sheila Brock	214-860-2169
Director, TRIO	Sarah Oglesby	214-860-2228
Director, Urban Education	Cheryl Rischer	214-860-2485
Coordinator, ESL/Spanish/CWE	Kim White	214-860-2228
Coordinator, Jail Education	Jane VanDeventer	214-860-2218
Coordinator, Rising Star	Becky Garza	214-860-2727
Coordinator, Student Programs	Dwayne Richard	214-860-2138
Manager, IS/LAN Support	Eliazar Martinez	214-860-2166

INSTRUCTIONAL DIVISION EXECUTIVE DEANS

Arts and Sciences	Betty Moran	214-860-2392
Business and Public Service	Jennie Pollard-Bratcher (interim)	214-860-2202
Communications/Math/Developmental Studies/Urban Education	Toni Hopper (interim)	214-860-2246
Health/Legal and Continuing/Workforce Education	Sondra Flemming	214-860-2146
Information Technology Programs and Systems Support	Susan Turner	214-860-2688

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Anthony, Michael ..... Fashion Design
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Armstrong, Dean ..... Drama, Humanities
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Bates, Barry L. ..... Biology
Stephen F. Austin Univ., B.S., M.S.

Beasley, Sharman ..... Paralegal
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Calcaterra, Cindy L. ..... Director, Surgical Careers
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Carolan, Catherine ..... Echocardiology Technology
Sydney Technical College (Australia), Assoc. Diploma of Medical Radiography; Mitchner Institute (Toronto, Canada), Certificate, Diagnostic Medical Sonography; Queensland Univ. of Technology (Australia), Post-Graduate Diploma, Diagnostic Medical Sonography; R.D.M.S., R.D.C.S., R.V.T.

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MOUNTAIN VIEW COLLEGE

Dallas County Community College District Statement of Purpose

The purpose of the Dallas County Community College District is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. The District does this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for development of intellectual skills, job skills, personal growth, and/or transfer to a baccalaureate program. In fulfilling our purpose, the District furthers cultural, economic and workforce development in the communities served. In all our efforts, the District strives to meet the needs and exceed the expectations of those the District serves.

Vision Statement

Mountain View College will exceed the expectations of its communities to become the best community college in the region.

Values

- Quality
- Success
- Access
- Community
- Integrity

Mountain View College Mission Statement

Mountain View College is a comprehensive community college dedicated to delivering excellence in education and encouraging intellectual and personal growth. More specifically, Mountain View College provides:

- Technical programs leading to associate degrees or certificates.
- Vocational programs leading directly to employment in semi-skilled and skilled occupations.
- Freshman and sophomore courses in arts and sciences.
- Continuing adult education programs for occupational or cultural upgrading.
- Compensatory education programs designed to fulfill the commitment of an admissions policy allowing the enrollment of disadvantaged students.
- A continuing program of counseling and guidance designed to assist students in achieving their individual educational goals.
- Workforce development programs to meet local and statewide needs.
- Adult literacy and other basic skills programs for adults.
- Administrative and Support Services that ensure student and employee satisfaction and success.
- Other purposes as may be prescribed by the Texas Higher Education Coordinating Board or the District's Board in the best interest of post-secondary education in Texas.

Mountain View College Goals

1. *Career Preparation*
MVC students will obtain the knowledge, skills, and services needed to succeed in jobs and careers that meet the area workforce needs.

2. *Transfer Preparation*
MVC students will obtain the freshman and sophomore level knowledge, skills, and services needed to succeed in earning a bacalaureate degree.

3. *Continuing Education*
MVC students will obtain quality continuing education to enrich their lives personally, socially, and culturally and to upgrade occupational and job skills.

4. *Basic Skills*
MVC students will acquire basic literacy skills and developmental education to live more functionally and become ready to participate successfully in college-level curricula.

5. *Access*
MVC student body will reflect the diversity and size of the service area.

6. *Economic Development*
MVC in partnership with business, industry, and governmental entities prepares a quality workforce to enhance economic development.

7. *Citizenship*
MVC students will acquire the knowledge and skills needed to succeed in and contribute to a global community, to understand the value of lifelong learning, and to exercise their rights and responsibilities as citizens.

8. *Distance Learning*
MVC will use existing and emerging telecommunication technologies to provide convenient and flexible access to accredited and lifelong learning opportunities to students and workforces.

9. *Human Resources*
MVC is committed to ensuring that its workforce is diverse, continuously trained, multi-skilled, adaptable, and empowered.

10. *Continuous Improvement*
MVC will ensure continuous process evaluation and improvement of educational programs and administrative processes and decision-making.

11. *Financial Resources*
MVC will possess sufficient financial resources to support current and future programs and services.

12. *Administrative and Student Support Services*
MVC will provide effective administrative and support services that ensure student and employee satisfaction and success.

History

Since beginning in 1970, as the second of seven Dallas County Community College District campuses, Mountain View College has continued to serve as the center of learning for thousands of people in southwestern Dallas County including Oak Cliff, Duncanville, Cedar Hill, and parts of Grand Prairie. Mountain View meets a broad range of educational needs by providing a variety of academic, technical, cultural, and recreational programs.

Currently, Mountain View College is one of the few Hispanic Serving Institutions in the Dallas/Fort Worth area. As certified through the Department of Education, more than 25 percent of the campus' undergraduate full-time equivalent (FTE) students are Hispanic and not less than 50 percent of that population are low-income individuals.

Programs

Mountain View offers associate degrees in arts and sciences which meet freshmen and sophomore course requirements for a bachelor's degree at four-year colleges and universities. Additionally, Mountain View provides technical and occupational degrees & certificates for individuals entering the workforce. The college also offers hundreds of Continuing Education courses for students of all ages to enrich their lives through workshops, seminars and short-term classes in pursuit of cultural awareness, leisure-time activities, and personal and professional growth.

Mountain View addresses the educational needs of business and industry through its Contract Training Services Office. Seminars, workshops, and courses are tailored to a company's requirements, either on campus or at the workplace. Training can be provided at a time that is convenient for employees, in either a credit or non-credit format.

Mountain View also offers the following:

- Honors courses and an Honors Scholar Program;
- Emeritus Program for the mature adult;
- FIRST (Futures in Research, Science and Technology) Academy to new students interested in careers in science, engineering and technology;
- Tommorow's COPS Academy to support academic and career pursuits of students interested in law enforcement careers;
- Teacher Training Academy (TTA) for prospective teachers interested in a support program that adds continuity and depth to the teacher education process;
- TRIO/FOCUS provides first generation college students, low income students and students with disabilities with a comprehensive college experience through informational workshops designed to improve study skills and promote awareness of career and educational opportunities while preparing students to transfer to four-year colleges and universities;
- Math, Science and Technology Gateway Center, funded by Title V, a computer supported facility designed to strengthen mathematics teaching and access to science and technology career pathways;
- Student Programs and Resources to enhance the total college experience with numerous student clubs and organizations, performing arts presentations, vocal and instrumental concerts, art exhibits, lecture series, intramural sports, and many other opportunities for cultural and recreational experiences.

Accreditation

Mountain View College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award the associate degree.

Institutional Membership

Other institutional memberships include American Association of Community Colleges, American College Health Association, Association for Career & Technology Education, American Health Information Management Association (AHIMA), Cedar Hill Chamber of Commerce, COMBASE, Community College Humanities Association, Continuous Quality Improvement Network (CQIN), Council for Higher Education Accreditation, Council for Resource Development (CRD), Dallas Black Chamber of Commerce, Duncanville Chamber of Commerce, French-American Chamber of Commerce, Grand Prairie Chamber of Commerce, Greater Dallas Asian American Chamber of Commerce, Dallas Hispanic Chamber of Commerce, Hispanic Association of Colleges and Universities (HACU), National Association of Colleges and Employers (NACE), National Community College Hispanic Council (NCCHC), National Council of Instructional Administrators, National Council for Marketing and Public Relations (NCMPR), National Intercollegiate Flying Association, National Junior College Athletic Association, NISOD - The University of Texas at Austin, National Social Science Association (NSSA), North Texas Chapter of National Coalition Building Institute, International (NCBI), Oak Cliff Lions Club, Oak Cliff Chamber of Commerce, Southern Association of Community Junior and Technical Colleges (SACJTC), Southern Association of Colleges & Schools, Texas Association of Community College Trustees and Administrators, Texas Administrators of Continuing Education for Community/Junior Colleges (TACE/JC), Texas Association of Chicanos in Higher Education (TACHE), Texas Association of Student Financial Aid Administrators (TASFAA), Texas Associate for College Admissions Counseling, Texas Community College Teachers Association, Texas Council for the Humanities, and University Aviation Association.

MOUNTAIN VIEW COLLEGE ADMINISTRATION

President	Dr. Monique Amerman	214-860-8700
Vice President, Teaching and Learning	Vacant	
Vice President, Business Services	Sharon Davis	214-860-8705
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Executive Dean, Business and Professional Workforce	Vernon Hawkins	214-860-8616
Executive Dean, Student Support Services	John Pruit	214-860-8591
Dean, Education Center	Moises Almendariz	214-860-8711
Dean, Educational Resources	Jim Corvey	214-860-8520
Dean, Instructional Support and Outreach Services	Bonnie Hueston	214-860-8511
Dean/Director, Planning & Research, Institutional Effectiveness	David Hardy	214-860-8735
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Director, Academic Advising & Recruiting	Sarah Campbell	214-860-8887
Director, Athletics & Recreational Programs	Reginald Osborne	214-860-9887
Director, Business Operations	Tim Soyars	214-860-8587
Director, Career & Continuing Education	Felicia Cook	214-860-8564
Director, College Police	Clark Price	214-860-8781
Director, Corporate & Community Relations	Vonice Champ	214-860-8716
Director, Facilities Management	Allan Knott	214-860-8670
Director, Financial Aid	Dana Mingo	214-860-8565
Director, Human Resources	Alex Diaz	214-860-8784
Director, Institutional Research	Belinda Senteno	214-860-8585
Director, School Alliances/Institutional Outreach	Shirley Higgs	214-860-8507
Director, Student Programs and Resources	Cathy Edwards	214-860-8715
Director, Enrollment Management/Registrar	Linda Osagie	214-860-8604
Manager, Grants Management & Compliance	Alice Atchison	214-860-8818
Coordinator, Special Populations Services	Rodney Garrett	214-860-8589
Project Leader, Teacher Training Academy	Toni Holloway	214-860-8562

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Business Studies	214-860-8656
Technology	214-860-8852
Human Development	214-860-8588
Arts and Letters	214-860-8632
World Languages & Cultural Studies	214-860-8831
Social Science	214-860-8671
Science & Physical Education	214-860-8649
Math	214-860-8645

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Angelo State Univ., B.A.; Our Lady of the Lake Univ., M.A.

Amerman, Monique ..... President
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Atchison, Alice ..... Mgr. Grants Management & Compliance
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Kilgore Jr. College, A.A.; Baylor Univ.; B.S., M.S.;
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Beaty, Cathy ..... Health Information Program
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Florida Atlantic Univ., B.A., M.Ed.;
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Diaz, Alex ..... Director, Human Resources
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Bowling Green State Univ., Ph.D.

Duvall, Johnny W. ..... Mathematics
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Edwards, Cathy ..... Director, Student Programs and Resources
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Felty, Larry T. ..... Art
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Ferguson, Susan French ..... English
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St. Mary's Univ., B.B.A.; North Texas State Univ., M.B.A.

Fletcher, Ann ..... Counselor
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Zouyousefain, Mohammad ..... Mathematics
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Univ. of Texas, Arlington, Ph.D.

NORTH LAKE COLLEGE

North Lake College, "Your Partner in Learning", is creating innovative and productive partnerships with businesses, the community and other educational institutions to further higher education in the Irving/Las Colinas area of Dallas. The college strives to provide all members of the community access to educational opportunities. Whether a student wants a quality, economical starting point to earn a four-year degree, enhance professional skills, or explore new ideas for personal growth, North Lake College has resources to meet those needs.

Mission and Goals

North Lake College, created as a part of the Dallas County Community College District in 1977, is a public community college with an open-door admission policy which anticipates and responds to the educational, training, and employment needs of the community. The college prepares people for successful living and responsible citizenship through quality educational programs.

We invite dynamic partnerships with all our constituencies: students, community, business and industry, public schools, and government; we celebrate a supportive environment in all aspects of the college experience. We are committed to providing equal access and quality learning experiences to a diverse student population in an environment characterized by excellence in service and responsible use of resources.

To accomplish its mission, North Lake College has established the following goals:

1. Prepare students to succeed in earning a baccalaureate degree by offering freshman and sophomore transfer courses.
2. Prepare students to compete in the workforce and promote economic development through the development of technical/occupational programs and partnerships that respond to the needs of business and industry.
3. Provide comprehensive support services and appropriate accommodations to promote the educational, personal, and professional development of all students.
4. Provide lifelong learning for occupational, cultural, and personal enrichment.
5. Provide literacy and other skills necessary for successful citizenship in a global community.
6. Continuously improve access to and make optimal use of current and emerging technology for students, faculty, staff, and community.
7. Develop partnerships with public schools to assist students and provide support for them to pursue post secondary education.

Irving/Las Colinas

A high growth area between Dallas and Ft. Worth, Irving/Las Colinas, combines a hundred-year old established community with a dynamic urban center. Las Colinas, a well-known master-planned corporate and residential community is home to Fortune 500 companies, the Dallas Cowboys and many small and large businesses. Some of the larger companies who have their headquarters in Las Colinas are Exxon/Mobil, Boy Scouts of America, TIG Insurance and NOKIA of the Americas. To the west of Irving/Las Colinas is the DFW International Airport.

The Campus

North Lake is situated on 276 wooded acres in Irving/Las Colinas. With an innovative architectural design that enhances the natural beauty of the location, the campus offers an educational retreat for its students. The college includes twelve buildings on the main campus with satellite campuses in downtown Irving, the South Irving Center and the DFW Education Center next to the DFW airport.

Satellite Campuses

The South Irving Center is located at 440 S. Nursery Road in Irving. It was started in 1997 as a partnership with the City of Irving. The objective of the Center is to meet the educational and workforce training needs for residents in the older, downtown neighborhood who may not have access to transportation and/or have language barriers to attending college. English as a Second Language courses, Spanish-language computer courses, and GED testing and preparation in both Spanish and English are part of the offerings at the South Irving Center.

The DFW Education Center is located at 1341 Royal Lane, in the DFW Freeport. The Freeport is a 550-acre business community located east of the DFW International Airport. The Center is the result of a coalition between North Lake and the Construction Education Foundation. The partnership's purpose is to provide 1,300 construction companies in North Texas with trained people at all levels. Course offerings at the DFW Education Center include, in part, construction management, masonry, plumbing, mechanical, plumbing, and glazing.

Irving High School Academy

The Irving High School Academy is located on the south side of North Lake's campus. Built in 2001 in partnership with the Irving Independent School District, the Academy provides secondary school students with college-level courses and in-depth career exploration. North Lake provides college-level classes at the Academy and many students are involved in the college's dual credit program.

Natatorium

In partnership with the City of Irving and the Irving Independent School District, an Olympic-class natatorium was built on the North Lake campus. The pool is used for college physical education classes and special events, a city pool, and as the home for high school swim teams.

Accreditation and Affiliations

North Lake College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, 30033-4097: Telephone number 404-679-4501) to award the associate degree.

The college is a member of the following organizations:

- American Association of College Registrars & Admissions Officers
- American Association of Community Colleges
- American Council for Construction Education
- Association on Higher Education and Disability
- Centerpiece of Technology Council
- College Board (The)
- Continuous Quality Improvement Network
- Coppell Chamber of Commerce
- Council for Higher Education Accreditation
- Council for Opportunity in Education
- Dallas Black Chamber of Commerce
- Greater Dallas Hispanic Chamber of Commerce
- Greater Irving-Las Colinas Chamber of Commerce
- Hispanic Association of Colleges and Universities
- League For Innovation
- National Association of College and University Business Officers
- NAFSA Association of International Educators
- National Council for Resource and Development
- National Institute for Staff and Organizational Development
- National Safety Council
- North Texas Community and Junior College Consortium
- Southern Association of Community and Junior Colleges
- Texas Association of Chicanos in Higher Education
- Texas Association of Community College Teachers
- Texas Community College Association

NORTH LAKE COLLEGE ADMINISTRATION

President	Herlinda M. Glasscock	972-273-3010
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Vice President of Instruction	Martha Hughes	972-273-3590
Vice President of Planning & Development	Candace Castillo	972-273-3015
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Executive Dean of Learning Support Services	Mary Ciminelli	972-273-3135

Teaching and Learning Centers

Dean of Business and Computer Information Technology	Chip Ates	972-273-3122
Dean of Construction Technology	Paul Kelemen	972-860-7873
Dean of Liberal Arts	Zena Jackson	972-273-3201
Acting Dean of Math/Science/Sport Sciences	Marilyn Mays	972-273-3500
Dean of Visual and Performing Arts	David Evans	972-273-3561

Dean of Educational & Administrative Technology	J. D. Haight	972-273-3334
Dean of Educational Resources	Lee Crowley	972-273-3430
Dean of Organizational & Educational Partnerships	Lynda Edwards	972-273-3130
College Director of Athletics & Recreational Programming	Dan Joutras	972-273-3518
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College Director of Facilities Services	John Watson	972-273-3353
College Director of Human Resources	Ella Barber	972-273-3309
College Director of Marketing and Public Information	Janis Browning	972-273-3005
College Director of School Alliances/Institutional Outreach	Detra Craig	972-273-3143
College Director of School Alliances/Institutional Outreach	Guy Melton	972-273-3375
Director of Academic Advising & TSI	Deena Reeve	972-273-3127
Director of Admissions/Registrar	Steve Twenge	972-273-3109
Director of Career Services	Francyenne Maynard	972-273-3144
Director/Chief of Police	Danny Morris	972-273-3301
Director of College Programs	Marsha Anderson	972-273-3584
Director of College Programs	Frank Childress	972-273-3380
Director of College Programs	Marissa Kirk	972-273-3131
Director of College Programs	Tim McGraw	972-273-3521
Director of Community Programs	Shannon Weaver	972-273-3367
Director of Corporate and Community Relations	Dianne Orfanos	972-273-3376
Director of Disability Services	Carole Gray	972-273-3167
Director of ESOL/International Student Services	Samantha Spence	972-273-3154
Director of Financial Aid & Veteran's Affairs	Paul Felix	972-273-3326
Director of Institutional Research	Teresa Isbell	972-273-3392
Director of North Lake Community Library	TBA	972-273-3419
Director of Student Programs & Resources and Health Services	Virginia Jones	972-273-3171
Director of Testing	Susan Littlejohn	972-273-3161
Director of TRIO Program	M. J. Porchia	972-273-3156

NORTH LAKE COLLEGE ADMINISTRATION (Continued)

Assistant Director of Admissions/Registrar	Karen Matthews	972-273-3108
Assistant Director of Enrollment Management/Registrar	Noni Kirk	972-273-3366
Program Director of Careers and Continuing Education	Brent Dudenhoeffer	972-273-3504
Program Director of Careers and Continuing Education	Robert Martinez	972-273-3477
Program Director of Careers and Continuing Education	Korkye Purviance	972-273-3372
Program Director of Careers and Continuing Education	Wanda Whitten	972-273-3385
Program Director of Careers and Continuing Education	Peggy Woods-Felix	972-860-7876
Associate Dean for ESOL Program	Tom Fox	972-273-3368
Assistant Dean of Student Resource Center	Judy Keller	972-273-3424
Project Leader, Skill Development Fund	Clarissa Davanay	972-273-3369

TEACHING AND LEARNING CENTER DEANS

Business and Computer Information Technology	Chip Ates	972-273-3122
Construction Technology	Paul Kelemen	972-860-7873
Liberal Arts	Zena Jackson	972-273-3201
Math/Science/Sports Sciences (Acting Dean)	Marilyn Mays	972-273-3500
Visual and Performing Arts	David Evans	972-273-3560

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Wellesley College, B.A.; Michigan State University, M.A., Ph.D.

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Polytechnic of North London, B.A.; University of North Texas, M.S.; Univ. of Texas at Austin, Study

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Univ. of North Texas, B.S.; Southern Methodist Univ., M.Th; Chapman Univ., M.A.

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Bishop, Joe ..... Developmental Writing
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Black, Byron ..... Art
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Texas Woman's Univ., B.S., M.A.

Bravo, Lou ..... Accounting, Nutrition
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Weaver, Shannon ..... Director of Community Programs
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Wortham, Fredella ..... Biology
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Yeung, Hin-Kei ..... Music
Univ. of North Texas, M.M.

York, Johnathan ..... Government
Univ. of Dallas, B.A., M.A.

RICHLAND COLLEGE

A challenging educational experience awaits students at Richland College, where a dedicated faculty, innovative programs, functional campus design and the beauty of nature combine to create an exciting learning environment.

Richland was the fourth of seven colleges in the Dallas County Community College District enrolling its first students in 1972. It has subsequently become the largest DCCCD college, enrolling more than 12,000 college credit students and 8,000 non-credit continuing education students each semester.

A comprehensive curriculum with a variety of flexible formats is offered at Richland including academic transfer programs, career programs and non-credit continuing education courses. In addition, the college offers:

- Fast-track degree program
- Honors courses and an Honors Scholar program
- Global Studies and Global Scholar program
- World Languages Division
- Multicultural Center
- Adult Resource Center
- Career Information & Placement Services
- Center for Tutoring & Learning Connections
- Disability Services
- American English & Culture Institute

The Campus

Richland is located on 243 acres at 12800 Abrams Road just north of LBJ Freeway. The campus plan enhances the natural beauty of the site. Campus facilities are linked by pedestrian bridges which extend along both sides of a spring-fed creek and two picturesque lakes. Richland has a performance hall, a greenhouse with a demonstration garden, and a planetarium. The campus athletic complex includes an outdoor swimming pool and a fitness center.

Richland College Statement of Purpose

The purpose of Richland College/DCCCD is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. We do this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for the development of intellectual skills, job skills, personal growth and/or transfer to a baccalaureate program. In fulfilling our purpose, we further cultural, economic and workforce development in the communities we serve. In all our efforts, Richland strives to meet the needs and exceed the expectations of those the college serves.

Accreditation

Richland College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA 30033-4097; Telephone number 404-679-4501) to award the associate degree.

STUDENT SERVICES

Enrollment Planning	972-238-6106
Advising Center	972-238-3767
Student Records Office	972-238-6101
Accounting Services	972-238-6277
Adult Resource Center	972-238-6331
Career Information & Placement Center	972-238-6921
Cashier Services	972-238-6206
College Police	972-238-6911
Center for Tutoring & Learning Connections	972-238-6226
Crisis Counseling	(pager) 214-332-0794
Disability Services (Voice/TTY)	972-238-6180
Emeritus Program	972-238-6393
English as a Second Language Lab	972-238-6901
American English & Culture Institute	214-915-4800
Financial Aid	972-238-6188
Global Studies	972-238-6110
Health Center	972-238-6135
Honors Program	972-238-6322
International Programs/Studies Abroad	972-238-6301
Library (LRC)	972-238-6081
Multicultural Center	972-238-6900
School Alliances	972-238-6161
Student Programs (SPAR)	972-238-6130
Testing/TASP Information	972-238-6160
TRIO Grant	972-238-6159

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