CENTRAL TEXAS COLLEGE

CATALOG 1997-1999

Changing lives one degree at a time

Major Campus Addresses

Central Campus
Central Texas College
P.O. Box 1800
Killeen, Texas 76540-1800
(254) 526-7161
(800) 792-3348

Fort Hood Campus
Central Texas College
Dean, Fort Hood and Service Area Campuses
P.O. Box 1800
Killeen, Texas 76540-1800
(254) 526-1328

Service Area Campus
Central Texas College
Dean, Fort Hood and Service Area Campuses
P.O. Box 1800
Killeen, Texas 76540-1800
(254) 526-1206

Continental Campus
Central Texas College
Office of the Dean, Continental Campus
P.O. Box 1800
Killeen, Texas 76540-1800
(254) 526-1222/1368

Navy Campus
Central Texas College
Office of the Dean, Navy Campus
P.O. Box 1800
Killeen, Texas 76540-1800
(254) 526-1356
(800) 792-3348 (Out of State)
(800) 223-4760 (In State)

Europe Campus
Central Texas College
Unit #20233
APO AE 09165
(Civilian) 06181-95060
(Military) 322-8871
(Civilian) Telefax 06181-950650

Navy Atlantic Campus
Central Texas College
1301 East Little Creek Road, Suite 2
Norfolk, Virginia 23518
(804) 587-8873
(800) 457-2619

Navy Pacific Campus
Central Texas College
4250 Pacific Highway, Suite 128
San Diego, California 92110
(619) 226-6626
(800) 784-5470

Pacific Far East Campus
Central Texas College
Office of the Dean
Office of Student Services
Office of Administrative Services
Office of Support Services
Office of Payroll/Personnel
Campus Library
Camp Market - Building S-1650
Unit #15559
APO AP 96283-0618
(Civilian) 82-32-523-5110
(Military) 722-3814/3833
Director, Administrative Services
(Military) 722-3815 Student Services

Correspondence and Inquiries

Address correspondence and inquiries to the appropriate office (for example, Admissions, Records or Student Financial Assistance) as listed in this Catalog, at the location where you currently attend. The Pacific Far East or Europe Campus will provide records and transcript service for students currently enrolled at those areas. Students attending Continental, Air Force and Navy campus sites in locations other than Pacific Far East or Europe may request records and transcript services through the Central Campus Office.

Central Texas College District does not discriminate in admissions or access to, or treatment or employment in, its programs and activities on the basis of race, color, religion, national origin, gender, disability or age.

CENTRAL TEXAS COLLEGE

Central Texas College District

General Catalog

Seventeenth Edition • 1997-1999

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Accredited by
Central Texas College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees and certificates of completion.

Approved by
Texas Higher Education Coordinating Board; Texas Education Agency

Listed in
Report of Credit given by American Association of Collegiate Registrars and Admissions Officers
Accredited Institutions of Postsecondary Education American Council on Education
Directory of Postsecondary Institutions, Volume 1, U.S. Department of Education

Member of
American Association of College Admissions Counselors, American Association of Collegiate Registrars and Admissions Officers, American Association of Community and Junior Colleges, Association of Texas Colleges and Universities, Broadcast Education Association, National Association of Veteran Program Administrators, National Association of Student Financial Aid Administrators, Servicemembers Opportunity College, Southern Association of Collegiate Registrars and Admissions Officers, Texas Association of Broadcast Educators, Texas Public Community/Junior College Association, Texas Association of Collegiate Registrars and Admission Officers, Texas Association of Collegiate Veterans Program Officers, Texas Association of Student Financial Aid Administrators, National Association of College Admissions Counseling, and Texas Association of College Admissions Counseling

Back Row (Standing) left to right: Mr. Don Armstrong, Mrs. Mary Ann Kelley, Dr. James Anderson, Mrs. Mary Kliewer and Dr. Richard Kirkpatrick.
Front Row (Seated) left to right: Mr. Charles Baggett, Mrs. Margaret Bay and Mrs. Mari Meyer.

Board of Trustees

Mrs. Margaret Bay	Harker Heights, Texas	President
Mrs. Mary Kliewer	Killeen, Texas	Vice President
Mr. Charles Baggett	Copperas Cove, Texas	Treasurer
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M.B.A., Florida State University
Ph.D., Florida State University

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Chancellor's Message

For 30 years, Central Texas College has been providing a quality education at an economical price to students all over the globe. We believe education is a partnership between the student and the college, and as your partner, I pledge to you on behalf of the Board of Trustees, Administration, Faculty and Staff our continuing efforts toward making this experience all that you need and expect it to be.

The special trust and confidence you place in us to ensure that we achieve the highest standards of educational excellence will always be the foundation of our institution. As your community college, we take great pride in our ability to meet the educational requirements of all of our students: the first-time enrollee, the military servicemember, the military veteran, the senior citizen, the educationally or economically disadvantaged, or those just wishing to pursue a college education. We will continue to rely on the wisdom gained from listening to students, past and present, as well as to the leadership of business and industry who provide the jobs so vital to our economic growth, and to the leaders at Fort Hood who understand the special educational needs of the military student.

We will also continue to meet today's educational challenges related to teaching the skills necessary to attain success in our rapidly expanding, technological workplace environment. We place a high priority on ensuring that our curriculum, laboratories, equipment, library holdings and most importantly, our faculty remain technically current and at the forefront of the base of knowledge in every program we offer. Equally important, if not more so, is our pledge to ensure that every student is treated courteously, with dignity, and provided all academic services in a cheerful, helpful manner. Every student is important and we intend to treat each of you that way.

Lastly, we recognize that your decision to enroll in Central Texas College to pursue your educational objectives often entails some very real sacrifices both in time and money. We will never take your commitment for granted and pledge to assist in making your experience with Central Texas College both enjoyable and rewarding.

Thank you,

James R. Anderson, Ph.D.
Chancellor

College Calendar

Proposed Schedule for Central Campus 1997-1999

This College Calendar lists only Central Campus activities. If attending Central Texas College at other locations, contact Central Texas College officials serving those locations. The following calendar displays major activity dates of the academic years. Not all activities are displayed here, so read bulletin boards and other announcements publishing dates of other scheduled academic and social activities.

Prior to each registration period, a detailed Schedule Bulletin is prepared, providing a final calendar of activities, registration procedures and schedules of course offerings. For administrative purposes, the Schedule Bulletin becomes the official calendar for the semester for which it is published.

Fall 1997

New Student Registration	August 11-15
Registration	August 18-26
Dormitory Open for Occupancy	August 26
Classes Begin	August 27
Labor Day (No Classes)	September 1
Last Day to Apply for Fall Graduation	October 1
Veterans' Day (No Classes)	November 11
Thanksgiving (No Classes)	November 27-28
Final Exam Week	December 10-16

Fall 1998

New Student Registration	August 17-21
Registration	August 24-28
Dormitory Open for Occupancy	August 30
Classes Begin	August 31
Labor Day (No Classes)	September 7
Last Day to Apply for Fall Graduation	October 1
Veterans' Day (No Classes)	November 11
Thanksgiving (No Classes)	November 26-27
Final Exam Week	December 14-18

Spring 1998

New Student Registration	January 5-9
Registration	January 12-16
Martin Luther King Day (Holiday)	January 19
Dormitory Open for Occupancy	January 19
Classes Begin	January 20
Last Day to Apply for Spring Graduation	February 1
Presidents' Day (No Classes)	February 16
Spring Break (No Classes)	March 23-27
Final Exam Week	May 11-15
Graduation	May 16

Spring 1999

New Student Registration	January 4-8
Registration	January 11-15
Martin Luther King Day (Holiday)	January 18
Dormitory Open for Occupancy	January 18
Classes Begin	January 19
Last Day to Apply for Spring Graduation	February 1
Presidents' Day (No Classes)	February 15
Spring Break (No Classes)	March 22-26
Final Exam Week	May 10-14
Graduation	May 15

Summer 1998

New Student Registration	May 18-22
Memorial Day (Holiday)	May 25
Registration	May 26-29
Dormitory Open for Occupancy	May 31
Classes Begin (Summer I and 10 Week)	June 1
Last Day to Apply for Summer Graduation	June 10
Final Exams (Summer I)	July 3
Independence Day (No Classes)	July 4
Classes begin (Summer II)	July 6
Final Exams (10 Week)	August 3-4
Final Exams (Summer II)	August 7

Summer 1999

New Student Registration	May 24-28
Memorial Day (Holiday)	May 31
Registration	June 1-4
Dormitory Open for Occupancy	June 6
Classes Begin (Summer I and 10 Week)	June 7
Last Day to Apply for Summer Graduation	June 10
Independence Day (No Classes)	July 4
Final Exams (Summer I)	July 9
Classes Begin (Summer II)	July 12
Final Exams (10 Week)	August 9-10
Final Exams (Summer II)	August 13

Statement of Purpose

History

In 1965, the citizens of central Texas joined together to authorize the building of a community college that would serve Bell, Coryell, Lampasas, Mills, and seven other central Texas counties as well as Fort Hood and the correctional facilities in Gatesville. The campus was constructed on 560 acres of land donated by Fort Hood through the Department of Education and with funds supplied through a local $2 million bond. Central Texas College, under Section 130.04 of the Texas Education Code, opened its doors with an initial enrollment of 2,068 students in the Fall of 1967. The number of students and the location of offerings has steadily increased since that time. Central Texas College has maintained its accredited status with the Southern Association of Colleges and Schools since first being awarded accreditation in 1968, and was reaffirmed most recently in December 1994.

CTC initiated on-site programs on Fort Hood in 1970 and in Europe in 1974. CTC's success at Fort Hood and Europe led to the explosive expansion of CTC's locations, including Fort Leonard Wood (Missouri), South Korea, and the Atlantic and Pacific Fleets in 1976. By the early 1980s, CTC offered programs to military personnel stationed in the Pacific Command, Alaska, and Panama as well as throughout the continental United States. This expansion occurred locally as well with the initiation of instructional programs and services for the Texas Department of Corrections in Gatesville in 1976.

Today, CTC consists of administrative units referred to as campuses: the Central Campus, the Continental Campus, the Europe Campus, the Fort Hood and Service Area Campus, the Navy Campus, and the Pacific Far East Campus. Of these, the Central, Fort Hood, and Service Area Campuses operate within the state of Texas. While some campuses, like the Navy Campus, offer programs only for military personnel, others enroll military, civilian, and incarcerated students.

Students enrolled in CTC may select a degree plan from Associate of Arts degree programs, Associate of Science degree programs, Associate in Applied Science degree programs, or Associate in General Studies. In addition, students choosing to earn a certificate may enroll in any of the more than 40 certificate programs. Campuses within the Central Texas College District may offer the full range of degree programs and services or only those identified through local needs assessments. CTC also provides a wide range of education and training opportunities for those students who do not select a degree or certificate option.

Committed to serving all students, CTC provides comprehensive programs and services for special populations: disability support services, single parent/homemaker support services, and non-traditional career support services as well as tutoring and transportation assistance. To meet the occupational training needs, Central Texas College offers a variety of professional development and job-related skills programs, such as basic literacy skills, leadership skills, foreign language skills and occupational skills programs.

Vision

It is Central Texas College's vision to be the best possible community college in which to study and work. We want to offer each student and employee the opportunity to grow, learn, and succeed. We want our graduates to be able to compete in a global economy, make intelligent consumer choices, and exercise their rights and responsibilities as citizens. We want to celebrate our diversity while remaining united in our pursuit of excellence through continuous improvement. We want to meet the challenges of the future with students, employees, and community members working together toward the common goals of availability, accessibility, and quality in education.

Mission and Purpose

Central Texas College is a two-year, open admissions institution which provides educational opportunities to students locally, nationally, and internationally. CTC offers vocational, technical, and academic courses leading to certification or associate degrees. CTC offers remedial and compensatory education, adult and continuing education, and workforce development training programs. CTC provides services and programs that facilitate student achievement and address the necessary needs of our military and civilian communities. CTC encourages institutional research and effective resource management. CTC insists upon excellence in all instructional, organizational, and operational areas.

The purpose of CTC is to provide:

- technical programs up to two years in length leading to associate degrees or certificates;
- vocational programs leading directly to employment in semi-skilled and skilled occupations;
- freshman and sophomore level courses in arts and sciences;
- adult, continuing, and community 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 designed to meet civilian and military community needs;
- adult literacy and other basic skills programs for adults;
- library services; and
- a wide variety of public service needs.

Philosophy

Central Texas College, in meeting the educational and training needs of students in our key service populations and our civilian and military communities, is committed to:

- the belief in the worth and dignity of the individual.
- excellence in teaching and learning.
- open-door policies for meeting individual needs through a wide range of educational goals.
- a vision of community as a place to be served and a climate to be created.
- implementing the highest standards of ethical professional practice.
- effective stewardship of public trust and resources.
- offering programs that are student centered, reflect increases in the body of knowledge and changes in technology and economy, and are revised and improved continuously.
- addressing the cultural, racial, and ethnic diversity of students, employees, and community.

Goals

Goal 1: To Provide Instruction

Central Texas College shall provide quality instructional programs that will prepare students to fully participate in educational, occupational, economic, and social opportunities. These include certificate and/or degree programs in general education and occupational and technology; university transfer; developmental education; adult and continuing education; skills training and workforce development programs; special and enrichment education; and adult literacy and basic skills education.

Objective 1: To provide and update curricula district-wide that foster student goal attainment, meet changing requirements, reflect changes in instructional technology, and incorporate development of SCANS and communication skills.

Objective 2: To employ and retain faculty who, at a minimum, meet the qualification requirements set by accrediting associations and regulatory bodies.

Objective 3: To meet the educational, occupational, and developmental needs of a diverse student population.

Goal 2: To Conduct Institutional Research

Central Texas College shall improve instructional and administrative processes and outcomes through research, demonstration projects, creative local initiatives, and well-thought-out technological innovations.

Objective 1: To maintain institutional and program accreditation and approval.

Objective 2: To evaluate continuously programs, services, processes, and personnel and use the results of such evaluations to improve programs, services, processes, and activities.

Goal 3: To Provide Public Service

Central Texas College shall assist its communities through instructional programs tailored to their needs; economic development, technical support, and proposal/grant development services; support of cultural activities; employee participation in community activities; and other related cooperative efforts.

Objective 1: To cooperate with communities in meeting their educational, economic, and cultural needs.

Objective 2: To promote the institution as a partner with the community it serves.

Goal 4: To Provide Institutional Support and Ancillary Operations

Central Texas College shall provide the direction; control; educational support services (including student development services, library services, instructional services, etc.); resource management services; and other services and resources as may be required by the institution to accomplish its mission.

Objective 1: To use effectively and efficiently the human, fiscal, and physical resources of the institution.

Objective 2: To promote equal access and equal opportunity.

Objective 3: To provide educational and training opportunities for employees that foster professional growth.

Objective 4: To maintain an organizational structure and culture that supports responsive decision making; creates a positive work environment; and assures compliance with regulations, laws, and mandates.

General Information

The Catalog

This Catalog is an official publication of Central Texas College containing policies, regulations, procedures, tuition and fees in effect at the time the Catalog was published. Central Texas College reserves the right to make changes at any time to reflect current Board policies, administrative regulations and procedures, amendments required by state law, and tuition or fee changes. The Catalog serves two purposes: first, to provide general policy for all Central Texas College operations and second, to provide specific information, policy, and directives for the Texas Campuses. Rules, regulations, and procedures for the Continental and International Campuses are found in the Central Texas College Continental and International Campuses Catalog.

Study the contents of this Catalog carefully; you are responsible for observing the regulations contained herein.

Other official publications published by Central Texas College include the Continental and International Campuses Catalog describing policies, procedures, regulations, and fees for campuses outside the state of Texas; the Student Handbook, which includes the Institution's policies and regulations relating to student conduct and student activities at the Central Campus; and semester schedule bulletins.

Program and Course Availability

Programs of study displayed in this Catalog are offered when sufficient interest indicates a level of enrollment required for program continuation. To enter specific programs of study, seek confirmation of program availability. Central Texas College further reserves the right to adjust course scheduling, including class cancellation, when enrollment or other circumstances require this action.

Equal Opportunity Policy

Central Texas College is committed to its policy on equal educational opportunity and administration of its educational programs, activities, and employment without regard to color, race, religion, national origin, disability, age, or gender as required by Title VI and Title VII of the Civil Rights Act of 1964, as amended, Title IX of the Education Amendments of 1972, the Rehabilitation Act of 1974, the Vietnam Era Veteran's Assistance Act of 1974, the Americans with Disabilities Act of 1990, and Executive Orders 11246, as amended, and 11375.

Central Texas College does not discriminate against qualified individuals with disabilities in the recruitment and admission of students, the recruitment and employment of faculty and staff, and the operation of any of its programs and activities, as specified by applicable federal laws and regulations. The designated coordinator for compliance with Section 504 of the Rehabilitation Act of 1973 and the ADA relating to students is Bill Alexander, Dean, Guidance and Counseling; the designated coordinator for employment of faculty and staff is Leo Welsh, Director, Human Resource Management.

Central Texas College has established programs to ensure that a lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs.

Existing administrative procedures of Central Texas College are used to handle student grievances. If you believe a condition or employee of Central Texas College is unfair or discriminatory, you can appeal to the administrator in charge of that area. If you need assistance pursuing a grievance matter, contact the Director of Student Life Activities, Central Texas College, Room 100, Roy J. Smith Student Center, 254/526-1258.

Statement on Harassment and Discrimination

Central Texas College is committed to providing an educational and work climate that is conducive to the personal and professional development of each individual. Faculty, staff and students should be aware that discrimination and harassment based on the age, ethnic background, family status, gender, disability, national origin, race, religion, sexual orientation or veteran status of individuals or any other subgroup stereotyping or grouping within the college community are unacceptable. To fulfill its multiple missions as an institution of higher learning, Central Texas College encourages a climate that values and nurtures collegiality, diversity, pluralism and the uniqueness of the individual within our state, nation and world. Central Texas College also strives to protect the rights and privileges and to enhance the self-esteem of all its members.

If you believe you have experienced harassment or discrimination, contact the appropriate office where you attend. Students should contact the Director of Student Life Activities at 254/526-1258, faculty should contact the Deputy Chancellor for Campus Operations at 254/526-1781, and staff should contact the Human Resources Department at 254/526-1157.

Americans with Disabilities Act

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Disability Support Services Office at 254/526-1339, TDD 526-1378, located in Room 102 of Student Center Building 106 or contact the Learning Disabilities Services Office in Room 107 of Student Center Building 106 at 254/526-1195.

Student Right-to-Know and Campus Security Act of 1990

Central Texas College, in compliance with the "Student Right-To-Know and Campus Security Act of 1990," publishes annual crime statistics three times a year in the Central Campus Schedule Bulletin. These statistics are provided for students' and employees' information.

Central Texas College is committed to providing a safe environment and minimizing risk for students to enter campus and pursue their academic studies and personal development. You are expected to share in the responsibility alongside employees to provide a safe campus by reporting unsafe conditions, potential safety/health hazards, and accidents/injuries to your instructors or directly to the Risk Management Office. Central Texas College is considered a public school under Texas law, and is therefore immune to liability for personal injury and/or property damage that students may sustain while on campus. You enter campus (to include parking your vehicle) at your own risk and responsibility.

Fort Hood Campus

The Fort Hood Campus offers five eight-week terms per year. Saturday and noon time "brown bag" courses are also available. All Fort Hood Campus classes are open for active duty personnel, retirees and, on a space available basis, to family members, others, and those receiving benefits from the Office of Student Financial Assistance. Financial aid and veteran students should contact the Office of Student Financial Assistance at Central Campus prior to enrolling at Fort Hood.

The Fort Hood Campus Student Services Office at Building 265 has a full-time staff to provide academic advisement to meet the educational needs of the Fort Hood Community. Servicemembers can also register at Fort Hood for courses offered at Central Campus.

Central Texas College Fort Hood Campus recognizes the unique nature of the military lifestyle and has committed itself to facilitating the transfer of credits and awarding credit for appropriate military training and experiences.

Service Area Campus

The CTC Service Area Campus provides college credit and non-credit classes to the citizens of Central Texas in the following counties: Bell, Burnet, Coryell, Hamilton, Lampasas, Llano, Mason, McCulloch, Mills, San Saba and Williamson. These classes are offered on a semester basis. CTC Community Coordinators are located in Brady, Burnet, Gatesville, Hamilton, Lampasas and San Saba. CTC Community Coordinators can assist you with testing, financial aid, registration and other college related activities.

Distance Learning

Central Texas College offers college-level distance learning courses in a variety of instructional formats. Distance learning courses may be telecourses, video conference courses, multimedia courses, or on-line courses. Students have direct and continuous access to their instructor, opportunities to collaborate with other students, and full access to library and support services.

Voice mail allows direct communication with the instructor and telephone conferencing with the instructor and classmates. Students may practice oral language skills or participate in structured discussions.
E-mail fosters direct, frequent and precise communication between the student, instructor, and other students. You can use E-mail to send completed assignments, for electronic discussions, and for seeking answers to questions.

As a distant learner, you can use the library at CTC by visiting the Oveta Culp Hobby Library on the Central Campus, sending e-mail requests to the library, or submitting requests by phone or fax.

Distance Education faculty provide phone numbers and e-mail addresses during orientation sessions.

To Be Successful

Before enrolling in a distance learning courses, you should consider your course needs, learning styles, and learning preferences. The distant learner must be self-motivated, goal-oriented, and able to work independently.
You can do well in distance learning courses if you:

- are self-disciplined, like to set your own schedule, and enjoy working on your own.
- have a compelling reason to take the course, such as your work schedule preventing you from enrolling in a traditional course.
- are comfortable with written instructions because most distance learning courses rely on printed materials and written directions rather than in-person explanations from the instructor.
- don't need the continuous face-to-face interaction with your instructor and classmates to be successful.
- need to save time in commuting because distance learning courses require just as much time "learning time" and "study time" as campus courses.
- are comfortable with technology because most distance learning courses use technology for teaching and communication (for example: e-mail, voice mail and fax machines).

Telecourses

A telecourse uses broadcast television or videotapes to enhance the course with images not easily conveyed in a printed format. Students view simulations, demonstrations, or artifacts to increase understanding of the subject. These video presentations may be viewed on KNCT-TV or videotaped or both. Missed broadcasts and video lectures may be viewed at the Oveta Culp Hobby Library on CTC's Central Campus. You must attend an orientation session and take tests on Central Campus, or at a designated location. You communicate with your instructor through voice mail and/or e-mail.

Video Conference Courses

In a video conference course, the distant learner has two-way audio and two-way video interaction with the instructor and other students through a video conferencing system. This delivery system allows for instructor-delivered lectures, in-depth discussions, question/answer sessions, and demonstrations—just like in a traditional classroom. Students communicate with their instructor and peers directly in the class. These courses are available through the Service Area Campus and Central Campus and may be viewed from the University Center on Fort Hood.

Multimedia Courses

Multimedia courses use textbooks, CD-ROM, computer software, and/or videotapes along with curricular materials to guide the student in learning. Students choose the media most suitable for their learning styles and most accessible for their learning environments. Students attend an orientation session and take tests on Central Campus, or designated location. Students communicate with their instructors using voice mail or e-mail and collaborate with other students using e-mail or discussion sessions.

On-line Courses

On-line courses use the Internet as the primary delivery system for instruction. Course materials (guides, syllabi, reading lists, and lecture notes) are posted on the Internet for students' use. In addition, students communicate with faculty and students and access instructional resources through the Internet. Orientation and review sessions may be done in person or via the Internet.

Continuing Education

Continuing Education non-credit programs at Central Texas College give you an opportunity to explore new activities for personal growth, enjoyment, and for learning new skills for employment or upgrading present skills. CTC also offers programs sanctioned by appropriate state and national associations and state licensure boards. Training programs can be tailor-made and, if desired, offered "in-house" to meet specific job upgrading and mobility needs of individual organizations.

Non-credit courses cover a variety of subjects and offer alternative opportunities to individuals seeking non-traditional educational experiences. Non-credit courses are open to interested persons without regard to eligibility for admission to college-credit programs.

Non-credit courses may be offered in the following areas:

- Business
- Child Care Provider Training
- College for Kids
- Creative Arts
- Culinary Arts
- Driver Education
- Emergency Medical Technician
- Exam Preparation
- Health and Fitness
- Horticulture
- Language
- Mental Health Services
- Microcomputers
- Nursing Education
- Paramedic
- Police Academy
- Professional Truck Driving
- Senior Citizen Classes
- Special Interests
- Study Skills

For more information concerning Continuing Education programs, call 254/526-1586.

Admissions and Registration

General Admission Information

Address requests for application materials or questions concerning admission to the Guidance and Counseling Office, P.O. Box 1800, Killeen, Texas 76540-1800, or e-mail to balexan@ctcd.cc.tx.us.

Central Texas College is a comprehensive community college that maintains an open-door admissions policy to ensure that all persons who may benefit from post-secondary education have the opportunity to enroll. New students will be admitted to Central Texas College providing all admissions requirements are met.

Federal law prohibits institutions from making pre-admission inquiries about disabilities. Any information received regarding disabilities will not adversely affect admissions decisions. If you require special services or accommodations because of a disability, you should notify Disability Support Services, Building 106, Room 102, 254/526-1339, TDD 254/526-1378, or Learning Disability Services, Building 106, Room 107, 254/526-1195. This voluntary self-identification allows Central Texas College to prepare appropriate support services to facilitate your learning. This information will be kept in strict confidence and has no effect on your admission to Central Texas College. Appropriate documentation of the disability will be required.

Admission to Central Texas College does not guarantee admission to specific programs and courses. Departmental approval is required to register for certain courses, as published in the registration schedule.

General Admission Requirements For All Students

Students who hold diplomas from accredited secondary (high) schools or GED equivalency certificates will be admitted to Central Texas College. If transferring from another regionally accredited college, you will be admitted if you are eligible to return to the institution last attended. Adults, veterans and military personnel who have not completed a high school program, but who are prepared to undertake post high school studies, may be admitted after providing official test scores from a list of approved tests authorized by the Department of Education. Obtain the list from the Director of Testing.

An adult, for purposes of admission, is defined as an individual 18 years of age or older.

Individuals who have not previously earned a high school diploma or GED are not eligible to enroll in college-level coursework until they have taken and successfully passed a Department of Education independently administered examination. The examination must have been taken within the past year.

Students applying for Financial Aid must have a high school diploma or GED. Non-graduates should contact the Office of Student Financial Assistance for further details.

Non-graduates seeking further information should contact the Office of the Director of Testing, 254/526-1254.

Admission Procedures

Your Application for Admission and required documents should be submitted prior to registration for timely processing. Submit all applications 48 hours prior to registration.

Steps for admission into a college credit program are as follows:

1. Obtain an Application for Admission form from the Guidance and Counseling Office. Complete and return the form to the CTC Records Office. Include Texas residency documentation. Completed military verification forms are required at the time of registration.
2. Arrange for official transcripts from previous schools (high school and college) to be sent to the CTC Records Office.
3. Submit appropriate test scores (TASP, ACT, SAT, TAAS). Students who have not taken the TASP exam are required to take the placement test prior to enrolling in college-level courses, unless they have satisfied placement requirements. Refer to the section on Placement Examinations for further clarification.
4. Students will be notified of their acceptance for admission upon receipt of above information.

5. Arrange to visit with a counselor prior to registration.
6. Registration for classes will follow the dates listed in the Schedule Bulletin. Payment of tuition and fees is required at the time of registration.
7. Falsification of information will result in dismissal from Central Texas College.

Transient Students

Students not seeking a degree or certificate from Central Texas College are not required to provide previous education records unless required for Financial Aid or Veteran Services. Students who have completed TASP testing must request official TASP scores. Records will be required if you later elect to seek a diploma, certificate or evaluation and award of credit.

Transfer Students

Transfer of credit from regionally accredited colleges and universities may be accepted when the grade earned was "C" or higher and the coursework applies to your curriculum. Passing grades lower than "C" may be considered for transfer in accordance with current evaluation procedures and curriculum requirements. Grades other than "A," "B," or "C," or "CR" will not be accepted in transfer in major degree requirements.

Because of the rapid changes occurring in vocational/technical fields today, coursework taken in a major field of study or vocational/technical courses directly related to that major field may not be accepted in transfer to satisfy specific Associate in Applied Science Degree or Certificate program requirements. The appropriate Department Chair or Central Texas College official must approve the acceptance of course credit in transfer when the coursework was completed five years or longer before you entered the Central Texas College program of study. This also applies to returning students when vocational/technical courses that are applicable to their degree or certificate programs were taken at Central Texas College and the course content has changed to the point that retraining is necessary to ensure that the student has marketable skills for the degree/certificate pursued.

Records Required

Transcripts and Test Scores

Degree or certificate seeking students must ensure that all records of previous education are on file with the Records Office in order to fulfill admission requirements of Central Texas College.

Texas Academic Skills Program Test Scores: Official copies of TASP Test scores sent directly from NES must be on file for all students requiring TASP testing prior to the accumulation of 9 semester hours of college-level credit.

- High School Graduates: Degree or certificate seekers who have not previously completed 12 semester hours of coursework from a regionally accredited college or university must submit high school transcripts reflecting date of graduation.
- High School Equivalence Graduates: Degree or certificate seekers who have not previously completed 12 semester hours of coursework from a regionally accredited college or university must submit High School General Education Development (GED) scores.
- College Transfer Students: Transfer students seeking certificates or degrees from Central Texas College must provide official transcripts for all regionally accredited college study before official degree plans are provided.
- Individual Admissions Students (except transient students): These students must provide official transcripts for all previous college study from accredited colleges or universities they previously attended. Non-high school/GED graduates must provide Department of Education approved test scores taken within the past year.

You are responsible for requesting that all official records to be forwarded directly from the issuing institution to the Central Texas College campus serving your location. Transcripts must bear original seal or mark and signature of the registrar to be acceptable. Under the provisions of the Family Education and Privacy Act, CTC will not release copies of transcripts received from other institutions.

Addresses are listed in the front of the Catalog. If transcripts of previous education are issued to Central Texas College in your former name, without a social security number, Central Texas College cannot be responsible for properly identifying the document. Admission requirements have not been met until records required are on file with the appropriate campus records office.

CTC must receive all transcripts before the end of the first semester or second eight-week term of enrollment. Grades will not be mailed to students who are on Admissions Hold for required transcripts.

Recommended Program for High School Students

High School students planning to attend Central Texas College are encouraged to use the College Preparatory Program or the Tech-Prep Program as preparation for entering transfer, technical and Tech-Prep degree programs. The Texas Board of Education has approved these graduation programs. Copies of these programs are available from your high school counselor.

Placement Examinations

If you:	You must take:
Have not completed three semester hours of college-level credit before Fall 1989 and have not completed the TASP test	All portions of the CTC Placement Test
Are a returning student who has not completed the math and/or writing portions of the Placement Test within the last two years	- The math portion before enrolling in MATH 1314, 1324 and 1342 - The writing portion before enrolling in ENGL 1301 and 1312
Are entering a Skills Center Open Entry Self-Paced Level I Certificate, Barber or Cosmetology Programs	You are currently exempt from the TASP and Placement Tests
Are entering a Skills Center Open Entry Self-Paced Level II Certificate Program	TASP and/or placement tests
Are entering the Barber or Cosmetology Programs, and you do not have a high school diploma or GED	TABE Examination*
Are entering a Skills Center Open Entry Self-Paced Level I Certificate Program	Skills Center Diagnostic Test, unless you meet exemption criteria*
Are a new International Student (non-immigrant) or a Community Foreign Student (resident alien) and your native language is not English	CELT Examination, if your scores are below 500 or you have never taken the test

*Contact Industrial Technology or a Skills Center Counselor in Building 118, Room 14 or 17 for more information.

If you need special testing accommodations, contact Disability Support Services at 254/526-1339 or Learning Disability Services at 254/526-1195 before taking the test(s). Appropriate documentation of the disability is required.

The Texas Academic Skills Program (TASP)

The Texas Education Code, Sec. 51.306, states that all students "who enter public institutions of higher education in the fall 1989 and thereafter must be tested for reading, writing, and mathematical skills." This includes all "...full-time and part-time freshmen enrolled in a certificate or degree program...," any non-degree students prior to the "accumulation of nine or more (college) credit hours or the equivalent," and "...any transfer students with fewer than 60 semester credit hours or the equivalent who have not previously taken the tests."

A student may not "...enroll in any upper division course (the) completion of which would give the student 60 or more semester credit hours or the equivalent until the student's test results meet or exceed the minimum standard in all test scores."

The Texas Academic Skills Program (TASP) is required to ensure that students enrolled in Texas public colleges possess the minimum academic skills and aptitude needed to perform in general college-level coursework. TASP includes a testing component designed to identify and provide diagnostic information about the reading, writing, and mathematics skills of each student. Since the TASP examination is not intended for placement in a specific college course, the examination scores along with other pertinent information such as high school grades, ACT, SAT or TAAS scores, and institutional placement examination scores, may be used to ensure the proper placement of the student in reading, writing, and mathematics courses.

If required to take the TASP test, you must do so before accumulating nine college-level semester credit hours or the equivalent. Pre-collegiate courses, such as developmental or remedial English and mathematics, are not counted in calculating the semester credit hours for meeting the testing requirement.

Based on the level of your skills as reflected on the English and mathematics sections of the ACT or the verbal and quantitative sections of the SAT, students planning to enroll may be required to take the essay portion of the Central Texas College placement test. You should seek advice from Central Texas College on the best time to take the TASP test, e.g., before or after an opportunity has been provided to review or obtain any necessary developmental or remediation courses in reading, writing, and mathematics.

For information on who must take the TASP test and to obtain a copy of the TASP Registration Bulletin, contact the Guidance and Counseling Office at Central Texas College or the university you are currently attending or are planning to attend. You will pay the TASP test fee. TASP payment vouchers are available on a limited basis in the Office of Student Financial Assistance. You must demonstrate financial need to receive the voucher.

Performance on the TASP Test will not be used as a condition of admission.

Registration

Registration Periods

Registration periods for regularly scheduled classes are tentatively scheduled in the Central Texas College calendar published in this Catalog. Specific times, dates, and class information are published separately in the Schedule Bulletin, distributed before each registration period.

CTC conducts special registrations for classes offered at locations other than the Central Campus and for courses scheduled other than in the semester calendar. Details of special registration are published and distributed separately.

Registration for the self-paced certificate programs is continuous. Students may enroll anytime, except during Spring Break, Christmas Holidays and other official Central Texas College holidays.

New Student Registration

As a first-time student, you are expected to participate in the new student registration process. This process includes academic counseling, schedule planning, registration, orientation and a discussion of the TASP program and its requirements and referral to other specialized services, such as the Office of Student Financial Assistance.

If you have not satisfied placement requirements, you must take the Central Texas College Placement Exam or TASP Exam before registration. Schedule Bulletins containing necessary registration information are available at all registration and academic department offices.

Late Registration

You can register late as published in the Schedule Bulletin. A fee of $10 is assessed to those registering after classes begin. If you complete registration after courses begin, you are not excused from meeting attendance or academic requirements and must arrange with the instructor to make up any assignments missed. No students are permitted to register after the scheduled late registration date.

Adding or Dropping Classes

To register for additional courses or change course enrollments after registering, you must have approval of a counselor in the Guidance and Counseling Office. If receiving financial aid or VA, you must also have your schedule change approved by that office. You must complete all schedule changes within the time specified by the Central Texas College calendar. A $5 fee will be assessed for changes made for the convenience of the student.

Official Enrollment

You must complete the published registration procedure each term, including payment of all tuition and fees, to gain admission to classes. No one is officially enrolled until all charges have been paid in full. Students who withdraw are not entitled to remain in class on an unofficial basis. Only those students who are officially enrolled may attend classes.

Residency Requirements

The State of Texas requires that each student sign an affidavit certifying legal residence at the time of enrollment. Residence for tuition purposes is determined by state law and as such is subject to change by the Texas Legislature.

To be eligible for minimum tuition rates, you must prove to the satisfaction of Central Texas College that you are entitled to be classified as a resident of Texas.

It is your responsibility to register under the proper residence classification and any question concerning the right to classification as a resident of Texas must be clarified prior to the time of enrollment.

Non-resident military personnel and their family members classified as non-residents are entitled to pay resident tuition if assigned to duty in Texas. To be entitled to pay resident tuition, military personnel must submit a statement from their Commanding Officer or Personnel Officer certifying that they are assigned to duty in Texas.

Readmission Requirements

Central Texas College students who have not enrolled for two years or more at CTC must re-complete the admission process. Students who have attended other institutions during their absence from Central Texas College must provide transcripts from all institutions attended during the absence.

Early Admission

Early admission offers the opportunity for high school students to earn college credits while concurrently enrolled in high school or during summer sessions. Early admission is open to selected high school students, subject to the following conditions. The student must:

- Submit an Early Admission Form with the signatures of high school principal or counselor and parent or legal guardian
- Provide an official high school transcript.
- Adhere to all policies of Central Texas College and the high school to include attendance, TASP laws and regulations, and any testing requirements for regular admission to Central Texas College.

Students who meet the above criteria will be accepted at Central Texas College on individual approval to take one course per semester or two courses each summer session at Central Texas College. Credentials must be re-submitted each semester for early admission.

Central Texas College assumes no responsibility for loss of Interscholastic League eligibility of high school students enrolled under this program.

Credits earned prior to high school graduation may not transfer to some colleges.

Admission to Skills Center Self-Paced Certificate, Barber and Cosmetology Programs

The admission/registration process for these programs differs slightly from those for the regular college credit programs in that registration is done daily.

- Self-paced Certificate: If interested in enrolling in a self-paced certificate program, contact a Skills Center Counselor in the Vocational Skills Center Building 118, Room 14 or the Industrial Technology Department, Room 17.
- Barber/Cosmetology: If interested in enrolling in the Barber or Cosmetology programs, contact the Industrial Technology Department in the Vocational Skills Center Building 118, Room 17.

Community Foreign Students

If you are a community foreign student (immigrants/resident aliens/"Green Card" holder), you follow the regular registration process if you meet the following requirements:

- You have already completed hours in CTC developmental or credit courses
- You are a new student and have taken the Comprehensive English Language Test (CELT) and your test scores determine that you do not need English-as-a-Second-Language (ESL/DSLA) courses
- You have a TOEFL score of 500 or more

All community foreign students must take the CELT because this test determines fluency. Students whose CELT scores fall within the parameters of the ESL program must enroll in and finish the ESL program before taking the CTC Placement Test.

International Students

Ninety days before registration, prospective international students planning to register at a CTC Texas campus must provide all of the items listed below. Each required form must be filled out completely before CTC will admit you as a student. CTC will not give you the I-20 form until admission has been granted.

If holding visa category A-M issued by the U.S. Immigration and Naturalization Service, you will be classified as a non-immigrant alien and must submit the following documentation/items to apply for admission at CTC:

1. CTC Application for Admission.
2. Record of Previous Education. Applicants must submit:
   a. High School Graduates: Official copy of transcript(s) showing date of graduation from a secondary school. The official transcript must be an original copy translated into English and must show each course completed and grades earned.
   b. College Transfer/Transient Students: Official copy of transcript(s) for each college or university attended. All foreign transcripts must be certified English translations. Transcripts must also have original mark or seal and signature(s) to be acceptable.
3. CTC International Student Application for Admission. All items on the form must be completed.
4. International Student Statement of Understanding. Read carefully all the statements and conditions, then sign and date the form.
5. Notarized CTC Sponsor's Statement for International Students. Applicants must have a sponsor who is required to certify the availability of financial resources to support student expenses at the school. Funds may come from sponsoring agencies, scholarships, the applicant's family, or any dependable source. All items on the form must be completed and the sponsor's signature must be notarized. This form is not acceptable without an official seal.
6. Sponsor Bank Letter/Statement. The applicant's sponsor is required to provide a bank letter or statement showing the availability of funds to cover student expenses to be incurred during the first year at CTC, exclusive of travel expenses. CTC estimates a student's average cost for an academic term of 12 months will be US $11,000. The letter statement required must show available funds in U.S. dollars. Statements with figures in foreign currencies are not acceptable.
7. Two Passport-sized photographs.
8. Proof of Health/Accident Insurance for each academic term, submitted at registration. If you use foreign insurance policies, they must have all information translated into English, including the expiration date. The health/accident insurance policy must cover students while attending CTC and the policy must offer a maximum medical expense benefit limit of no less than $100,000.
9. TOEFL Scores (Optional). Students without TOEFL scores or scores below 500 will be required to take the Comprehensive English Language Test (CELT) for appropriate placement.
10. Required Deposits:
    a. $500 Tuition deposit, to accompany CTC application documents. This deposit will be applied to the tuition cost when the student enrolls for the first semester at CTC.
    b. $100 Residence Hall deposit, only if applying to stay in the Residence Hall.

If the visa is denied or you are unable to attend for any other reason, CTC will refund 80% of the tuition deposit ($400), provided CTC receives the original I-20 form and a written request for refund. The other 20% will not be returned since it pays for processing the forms. The Residence Hall deposit is non-refundable.

Additional Requirements for International Transfer Students

In addition to the requirements for all applicants, to transfer from another school within the U.S., you must submit the following:

- Certification of Good Standing from previous school. You must complete the front part of this form. The foreign student advisor at the school last attended completes the back of the form before sending it to the CTC International Student Services Department.
- Photocopy of I-20 form issued by previous school. You must provide a photocopy of the I-20 form issued by the school currently or last attended.

Residence Hall Application Process for International Students

- Residence Hall Application. You must complete all items, attach a picture, and sign and date the form.
- Required non-refundable Residence Hall deposit of $100 mentioned above. Early arrival is required for new international students for pre-testing and registration. Be prepared to pay $25 per day, excluding meals, to stay in the Residence Hall during the week before classes begin. Room and Board fees do not cover the week before the beginning of classes.

When you submit both items above, you will be placed on the Residence Hall waiting list, which does not guarantee assignment of room. Check status of application with the Residence Hall Manager.

To apply to Central Texas College, direct inquiries to the Director of International Student Services who will provide forms and instructions to complete the requirements listed above. An International Student Handbook is also available for detailed information.

English as a Second Language (ESL)

Non-native English speakers (international students and community foreign students) are required to take the Comprehensive English Language Test (CELT) prior to beginning the English-as-a-Second-Language Program (ESL/DSLA courses). Only international or community foreign students with TOEFL scores over 500 will be exempt from English language pretesting and the English-as-a-Second Language Program. The CELT testing dates and locations are published in each CTC Schedule Bulletin. The test is free and may only be taken once.

Transfer students who have taken English-as-a-Second-Language (ESL) courses elsewhere and wish to continue ESL at CTC must take the CELT.

The ESL program comprises 14 courses divided into beginning, intermediate and advanced levels. The entire program takes three semesters to complete, provided you pass all subjects the first time. The CELT provides individualized course placement into appropriate levels of grammar, writing, reading, listening and speaking. Sufficient test scores allow you to exempt courses already mastered and ensure that you do not take unnecessary courses.

Uniform Application of Standards

The standards of Central Texas College academic and student policies are uniform at all locations served by CTC. The following sections of the Catalog provide information unique to Texas campuses. Central Texas College provides services at nine Texas locations which include:

- Central Campus, located between Killeen and Copperas Cove, Texas;
- Fort Hood Campus, located within the Central Texas College District at Fort Hood, Texas; and
- Service Area Campus, which operates satellite offices strategically located in eleven counties with offices in Brady, Burnet, Gatesville, Hamilton, Killeen, Lampasas, and San Saba.

Departmental Admissions Requirements

Aviation Science

If you are an Aviation Science student, you must pass Federal Aviation Administration (FAA) physical exams appropriate to your level of training before admission to flight training. Present written evidence of FAA medical certification to the Department Chair at the time of pre-registration advisement for admission to this department.

Computer Science Network Systems Administrator Option

Admission Policy

Submit application for the Network Systems Administrator program to the Computer Science Department.

Progression Requirements

To progress in the Network Systems Administrator program

- You must achieve 70% or higher in each Computer Science course in the program.
- You must complete the courses in the progression as listed on the degree plan.
- Selection for acceptance to the networking portion of the program will be on a space available basis. There are only 16 seats available in the sophomore networking classes. The selection will be based on the following:
  - All students who have completed all lower level requirements will be considered first.
  - If more than 16 students have completed all the lower level requirements, then the students with the oldest applications will be considered first.
- You will be notified by letter when selected for admission to COSC 2491, COSC 2492 or COSC 2493.
- It is your responsibility to upgrade the application at the end of each semester as degree requirements are completed.

Medical Lab Technician

Admission Policy

You must follow the regular procedures for admission to Central Texas College. In addition, admission to the Medical Laboratory Technician (MLT) Program will be determined by:

- Application to the MLT Program.
- Transcripts of high school graduation or GED completion with a score of 40 or higher.
- Transcripts of previous college credits. It is your responsibility to make sure that CTC has received the transcripts, and copies of the transcripts should be sent to the MLT department.
- Passing scores (220) on the math, reading, and writing placement examination. A copy of the results must be on file in the program office. If you do not successfully complete the reading or writing section of the placement exam, you must successfully complete remedial courses and BIOL 1408 before entering MELT 1601.
- BIOL 1408 is a prerequisite for any student who has not completed a high school biology course prior to entering MELT 1601. CHEM 1406 is recommended for any student who has not completed a high school chemistry course. If you have previous college science credits from a regionally accredited school, you are exempt.
- Two completed reference forms must also be on file.
- Status form must be signed and on file stating the understanding of competitive status for clinical admission.
- Personal interview with the program director. Call for an appointment when all of the above requirements have been met.
- CTC will not accept transfer courses for the MLT program unless they have a "C" or above. You must repeat science courses that are over five years old.
- Neither Central Texas College nor hospitals provide medical coverage or workers' compensation for emergency illness or injury. Medical coverage is the responsibility of the student.
- After you have been accepted for admission, ensure that the following is on record in the MLT office before the first day of class:
  - Copy of current immunizations
  - Proof of physical exam completed within the last six months signed by an M.D. or a D.O.
- You are admitted to the MELT 1601 course on a first come basis after other admission criteria have been met. Enrollment in MELT 1601 does not guarantee a position in the clinical portion of the program. When entering the MELT 1601 course, and subsequent courses, you are in competitive status for admission to the clinical portion of the program.

Progression Requirements

To progress in the MLT Program, you must meet the following requirements:

- Achieve a grade of "C" or better in all courses in the curriculum, including academic and MLT courses.
- Successfully complete prerequisites to the Clinical Practicum I. Prerequisites (with a grade of "C" or better) are:

MELT 1601	MELT 1402	CHEM 1411	MATH 1314
BIOL 2401	BIOL 2402	CHEM 1412	MISC 1450

- Selection for acceptance to the clinical portion of the program will be made on a space available basis. The selection process is a function of the MLT advisory-selection committee. The committee uses the following criteria as a basis for their decision regarding admission:
  - Review of transcripts and courses currently in progress, specifically academic courses in biology, chemistry, math, and medical laboratory technology.
  - Personal interview with two members of the MLT selection committee.
  - There are a maximum of ten positions available for clinical experience. The students with the ten highest point values will be admitted to the clinical portion of the program. Two alternate positions will be assigned to the next two applicants.
- You will be notified by letter regarding your status for admission to the clinical practicum.
- Once you have been accepted into the clinical practicum, you must submit proof of liability insurance.

Transfer Students

Transfer Students must:

- Meet general admission requirements of Central Texas College and the MLT Department.
- Have a GPA of 2.5 or better.
- Present syllabi of science and MLT courses already completed.
- Present transcripts from all regionally accredited colleges attended.
- Challenge certain MLT courses depending on the transcripts and syllabi evaluation.
- Understand that placement of students in MLT clinical practicums will depend upon availability and upon the recommendation of the MLT Selection Committee. Clinical admission process will be applicable.

Readmission Policy

Readmission to any MLT course is dependent upon availability of class openings after current class progression, but it is not automatic.

- The student must complete the program within four calendar years of enrollment.
- The student who does not successfully complete an MLT or science course or who withdraws from the course with a failing average may apply for readmission only one time.
- For readmission to the clinical portion of the program, the student must repeat the clinical admission process.
- After a student has been accepted for readmission, the following must be on record in the MLT program office prior to the first day of class.
  - Proof of physical exam signed by an M.D. or a D.O. within the last six months.
  - Proof of current liability insurance.
  - Copy of current immunizations.

Mental Health Services

Admission Policy

Applicants for the program must follow the regular procedure for admission to Central Texas College. In addition, the following is required of all applicants for admission to the Mental Health Services program:

- Application to the Mental Health Services (MHSV) Department.
- Personal interview with a Mental Health Services program advisor.
- Before participating in an external lab in any MHSV course in which a field placement experience occurs, you must:
  - Provide proof of CPR/First Aid Course completion.
  - Complete a course that the MHSV Department will provide in:
    - Crisis Intervention and Management of Aggressive Behavior, and
    - Infectious Disease Awareness.
  - Purchase liability insurance at the time of registration and provide proof of that to the department.
  - Be aware that field placement experiences will require travel at your expense.
  - Be aware that neither Central Texas College nor clinical facilities in which field placement experiences occur provide medical coverage, workers' compensation or emergency care. Medical coverage is the responsibility of the student.
  - If you are enrolled in the Community Child and Youth Work Specialization option, the following is required:
    - Proof of physical exam completed within the last 6 months signed by an M.D. or a D.O.
    - Proof of immunizations (MMR, DT).
    - TB Skin Test.
    - Hepatitis B protection.

- If you are enrolled in the Chemical Dependency Specialization option, the following is required:
  - Proof of immunizations (MMR, DT).
  - TB Skin Test.
  - Hepatitis B protection.

  The physical exam is recommended.

Associate Degree Nursing

Admission Policy

Applicants for the program must follow the regular procedures for admission to Central Texas College. In addition, the following is required of all applicants for admission to the Nursing Program.

- Application to the Nursing Program.
- Transcripts of previous college credits from a regionally accredited school. It is your responsibility to make sure the school has received transcripts.
- Completion of the courses prerequisite to NURI 1901 with a GPA of 2.5 or higher.
  - Computer Science elective
  - ENGL 1301
  - PSYC 2301
  - Scores on the math part of the TASP of 270 or on the math placement exam of 220, or successful completion of DSMA 0303 or college-level Algebra.
- Take the Nurse Entrance Test and pass it with a score of 65% or higher on the math section and greater than 42% on the reading section.
- An overall 2.5 GPA on a 4.0 scale in all college work, both transfer courses and work earned at CTC, that will be used on the nursing degree plan.
- CTC will not accept transfer courses for the ADN program unless they have a "C" or above. Science courses that are over 5 years old must be repeated.
- A personal interview with the Chair of the Nursing Program. Call for an appointment when transcripts have been received and you have successfully completed the Nurse Entrance Test.
- After the student has been accepted for admission, the following must be on record in the Nursing office prior to the first day of class:
  - Proof of physical exam done within the last six months signed by a MD or DO. Be sure that proof of required immunizations is documented on the form.
  - Proof of CPR course completion - BLS-HCP
- Neither Central Texas College nor hospitals provide medical coverage or workers' compensation for emergency illness or injury. Medical coverage is the responsibility of the student.
- Requests for admission/readmission for transfer students, challenge students and former CTC nursing students will be prioritized as follows:
  - Former CTC students with a passing grade in previous nursing courses.
  - Challenge students ranked by grade on exam.
  - Transfer students with passing grades in previous nursing courses.
  - Former CTC students or transfer students with a previous nursing course failure.
- The nursing program must be completed within four years of enrollment in NURI 1901 or its equivalent.
- Any LVN who has failed any nursing course in any RN program may be admitted into the Bridging course (NURI 1401) provided:
  - Admission criteria are met.
  - Graduation from a State VN Board approved program followed the nursing school failure.

Progression Requirements

To progress in the nursing program, the following requirements must be met:

- Achievement of a grade of "C" or better in all courses in the curriculum, including academic and nursing courses.
- Prerequisites to each nursing course have been successfully completed.
- Achievement of the grade of Satisfactory in the clinical area.
- Current CPR course completion.
- Current liability insurance.
- Proof of physical exam or diagnostic tests as recommended or required.

Transfer Students

Transfer Students must:

- Meet general admission requirements of Central Texas College and the Nursing Department.
- Have a GPA of 2.5.
- Present syllabi of nursing courses already completed.
- Present a transcript from all regionally accredited colleges attended.
- Challenge certain nursing courses.
- Understand that placement in nursing courses will be dependent upon space availability and recommendations of the Admissions and Standards Committee.
- Complete the nursing program within four years of enrollment of NURI 1901 or its equivalent.

Transfer student nurses who have failed in another college or university nursing program are eligible to seek entry into the Central Texas College Department of Nursing if admission criteria are met. These student nurses are admitted with the understanding that readmission following any Central Texas College Nursing Department failure will be denied.

Readmission Policy

- Readmission to any nursing course is dependent upon availability of class opening after current class progression but is not automatic.
- The student must complete the nursing program within four calendar years of enrollment in NURI 1901.
- The student who does not successfully complete any nursing course or who withdraws from a nursing course with a failing average may apply for readmission to the Nursing program only one time. This applies to the following nursing courses: NURI 1901, 1902, 1101, 2903, 2102, 2904, 2101, 2103 and 1401. Failure of two nursing courses in one semester will result in ineligibility for readmission.
- If a student has been readmitted following a nursing course failure and subsequently withdraws from a nursing course due to extenuating circumstances, that student may be readmitted if he or she withdrew in passing status.
- Consideration for readmission of former students is based on the following:
  - Former team recommendation
  - Academic grade average and clinical evaluation
  - Reason(s) for failure, if applicable
  - Resolution of outside extenuating circumstances, if applicable
  - Completion of remedial work and/or completion of corresponding Level I or Level II academic courses (if recommended)
  - The recommendation of the Admission and Standards Committee; an interview of the former student may be required.
- Selection of students for readmission will be made in May and December.
- Any student applying for readmission to the nursing department must request a formal meeting with and appear before the Admissions and Standard Committee to submit a written plan for success to be reviewed with the Committee, which may make recommendations related to this plan for success.
- All students seeking readmission must take the Nurse Entrance Test and pass it with a score of 65% or higher on the math section and greater than 42% on the reading section.
- After a student has been accepted for readmission, the following must be on record in the nursing office prior to the fifth day of class.
  - Proof of physical exam signed by an M.D. or D.O. within the last six months. This exam must include proof of required immunizations.
  - Proof of CPR course completion.

Challenge Students

The challenge option is available for the following students:

- Licensed Vocational Nurses (Texas License);
- Transfer students from Diploma programs; and
- Transfer students from other ADN or BSN programs, if recommended.

If interested in challenge option, make an appointment with the Director of Nursing.

Bridging For LVN

Currently licensed LVNs may take a summer Bridging course after completion of six prerequisite courses and, if successful, complete the ADN program in two semesters. Contact the Nursing Department for further information.

Vocational Nursing

Admission Policy

The following must be completed prior to admission to the Vocational Nursing Program:

- Application for the nursing program.
- Evidence of high school graduation (transcript) or completion of GED with a score of 40 or above, in accordance with BVNE guidelines.
- Completion of NET aptitude test with acceptable scores. Based on test scores, remedial work may be required.
- Participation in a mini-orientation upon completion of your file.
- Physical examination by a licensed MD or DO. Be sure that proof of required immunizations is documented on the form.

Readmission Policy

- If you do not successfully complete the vocational nursing program or you withdraw from the course for any reason, you may be readmitted only one time.
- The VN program may be restarted at the beginning of the level where you were unsuccessful or withdrawn provided readmission is within one year. It may be recommended by the Admissions and Standards Committee that it would be in your best interest to repeat the previous level(s). The number of students readmitted may not exceed the number of open slots in any class.
- Consideration for readmission is based on a letter you write that explains:
  - Your reason for failure or non-completion
  - How extenuating circumstances have been resolved
  - Your written plan for success
- After you have been accepted for readmission, follow standard nursing department policies found in the Vocational Nursing Student Handbook.
- Professional liability insurance must be paid according to Nursing Department policy.

Progression Requirements

To progress in the Vocational Nursing Program, you must make an average of 70% or higher on exams, written work and clinical performance throughout the entire program. An exception to the progression requirements are the pharmacologic conversion exams. A score of 90% must be achieved within three testing opportunities. Failure to achieve 90% on the pharmacologic conversion exam will result in a clinical failure, which results in dismissal from the VN program.

Transfer Students

For those Transferring from an ADN or BSN program:

- You must meet the current entrance requirements of the Central Texas College Vocational Nursing Program, which include application to the Nursing Program, and evidence of high school or GED transcript. NET aptitude tests are not required.
- Academic courses equivalent to current requirements will be transferred. The last nursing course taken must have been completed within the last two years. You must have earned at least a "C" in all transfer courses. Courses equivalent to level I are:
  - Anatomy 3-4 semester hours
  - Introduction to Psychology 3 semester hours
  - Fundamentals of Nursing 9 semester hours
- Submit:
  - A letter of status from the previous school
  - A complete description of the nursing courses taken
  - Evidence of maintaining a "C" (2.0 GPA) at previous school
  - Two references from former instructors regarding clinical performance
  - Proof of completion of CPR course: Health Care Provider or CPR for the Professional Rescuer
  - Proof of current liability insurance
- Physical examination by a licensed M.D. or D.O. is required prior to enrollment in the program. Be sure that proof of required immunizations is documented on the form.
- The PVA course requirement will be met by written challenge.
- You may be asked to verify academic standing and/or clinical skills by written examination and/or practical demonstration in the learning laboratory.

For those transferring from another vocational/practical nursing program:

- You will be judged on an individual basis by the VN Admissions and Standards committee.
- Application for transfer must be submitted 90 days before starting in the program.
- Vocational Nursing courses used for transfer for advanced placement must have been completed within the past year.
- Science courses must have been completed within the last five years.
- All other admissions policies apply.

Progress Records

- You are provided grades on examinations. Periodic individual evaluation conferences are held.
- Grades are provided at the completion of each major subject and clinical evaluations are provided as required.
- Transcripts are available upon your written request. Fees are listed in this Catalog.
- Upon completion of each term, the following grading system for the Vocational Nursing Program is used:
  - P Satisfactory mastery of the course (70% or higher)
  - N Incomplete mastery of course competencies within the clock hours designated per term for course completion
  - XN Administrative Termination (limited to internal reports, posted to the permanent academic record as the grade of N) used in reporting excessive absences to the Offices of Student Aid and other agencies
  - W Official withdrawal from course in which enrolled

Emergency Medical Technology Program

Admission Requirements

All applicants for the Emergency Medical Technology (EMPT) Program must follow the regular procedures for admission to Central Texas College. TASP requirements apply to those taking credit courses. In addition, the following is required of all applicants for admission to the EMPT program:

- Application to the EMPT program with copies of high school transcript or diploma and transcripts from all prior regionally accredited colleges attended.
- Proof of completion of a CPR course: BLS-HCP or CPR for Professional Rescuer
- Proof of mandatory immunizations, which must be submitted before you will be allowed to register. For more information, contact the CTC Nursing Department.

Progression Requirements

EMPT 1502 or CEEM 0102—You must have a 70% average grade on the four in-class exams to be eligible to take the written state Certification Exam. Twenty-four hours of clinical time will be completed at Darnall ER. All clinical and field internships must be completed, including the six Emergency Ambulance runs, prior to taking the class final exam.

In order to progress from one phase to the next in the Paramedic program, you must achieve and carry a minimum grade point average of 70% in all modules in each phase or course. You must also carry a passing evaluation in skill and clinical portions of the course.

Neither Central Texas College nor the hospitals provide medical coverage or workman's compensation for emergency illness or injury. Medical coverage is your responsibility.

College Costs

Tuition Schedule for 1997-1999*

Effective Date: Fall Semester 1997

Semester Hours	Resident	Nonresident and International
1	$60	$250
2	$60	$300
3	$60	$350
4	$80	$400
5	$100	$450
6	$120	$500
7	$140	$550
8	$160	$600
9	$180	$650
10	$200	$700
11	$220	$750
12	$240	$800
13	$260	$850
14	$280	$900
15	$300	$950
16	$320	$1,000
17	$340	$1,050
18	$360	$1,100

Individualized Instruction

(Fees in addition to above semester-hour tuition)

Aviation Science **

ASCI 1200	$775
ASCI 1201	$1,320
ASCI 1204	$2,050
ASCI 2204	$3,210
ASCI 2205	$2,535
ASCI 2206	$1,700
ASCI 2208	$1,720
ASCI 2209	$3,975
ASCI 2210	$2,410
ASCI 2211	$3,115
ASCI 2212	$1,480
ASCI 2213	$3,180
Aviation Maintenance	$75

Criminal Justice

Firearms	$25
Corrections Academy	$348
Police Academy	$180 (per course)
Reserve Police Academy	$242-336 (per course)

Food Service

HMCA 1333	$30
HMCA 1334	$30
HMCA 1601	$60
HMCA 1606	$60

Music

Piano and Voice

1 Semester Credit Hour	$105
2 Semester Credit Hours	$160
3 Semester Credit Hours	$175

* All tuition and fees are subject to change as approved by the Board of Trustees.

** Aviation Science individualized instruction fees may be paid under provisions of the installment payment plan.

Music, continued

Special Instruction

1 Semester Credit Hour $50
2 Semester Credit Hours $60
3 Semester Credit Hours $75
Photography $20

Physical Education

Bowling $33
Golf $35
Gymnasium Classes $16

Welding

Ranges from ..... $40-$100

Fees *

Out-of-District (based on residency)(per semester credit hour) $5
Technology Fee (per semester credit hour) $5
Building Fee, semester credit students (per semester credit hour) $3
Laboratory Fee (all Lab courses unless otherwise specified) ..... $8-$24
Specialized Instructional Fees,
which vary depending upon program (includes Continuing Education) ..... $8-$400
GED Testing $40
Graduation $25
Transcript and Records (per copy)** (Mail or 24 hour service) $3
Transcript and Records (rush) $5
Institutional Challenge Exam $50
FAA Exam (PVT-COMM AMEL, CFII) $100
FAA Exam (Initial CFI) $150
Return Check Fee $25
Student I.D. or Meal Card Replacement (per card) $5
Schedule Change Fees (per drop action) $5
Late Registration Fee $10

Distance Learning Fees

Formats	Campus-based		Remote Access
Charges	Distance Learning Fee	Other Fees	Distance Learning Fee
On-Line	$50	Technology Fee Building Use Fee	$350***
Video Conference	N/A	Technology Fee Building Use Fee	N/A
Multi-Media	$50	Technology Fee Building Use Fee	$350***
Telecourse	$50	Technology Fee Building Use Fee	$350***

* All tuition and fees are subject to change as approved by the Board of Trustees.
** First transcript provided free of charge.
*** There will be a $50 non-refundable fee for dropping remote access distance learning courses.

Rent, Room & Board, and Deposits*

- Room and board must be paid in full upon moving into the Residence Hall.
- Room reservation deposits are non-refundable.
- Week of Spring Break is not included in cost of room and board.
- Daily occupancy rate without board is only available when the Cafeteria is closed.

International Student Tuition Deposit with application for admission	$500
Residence Hall Property Deposit	$100
College Housing Deposit	$200
Campus Apartments (There is an additional fee for electricity, billed monthly)	
One-Bedroom Apartment, monthly rental	$340
Two-Bedroom Apartment, monthly rental	$390

Student Residence Hall Room and Board Plan, per semester Rent and Five Day Meal Plan, including tax 15 meals, Monday through Friday	
Fall and Spring Semesters, 16 weeks	Summer Semester, 11 weeks
Double Occupancy $1,371	Double Occupancy $971
Single Occupancy $1,671	Single Occupancy $1,271

Daily Occupancy Rate with board (3 day maximum)	$20
Daily Occupancy Rate without board (3 day maximum)	$13
Early Occupancy without board (per day)	$25

When the Board Plan is not in effect (holidays, spring break, etc.), the following rates per student apply:

- Minimum of 10 students (per day) $14
- Minimum of 20 students (per day) $12
- Minimum of 30 students (per day) $9.75

Skills Center Students Only, Room and Board Plan, per month

Five Day Meal Plan, including tax (15 meals per week, Mon-Fri)	$427

* Rent, room and board charges are subject to change as approved by the Board of Trustees.

Installment Payment Plan

CTC now accepts installment payments for Fall and Spring classes that are 16 weeks in length.

- One-half of tuition and fees must be paid prior to the start of the semester. A promissory note must be executed for the balance, with equal payments due before the start of the sixth class week and the eleventh class week.
- All financial aid will be applied to the amount due prior to the multiple payment plan being offered.
- A fee of $20 will be assessed each semester for use of the plan.
- A late fee of $25 will be assessed on any payment not made before the due date.
- A student who fails to make full payment of tuition and fees, including any incidental fees, by the due date may be prohibited from registering for classes until full payment is made. A student who fails to make payment prior to the end of the semester will be denied credit for the work done that semester until full payment is made.
- The installment plan is not available for students registering during late registration.

Refunds

Rent, Room & Board, and Deposits

Rent	Refunded on a pro rata basis after deductions for repair, cleaning, etc.
Room and Board	Non-refundable.
Deposits	Refunded after deduction for repair, cleaning, etc.

Refunds of Tuition and Fees

No tuition refunds will be made except in the case of cancellation or official withdrawal from Central Texas College or from a course. All refunds for tuition will be computed from the date the Application for Withdrawal or Refund is filed with the Records Office (not from the date of last attendance).

- Students who officially withdraw from the Institution shall have their tuition and mandatory fees refunded according to the following schedule:
  - A 100 percent refund is to be made for courses dropped prior to the first class day.
  - During the fall or spring semester or comparable trimester:
    - during the first fifteen class days, 70 percent
    - during the sixteenth through twentieth class days, 25 percent
    - after the twentieth class day, none; and
  - Six-week summer semester:
    - during the first five class days, 70 percent
    - during the sixth and seventh class days, 25 percent
    - after the seventh class day, none
- For flex entry and non-semester-length courses with a census date other than the 12th class day (4th class day for a six-week summer semester)
  - Prior to the first class day, 100 percent
  - After classes begin, see table

Length of Class Term in Weeks	Last Day for 70 Percent Refund	Last Day for 25 Percent Refund
2 or less	2	N/A
3	3	4
4	4	5
5	5	6
6	5	7
7	7	9
8	8	10
9	9	11
10	9	12
11	10	14
12	12	15
13	13	16
14	13	17
15	14	19
16 or longer	15	20

- Class day count begins with the first day of instruction (the first calendar day of the term) and includes all weekdays, Monday through Friday, which are not designated official Central Texas College holidays.
- Tuition and fees paid directly to the Institution by Veterans Administration, Title IV (Financial Aid Programs), a sponsor, donor, or scholarship shall be refunded to the source rather than directly to the student.
- Emergency withdrawal will be considered to be filed as of the date of the emergency. Students must submit written proof of emergency such as military emergency leave orders or medical certification of family emergency. Refunds under emergency conditions will follow the tuition refund schedule listed above.
- First time students at Central Texas College using Title IV funding will have refund calculated at a pro rata formula as required by Department of Education. Appropriate tuition and fees will be refunded to the Title IV program funding the enrollment.

Non-Credit Courses

CTC will not refund tuition except in the case of course cancellation or official withdrawal from a course. The refund policy for non-credit courses offered by Central Texas College will be as follows:

- CTC will process all refunds on the basis of the date withdrawal form is filed with the Records Office.
- For courses that meet for more than one class session, refunds of 100% of tuition and fees will be processed for students withdrawing prior to the second class meeting.
- For courses that meet for only one class session, refunds of 100% will be made only if the application for refund withdrawal is filed with the Records Office prior to the beginning of the class.
- Emergency withdrawal will be considered to be filed as of the date of emergency. Students must submit written proof of emergency, such as military emergency leave orders, or medical certification of family emergency. Refunds under emergency conditions will follow the schedule above.

Pro Rata Refund

The 1992 Reauthorization of the Higher Education Act requires an institution to have a fair and equitable refund policy for students who received federal aid or whose parents borrowed under the Federal PLUS program. Equitable means that the policy must be consistent with the standards approved by the Department of Education.

A fair and equitable refund policy will provide a refund of at least the largest amount under:

- applicable state law;
- pro rata, for any student attending Central Texas College for the first time whose date of withdrawal is at or before the 60 percent (nine weeks into a 16 week semester) point in the period of enrollment for which the student has been charged. (Pro rata means a refund of the amount that was charged by the institution for the time that remains if a student withdraws on or before the ninth week of classes.)

According to the federal regulations, refunds must be credited to the federal program in the following order:

1. Federal Family Education Loan Programs (Stafford, Unsubsidized, PLUS);
2. Federal Perkins Loan Program;
3. Federal Pell Grant;
4. Federal SEOG;
5. Other Title IV Programs; and
6. Finally, the student.

Residency Classification for Tuition Purposes

Residency for tuition purposes is determined by State Law for state-supported colleges and is subject to change by the Texas Legislature. Students are responsible for providing documentation, as required by the Coordinating Board, to establish their proper residency classification. Questions concerning residency should be directed to the Director of Records or Registrar prior to registering. A student who knowingly falsely registers as a resident student is subject to disciplinary action. Students must notify Central Texas College of any change in their residency status.

You may obtain copies of the Rules and Regulations for Determining Residence Status, the Coordinating Board, Texas College and University System, from the Records Office or Registrar. A summary of this publication follows.

Whenever a change occurs in your status affecting your residency classification for tuition purposes at Central Texas College, you must provide residency documentation. Students returning to Central Texas College who have not taken classes for at least 12 months must re-document residency.

Individuals Over 18

If you are 18 years of age or older, move into the state, are gainfully employed within the state for a period of 12 months prior to enrolling in a public institution of higher education, and demonstrate a clear intent to become a Texas resident; you are entitled to classification as a resident. If you are enrolling in an institution of higher education prior to having resided in the state for 12 months immediately preceding time of enrollment, you will be classified as nonresident for tuition purposes and will remain a nonresident until you have remained out of school for 12 consecutive months. If you are classified as a nonresident, you retain that classification until you provide proof of residence to the Director of Records or the Registrar.

Minors and Dependents

Residency of a minor or dependent is based on:

- The residence of the parent who has custody at the time of enrollment (upon divorce of parents)
- The residence of the parent who has claimed the dependent for federal income tax purposes both at the time of enrollment and for the tax year preceding enrollment
- The residence of the parent with whom the dependent has resided for the 12 months prior to enrollment

If you reside with a person other than a parent or a natural legal guardian, who may furnish funds for payment of tuition, fees, or living expenses, this in no way affects your residence classification as a minor.

Military Personnel

If you are in military service, you are presumed to maintain the same domicile (which was in effect at the time of entering service) during their entire period of active service. If you are stationed in another state for military purposes, you are presumed not to establish a domicile in that state because your presence is not voluntary but under military orders.

Change of Domicile

It is possible for members of the military service to abandon the domicile of original entry into the service and to select another.

Establishment of a domicile in Texas requires the filing of a "State of Legal Residence Certificate" with the military declaring Texas as the state of legal residence, followed by 12 months' physical presence in the state. In addition, at least four of the following actions are required:

- Purchasing a residence and claiming it as a homestead
- Registering to vote and voting in Texas elections
- Registering automobiles in Texas and paying personal property taxes thereon
- Obtaining a Texas drivers license
- Maintaining checking accounts, savings accounts, safe deposit boxes in Texas
- Having wills or other legal documents that indicate residence in Texas
- Having membership in professional organizations or other Texas organizations
- Establishing a business in Texas

To prove Texas has remained your domicile when stationed outside of Texas, you must provide evidence that the state of legal residence has remained Texas on military records. In addition, you must present proof of three of the following actions:

- Owning a residence and claiming it as a homestead
- Registering to vote and voting in Texas elections
- Registering automobiles in Texas and paying personal property taxes thereon
- Obtaining a Texas drivers license
- Maintaining checking accounts, savings accounts, safe deposit boxes in Texas
- Having wills or other legal documents that indicate residence in Texas

Residence Classification of Veterans upon Separation from Military

If you enroll in an institution of higher education following separation from military service, you must be classified as nonresident student unless:

- You were a legal resident of Texas at the time of entry into military service and have not relinquished that residence
- You can prove that during military service you have, in fact, established a bona fide legal residence in Texas at a time at least 12 months prior to enrollment, or
- You have resided in Texas other than as a student for 12 months prior to enrollment and subsequent to discharge from service.

Citizens of Other Countries

Aliens who are living in the United States under a visa permitting permanent residence have the same privilege of qualifying for Texas resident status for tuition purposes as a citizen of the United States. Aliens who are permanent residents of the United States (community foreign students) can be classified as a resident for tuition purposes, if they meet the requirements for Texas residency.

Aliens who are in the United States with a non-immigrant visa (F-1 student visa; J-1 exchange student; B-1, B-2 tourist visa, etc.) do not qualify for Texas residency status for tuition purposes. Non-immigrants or nonresident aliens will be classified as international students.

Married Students

As a Texas resident, your marriage does not jeopardize your right to pay the resident tuition rate unless you have taken the necessary steps to claim the out-of-state residence of your spouse. A nonresident who marries a resident of Texas must establish his or her own residency by meeting the standard requirements.

Reclassification

If you have been classified as a nonresident student upon your first enrollment in an institution of higher education, you are presumed to be a nonresident for the period during which you continue as a student. If you have been classified as a nonresident student, you shall be considered to retain that status until you make written application for reclassification in the form prescribed by the institution and are officially reclassified in writing as a resident of Texas by the proper administrative officers of the institution. Application for reclassification must be submitted prior to official census date of the relevant term.

Material to determine the establishment of a domicile in Texas are business or personal facts or actions unequivocally indicative of a fixed intention to reside permanently in the state. Such facts may include length of residence and full-time employment prior to enrolling in the institution, the fact of full-time employment and the nature of such employment while a student, presence in Texas as a part of a household transferred to the state by an employer, purchase of a homestead with substantial down payment, or dependency upon a parent or guardian who has resided in Texas for at least 12 months immediately preceding your enrollment.

Exceptions

- If you have owned property in the state for less than one year, but that property is subject to the ad valorem tax by the Central Texas College District, you may receive a waiver permitting you to pay resident tuition from the date of purchase. Property ownership must be verified.
- Nonresidents who receive an academic competitive scholarship of a least $1,000 per academic year may pay in-district, resident tuition during the registration period in which the scholarship is in effect.

Oath of Residency and Acceptable Documents

Each public institution is responsible for incorporating a core of residency questions and an oath of residency into its student Application for Admission process. The institution must file and maintain a copy of one or more appropriately dated documents which will certify that the student classified as a resident has legal right to such classification. Documents acceptable for this purpose include, but are not limited to:

- Texas high school transcript for the full senior year immediately preceding the full semester enrolled
- Texas college or university transcript (in conjunction with other documents from the institution)
- Employer statement of date of employment in Texas
- Permanent Texas driver's license (at least 1 year old). The license expiration date minus date of enrollment should not exceed three years.
- Texas voter registration
- Lease agreement in Texas which includes student's name and period covered
- Texas property tax payments for the year preceding enrollment
- Canceled checks from a Texas bank
- Utility bills in Texas for the year preceding enrollment
- (For Aliens) Proof of permanent residence classification which is eligible for the establishment of a domicile in Texas
- An income tax form or (if current year federal tax form has not been filed) a signed notarized statement regarding the student's independence or regarding the individual(s) who claim the student as dependent
- A current credit report which documents the student's length of stay and place of residence in Texas
- Other third party documentation which confirms residency status for the 12-month period preceding enrollment
- (For a homeless individual) Documentation may consist of written statements from the office of one or more legitimate social service agencies located in Texas, attesting to the provision of services to the individual over the previous 12-month period.

Each document listed above must include student name and date.

In-District Residency

Once your in-state residency is established, your classification as in-district or out-of-district is based upon where you actually reside or on your ownership of property subject to Central Texas College Ad Valorem taxation. The Central Texas College District (CTCD) lies within the same boundaries as the Killeen and Copperas Cove Independent School Districts.

If you are classified as a Texas (in-state) resident and you reside in or own real estate within the boundaries of the CTCD, you are eligible for the in-district tuition rate. If you meet in-state requirements but reside outside the boundaries of the CTCD, you will pay the out-of-district fee of $5 per credit hour.

To establish in-district residency, you must present one or more of the following types of documentation. This documentation must show an in-district address for six months prior to enrollment. A post office box address is not acceptable for verification of in-district residency.

- A current lease agreement in your name within the boundaries of the CTCD.
- A current Texas Voter Registration Card listing your correct address within the boundaries of the CTCD.
- A current automobile registration showing your correct address within the boundaries of the CTCD.
- A copy of a current deed and/or property tax statement showing ownership of property within the boundaries of the CTCD.
- Printed checks showing your correct address within the boundaries of the CTCD.
- Business or official correspondence at your correct address within the boundaries of the CTCD (i.e.; utility bills, telephone bills, billing statements from credit card companies, etc.)
- A letter from your employer (on company letterhead) verifying your correct address within the boundaries of the CTCD according to their records.
- A copy of your permanent (laminated) Texas Driver's License with current address within the boundaries of the CTCD.

Residency in the Central Texas College Residence Hall or in Married Student Housing does not exempt a student from the out-of-district fee.

Student Financial Assistance

Financial Aid Programs

Central Texas College participates in numerous financial aid programs designed to assist students who demonstrate financial need. If you participate in the various programs for financial aid, comply with the rules and regulations of CTC, as well as those of the program itself, to retain eligibility for the programs. Federal regulations require financial aid recipients to make satisfactory progress toward their current certificate/degree objective. Academic transcripts are monitored and financial aid will be denied when a student falls within the probationary status as defined in the current CTC Catalog. Texas Campus deadlines for application for financial aid are:

Fall:	August 1
Spring:	December 1
Summer:	May 1

Applications will be accepted and processed after these dates, but you may experience delays in receiving eligible funds for registration and books. All applications will be processed in order of receipt in the Office of Student Financial Assistance.

Central Texas College participates in electronic filing of financial aid applications. Bring or mail the application with copies of appropriate tax returns to the Office of Student Financial Assistance. Processing time should take six to ten working days depending upon number of applications received. Inquiries concerning student financial aid should be sent to the Office of Student Financial Assistance.

Satisfactory Progress Standards

If you are receiving financial aid, you are required to make adequate progress toward a degree objective in order to remain eligible to receive financial aid.

The following Satisfactory Progress standards are applicable to all students who receive financial aid at Central Texas College:

- The maximum time frame for the completion of a degree program is the equivalent of six 12-week or 16-week semesters of full-time enrollment. This time frame includes the entire attendance history of a student regardless of whether financial aid was or was not received.
- The time frame for students enrolled full-time (enrolled in twelve or more credit hours) shall be no more than six 12-week or 16-week semesters of full-time enrollment to complete a degree program.
- Three-quarter time students (enrolled in nine to eleven credit hours) shall have eight 12-week or 16-week semesters of three-quarter time enrollment to complete a degree program.
- Half-time students (enrolled in six to eight credit hours) shall have twelve 12-week or 16-week semesters of half-time enrollment to complete a degree program. Satisfactory progress may be met with any combination of full-time or part-time enrollment, including attendance during summer sessions. Students may refer to their degree plan, this Catalog, or see an advisor or counselor for further details regarding their specific academic program.

Selective Service Registration Compliance

An amendment to the Military Selective Service Act (Pub. L. 97-252) requires that, beginning with 1983-84 award year, any student required to register with Selective Service who fails to do so is ineligible for Title IV student financial aid. Among Title IV financial aid applicants, men (citizens and eligible non-citizens except permanent residents of the Trust Territory of the Pacific Islands and the Northern Mariana Islands) who are at least 18 years old and born after December 31, 1959, and who are not currently on active duty with the armed services must be registered.

The law specifically requires that, in order to receive Title IV aid, all financial aid applicants are required to file a Statement of Registration Compliance.

Grants

Federal PELL Grant

The Federal PELL Grant is authorized by the Higher Education Act Amendments of 1972 to assist students in pursuing their first undergraduate degree. The intent of the Federal PELL Grant is to provide a foundation of financial assistance to supplement the cost of postsecondary education. The amount of the Federal PELL award is based on the actual cost of the student's education while attending Central Texas College. Free applications for Federal Student Aid (FAFSA) forms are available in the Office of Student Financial Assistance.

Federal Supplemental Educational Opportunity Grant (SEOG)

This grant, authorized by the Higher Education Act Amendments of 1972, is available only to those students who demonstrate financial need. Grant awards and renewals are made on the basis of demonstrated financial need and satisfactory academic progress. To be considered for the Federal SEOG, a student must complete the FAFSA. This form is available in the Office of Student Financial Assistance.

Texas Public Educational Grant

The TPEG is a State of Texas grant program available to students who are Texas residents and who demonstrate financial need. The student must be enrolled half-time (six semester hours or more) to be considered for this grant. Application for the TPEG is the FAFSA. This form is available in the Office of Student Financial Assistance.

Federal College Work-Study Program

This program provides part-time employment opportunities for students who are in need of employment in order to complete their educational goals. In arranging a job and determining how many hours per week a student may work, the financial aid officer will consider: (1) financial need, (2) class schedule, and (3) student's health and academic progress. To be considered for the Federal CWSP, a student must complete the FAFSA. This form is available in the Office of Student Financial Assistance.

Loans

Federal Perkins Loan Program

Central Texas College participates in the Federal Perkins Loan Program as authorized by the National Defense Education Act of 1958. Interest rate on the loan is 5% per annum, beginning six months after the date on which the borrower ceases to carry at least six semester hours of coursework. The minimum repayment is $30 per month with a maximum repayment period of ten years. Awards are based on financial need and academic performance. Interested students must complete the FAFSA.

Federal Stafford Loans

Undergraduate students may borrow up to $2,625 during their freshman year (0-30 credit hours on the student's Central Texas College degree plan) and $3,500 during their sophomore year (31-60 credit hours on the student's Central Texas College degree plan). These loans are obtained by the student from a lending agency outside Central Texas College such as a bank, savings and loan association, or credit union that participates in the Federal Family Student Loan Program. The government will pay the interest charge while the student is enrolled at least half-time. Repayment begins six months after leaving school.

To obtain a Stafford Student Loan, applicants must maintain a minimum 2.0 grade point average each enrollment period. A minimum cumulative 2.0 grade point average is also required. If the grade point average falls below the minimum requirement, participation will be denied until such time as the grade point average has been raised to the minimum standing. Students must complete the FAFSA. Interested students should obtain detailed information and application forms directly from lending institutions or the Office of Student Financial Assistance.

Repayment

Loans must be repaid. Students who are awarded Stafford Loans (GSL) or Perkins Loans (NDSL) must attend a pre-loan counseling session. This session provides additional information about the loan programs such as monthly repayments, deferments, grace period and cancellations. The applicant will be advised of the disbursement procedures during the counseling session. Students receiving loans must advise the Office of Student Financial Assistance when leaving CTC. Each student must have an exit interview regarding rights, responsibilities, and loan payment scheduling. All programs are administered in compliance with section 504 of the Rehabilitation Act of 1993.

The Central Texas College Scholarship Fund

Central Texas College annually awards several two-year $2,000 scholastic scholarships to qualified high school students. Information regarding this scholarship program may be obtained from the Office of Student Financial Assistance.

Veteran Benefits

Central Texas College's programs are approved for those who wish to attend and receive benefits under the Veterans Readjustment Benefits Act of 1966, Post-Vietnam Era Veterans Educational Assistance Program, the Veterans Educational Assistance Act of 1984, Chapter 106-Reservists Education Bill, Chapter 30-VA Education Bill of 1986, and family members qualified for VA Educational Benefits, Chapter 35.

If you wish to attend with the aid of veteran benefits, inquire at the Office of Veteran Services prior to registration to obtain needed information relative to your enrollment and certification of attendance to the Veterans Administration. All new veteran students must furnish the Veteran Services Office an original copy of DD214 or a copy certified by the County Clerk. You must also furnish copies of marriage certificates, divorce certificates, and family members' birth certificates, if applicable.

You must provide an approved, signed certificate/degree plan to the Veteran Services Office prior to certification of your initial semester. Certificate/degree plans are available through the Guidance and Counseling Office or through departmental advisors. Transfer students should have copies of all previous transcripts for initial counseling sessions. It is your responsibility to inform the Office of Veteran Services of any changes in enrollment status. The monthly rates of payment to veterans are provided for by Public Law 94-502.

You should have military credit evaluated at the close of the first semester or upon successful completion of 12 semester hours, and furnish the Veteran Services Office with a copy of the updated degree plan. Also, any transfer credits from prior education need to be evaluated before the close of the first semester and a copy of the updated degree plan furnished to the Veteran Services Offices.

Records of progress are kept by Central Texas College on veteran and non-veteran students alike. Progress records are furnished to the students, veterans and non-veterans alike, at the end of each scheduled school term.

You must advise the Office of Veteran Services each semester/term of courses in which you are enrolled.

Military Education Benefits

Active duty military personnel may wish to attend Central Texas College under the Military Tuition Assistance Program, which pays for 75% to 90% of tuition. Information and applications for Military Tuition Assistance are available through Military Education Centers or CTC Navy Campus offices.

Vocational Rehabilitation

The Texas Rehabilitation Commission offers assistance for tuition to students who have certain physical disabilities, provided the vocational objective selected by the disabled person has been approved by a representative of the Commission. Application for this assistance should be made to the nearest Texas Rehabilitation Commission Office (refers only to Texas campuses.)

Central Texas College Foundation

The Central Texas College Foundation is a not-for-profit corporation organized under Texas law for the purposes of receiving private gifts to benefit the programs and students of Central Texas College.

For donors with specific philanthropic interests, gifts to the Foundation may be designated for scholarships, faculty development, technology, equipment, or facilities supporting Central Texas College's educational mission. The Foundation may receive gifts in many forms and offers assistance in planning bequests, trusts, and gifts of real estate and personal property.

The Foundation continually develops scholarships to provide assistance to the students of CTC. The current list of scholarships offered by the Foundation is as follows:

Endowed Scholarships:

Agnes Haug Memorial
Air Conditioning Club
Al Ornstein Memorial
Albert C. Gauna Memorial
Betsy & Kyle Hilliard
Central Texas College API
Central Texas College Faculty Senate
Charles F. Haug
Colley Kane Smith Memorial
David O'Neall Memorial
Dennis and Kandace Eakin
Dr. Ray Stanley Laney Memorial
Dr. Stephen and Lydia Vancura
Dr. & Mrs. W.A. Roach
Ed Jasuta Memorial
Eloyse Perry Freeman Memorial
Eugene Smith Memorial
Eugene Rorie Memorial
Foundation
Frank Mayborn
Frankie Baggett
General & Mrs. Robert Shoemaker
Heart O'Texas Federal Credit Union/Juanita C. Williams
Helen Bigham Memorial
J.E. Alexander Memorial
Jane & Sid Wieser Vocational/Technical
Korean/American
Local Heroes
Lott, Vernon & Co., P.C.
Lovett Ledger Memorial
Marvin Mickan
Metroplex Hospital
O'Connell Robertson
Phi Theta Kappa
Phyllis Barron
Reba & Murl Hennigan
Recipients of the Golden Deeds Award
Rena Pearce Coston
Roy Jason Crawford Memorial
Roy J. Smith Memorial
Roy Reynolds
Single Mothers'
Union State Bank
Wickersham-Thomason
William Chris Wilson Memorial
William A. Crawford

Named Scholarship Funds:

Central Texas College Alumni Association
Central Texas College Foundation
Criminal Justice
Earth Science
Fort Leonard Wood Campus
Henderson Garrett
Hispanic Students
Japanese Womens' Club
Jim Woodall/Delta Life & Annuity
Marthalene Swartz-Rowland
Music
Needy Student
Office Administration
Pacific Far East Campus
Retired Sergeant Majors
Sergeant Audie Murphy Club

Academic Policies

Academic Load

You are responsible for determining the academic load you may successfully complete during each semester.

- Full-Time: 12 or more semester hours during Fall or Spring semesters; eight or more semester hours during the ten-week Summer session; or four or more semester hours during the first or second Summer session.
- Normal Load: 16 to 18 semester hours per term.
- Maximum Load: Except as stipulated in a program of study, no student will be permitted to enroll in six academic courses or in more than 18 semester hours without the approval of the Campus Dean. The maximum load for a five-week session is eight semester hours and the maximum credit that a student can earn during the entire Summer session is 14 semester hours. Students enrolled in an eight-week term may take a maximum of nine semester hours. Central Texas College reserves the right to limit the course load carried by any student.
- Minimum Load: No minimum load is required

  International students must maintain a minimum load of 12 semester hours during Fall and Spring semester in compliance with INS regulations.

Students attending college with financial aid or veterans benefits assistance may be required to meet academic course load standards other than those noted above. Details should be obtained from the Office of Student Financial Assistance or the Veteran Services Office prior to registering for courses.

Attendance Policy

Tardiness

You are required to be in your classroom on time. Instructors may choose to lower your grade because of tardiness. Excessive tardiness is disruptive to the educational process and may result in disciplinary action. Due process and the right to appeal will be provided to students subject to disciplinary action. Details can be found in the Student Handbook, available in the Office of Student Life Activities.

Class Attendance

Because absences for any reason negatively affect the learning process, the individual student, and the class, you are expected to attend all classes in which you are enrolled. Class attendance is your responsibility. Regular and punctual attendance at all scheduled classes is expected, and CTC reserves the right to deal at any time with individual cases of nonattendance.

- The effect of absences on grades is determined by the instructor.
- Excessive absences constitute cause for dropping you from class; in such a case, the grade of "FN" may be given.
- In extreme cases, the academic dean may suspend the student from Central Texas College.
- When absence from class is necessary for any reason, it is your responsibility to arrange to make up assignments missed during the absence.
- The decision to allow you to make up work following any absence rests solely with the instructor.
- If you desire to be absent from classes for the observance of a religious holy day, submit a request to each instructor by the end of the first week of the semester. Although you will be excused from classes, you will be responsible for make-up of all work or tests missed. A "religious holy day" refers to a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code.

Absences

- Instructors are required to keep attendance records.
- Each faculty member will inform students of the attendance policy of the course at the initial class meeting.
- You are responsible for understanding the attendance policy for each course in which you enroll and for meeting the attendance requirements.
- Failure to meet the attendance requirements in a course may lower a grade for the semester or may result in failure of the course.

- An administrative withdrawal may be initiated when you fail to meet Central Texas College attendance requirements. The instructor will assign the appropriate grade on the Administrative Withdrawal Form for submission to the registrar.
- Only instructors can authorize an absence. Regardless of the reason for the absence, you are responsible for completing all coursework covered during any absence.

Excessive Absences

Absences from classes for any reason must not exceed CTC standards. Because objectives can vary from department to department and from course to course, the instructor shall inform students of specific course objectives at the initial class meeting. A student who is not meeting course objectives may be withdrawn from the course at the discretion of the instructor.

If you have not attended class by the 12th class day, you will be dropped by the instructor with a grade of "W." You may be administratively withdrawn from any class when your absences exceed a total of four class meetings for a Spring of Fall semester or three class meetings for an eleven-week, eight-week, or six-week semester; and in the opinion of the instructor, you cannot satisfactorily complete the course. The final decision rests solely with the instructor.

Official Withdrawal Policy

It is your responsibility to officially drop a class if circumstances prevent attendance. If you desire to, or must, officially withdraw from a course after the first scheduled class meeting, file an Application for Withdrawal or an Application for Refund at the CTC Records Office or with a Central Texas College representative at the Military Education Center.

- You must sign a withdrawal form.
- Applications for Withdrawal will be accepted at any time before the completion of the 12th week of classes for 16-week courses, the sixth week of classes for eight-week courses, or the fourth week of classes for six-week courses.
- If you are using financial aid, Military Tuition Assistance, VA benefits, or other than personal funds, you may be required to repay tuition and fees to the funding agency. For specific repayment requirements, contact the Office of Student Financial Assistance or the Veteran Services Office. Military Tuition Assistance students should see the Military Education Center. You must withdraw in person after receiving financial aid, Military Tuition Assistance, or Veterans Assistance approval.
- You may not withdraw from a class for which the instructor has previously issued a grade of "F" or "FN" for nonattendance.

Texas Academic Skills Program (TASP)

Based upon Texas Higher Education Coordinating Board (THECB) guidelines, TASP non-exempt students required to remediate based upon TASP score results will be withdrawn from all college-level coursework if they accumulate excessive absences and are administratively withdrawn from their developmental studies course(s).

Self-Paced Certificate Programs

In the self-paced certificate programs, if a student misses more than 25% of the time they have contracted for in a month's time, the student will be dropped for nonattendance and will be required to re-enroll for the class.

Student Classification

Freshman thirty semester hours or less of college-level credit recorded on your permanent record.
Sophomore thirty-one semester hours or more of college-level credit recorded on your permanent record.

Resident Credit

You may earn an associate degree entirely through study at campuses outside the State of Texas or in combination with courses taken at the Texas Campuses. At least 25% of the credits required for the associate degree must be earned by formal study at Central Texas College, regardless of campus location. Courses offered at all Central Texas College campuses meet the same academic standards and carry the same resident credit.

Credit Transfer

To Other Colleges and Universities

Central Texas College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees and certificates of completion. Credits earned at CTC are transferable to other institutions in accordance with policies of the receiving institutions. Students who plan to transfer to other institutions for degree completion or to pursue a more advanced degree are advised to consult with officials of the receiving school for degree requirements and transfer policy.

Resolution Of Transfer Dispute

Generally, colleges and universities will accept general academic transfer courses (courses within the Texas Common Course Numbering System, see University Parallel Courses below). In cases where a public institution of higher education does not accept a course or courses for transfer, the following procedure shall be followed to resolve the transfer dispute:

1. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, that institution shall give written notice to the student and the other institution that the transfer of the course credit is denied.
2. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with the Texas Higher Education Coordinating Board (THECB) rules and/or 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 receives written notice of denial, the institution whose credit is denied for transfer shall notify the Commissioner of the THECB of the denial.

The Commissioner of the THECB 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 institutions.

Both the Associate in Arts and Associate in Science degrees have been developed to accommodate transfer to senior colleges. All of the required curricular courses are equivalent to courses found in the current edition of the Community College General Academic Course Guide Manual and are approved by the THECB.

Maximum Hours for Transfer To Other Colleges

As a general rule, senior colleges will accept a maximum of 66 semester hours of transfer credit from community colleges. If you plan to transfer, do not take more than this number of hours unless you have written permission from the chosen senior college.

University Parallel Courses

University parallel courses are courses offered to fulfill the requirements for Associate in Arts and Associate in Science Degrees. The courses also support the degree requirements for the Associate in Applied Science degrees. The course credits of specific approved curricula will apply toward baccalaureate degree requirements if the courses are a part of the students degree requirements at the senior institution. The university parallel course designations determine both course equivalency and degree applicability of transfer credit on a statewide basis. To facilitate transfer of freshman- and sophomore-level university parallel courses, a common numbering system exists.

The Texas Common Course Numbering System (TCCNS) accomplishes two purposes:

- TCCNS assists students in identifying which courses at one college will meet specific course requirements at another college; and
- TCCNS assists college personnel in identifying courses with comparable content so that certain competencies can be expected upon completion of such courses.

The common course numbering system promotes the successful transfer of coursework among colleges and universities in Texas, making the transfer process easier for students.

The courses with common numbers in this Catalog have the course prefix and course number underlined as shown below:

HIST 2311 Survey of Western Civilization I 3-0-3

It is important to know what courses are recognized as common at the school to which you plan to transfer. You should declare a major prior to attaining sophomore standing at CTC. Each Texas public community college or university will accept transfer of course credit of students transferring from CTC to another accredited Texas public community college or university provided such credits are within the approved transfer curriculum of the student's declared major field at the receiving institution. Use its catalog to gain an understanding of the system at that institution and check with the appropriate campus office if you have questions regarding transfer credit at the receiving institution. A change of major may result in loss of credits earned in a previous program toward a previously planned baccalaureate degree requirement.

Taking a Course Out of Sequence

If you, for scheduling reasons, find it desirable to take an advanced course prior to completing the prerequisite, you must secure, in writing, approval from the department advisor prior to registering for the course. Approval does not release you from final responsibility for satisfactorily completing all course requirements.

Grading Policy

Reporting

Grades are assigned by faculty members based on attendance, class and laboratory performance, test scores, and other departmental academic requirements. You are encouraged to become familiar with each instructor's class syllabus and requirements for grades. Grades are reported by two methods:

- Grade Reports are mailed by CTC to the student's address of record at the end of each term. This method of reporting grades permits students to judge their performance at the end of each term. Students are responsible for notifying the appropriate Central Texas College Records Office of change of address.
- Transcripts are provided by the Transcript Office and are the official report of completed courses, grades, and credit awarded by CTC. For information on ordering transcripts, see page 46.

Grading System

The grading system at Central Texas College is as follows:

Grades		Grade Points
A	Superior	4
B	Above Average	3
C	Average	2
D	Passing, but Unsatisfactory	1
F	Failure	0
I	Incomplete	0
N	No Credit	0
P	Completed	0
W	Withdrawal	0
XN	Nonattendance	0
FN	Nonattendance	0
Y	Incomplete	0

Grade Designations

"D"

Students receiving a "D" grade in prerequisite courses are advised not to enroll in succeeding courses until they complete prerequisite coursework with at least a "C" grade. A "D" grade will not be acceptable toward graduation for any course in the major in Associate in Arts, Science, or Applied Science degree programs.

"F"

Failure may be awarded for lack of academic progress or failure to attend. "F" grades may not be overridden with "W" or "I" grades. Students who elect to repeat a course for which they have received an "F" must re-register, pay full tuition and fees, and repeat the entire course.

"I"-Incomplete
An incomplete grade may be given in those cases where a student has completed the majority of the coursework, but because of personal illness, death in the immediate family, or military orders, is unable to complete all the requirements for a course. Notice of absence with supporting documentation may be required by the instructor. Students are requested to notify instructors in advance of absences whenever possible. The instructor makes the final decision concerning the granting of the incomplete grade.

In awarding the grade of "I," the instructor may set a deadline for completing the remaining course requirements. In no case will the deadline exceed 90 days after the scheduled end of the class. It is the responsibility of the student to arrange with the instructor for the assignment of work necessary to complete the course and change the "I" grade within the time specified. An "I" grade cannot be replaced by the grade of "W." If a student elects to repeat the course, the individual must register, pay full tuition and fees, and repeat the entire course.

In calculating the grade point average for graduation or other purposes, the "I" grade is calculated as an "F." Students must complete course requirements to replace the "I" within the period specified.

"N"-No Credit
The grade of "N" is reserved for use with developmental and designated non-traditional, modular courses and will be assigned to students who have made satisfactory progress, but lack the successful completion of certain modules required for course completion. The grade of "N" indicates that the student must enroll the following semester and complete those modules for a final grade in the course. Re-enrollment requires the payment of usual tuition and fees for the course.

"P"-Completed
The grade of ""P" is reserved for use with developmental and designated non-traditional, modular courses and will be assigned to students who have satisfactorily mastered all the course requirements. When used with credit-granting courses, earned credit hours will be displayed on the transcript. Quality points and grade point calculation are not computed.

"X"-Non-Attendance
The grade of "X" is reserved for use with developmental and designated non-traditional, modular courses and will be assigned to students who have failed to make satisfactory progress due to failure to attend.

"W"-Withdrawal
Students who officially withdraw will receive the grade of "W," provided attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a withdrawal application with Central Texas College before they may be considered for withdrawal.

"Y"-Incomplete
The grade of "Y" is reserved for students receiving "incomplete" in developmental courses only.

Grade Point Averaging

A student's grade point average is calculated by dividing the total grade points by the total attempted semester hours. Grades of "W," "N," "P," "X," and "Y" are not included in these calculations. Grades from developmental courses are not calculated.

Grades and Financial Aid

If you are attending college with Military Tuition Assistance, financial aid, or VA benefits, be familiar with the requirements and possible obligations incurred, particularly upon receiving a grade of "F," "I," "W," "N," "X," or "Y." For additional information, contact the Offices of Student Financial Assistance.

Change of Grades

Students who believe that a computational error occurred in grading immediately contact the instructor of the course in question. Students must bring this matter to the attention of the instructor involved no later than 90 days after the end of the course in order for a grade change to be considered. Administrative personnel of Central Texas College are not authorized to change an instructor's grade.

Repeating a Course

The total hours earned toward a certificate/degree are not increased if a student repeats a course in which a passing grade has already been earned, although both grades remain on the transcript. When a course is repeated, only the last grade earned is utilized in computing the grade point average. Other colleges may compute the GPA in a manner different from Central Texas College. Honors designation at graduation considers all grades, including repeated courses. A student who repeats a course should notify the Records Office for recomputation of cumulative grade point average.

Academic Standards

Student Responsibility to Know GPA

You are expected to be aware of your grade point average. The method of calculation of grade point average is explained above. You are encouraged to compute your grade point average frequently. You are responsible for knowing whether or not you are eligible to continue at Central Texas College. An ineligible student who nevertheless registers in Central Texas College courses shall be withdrawn, and the student shall not receive special consideration for lack of knowledge of scholastic status. To assist the student, scholastic probation or suspension will be printed on the semester grade report. If you receive grades below "C" (2.0) for any course, seek academic advisement to determine the causes of unsatisfactory work and receive recommendations for improving grades in subsequent classes.

Testing and Evaluating

The State of Texas mandates various testing programs for students attending public colleges; and the Commission on Colleges of the Southern Association of Colleges and Schools, the regional accrediting body for postsecondary degree-granting institutions in Texas and throughout the South, requires that accredited institutions establish adequate procedures for evaluating the effectiveness of their instructional programs and the achievement of their educational goals. In carrying out these responsibilities, Central Texas College may require such testing of its students or conduct other such programs of evaluation as may be required by law or deemed necessary or appropriate at the sole discretion of the faculty and administration. Such tests or programs of evaluation may be initiated, implemented, or administered at any time without prior notice to or the approval of any student who is enrolled or who is planning to enroll in Central Texas College.

Honor Roll

Students whose scholastic achievement is outstanding are notified by letter of the "Dean's Honor Roll." The Honor Roll includes the names of all students who have earned a grade point average of 3.5 in 12 or more semester hours of college-level credit taken concurrently during the regular semester or eight semester hours of college-level credit taken during the Summer semester. Students completing 12 or more semester hours of college-level credit during two consecutive eight-week terms with a grade point average of 3.5 or higher receive Honor Roll status.

Honor Societies

Epsilon Delta Pi

Students who have completed at least 15 semester hours, which includes at least six semester hours in computer science, and who meet the scholastic requirements may apply for membership in Epsilon Delta Pi, a national honor society in the computer sciences.

Phi Theta Kappa

Students who have completed 30 semester hours of college credit (at least 12 hours at Central Texas College), who are currently enrolled in at least six semester hours, and who meet the scholastic requirements of the Sigma Iota Chapter may be eligible for membership in Phi Theta Kappa, International Honor Society of Community Colleges.

Graduation Grade Requirements

To graduate from CTC, you are required to have an overall grade point average (GPA) of 2.0, to include a minimum 2.0 at Central Texas College. Associate degree nursing students must have no grades lower than a "C" (70) to receive the Applied Science Degree in Nursing and to be recommended by the Nursing Department Chair for eligibility to apply for the State Board Exam. Associate degrees in Arts, Science, or Applied Science require a "C" for each course in the major. Graduation GPA includes all Central Texas College grades and grades in transfer courses accepted toward the degree. Students at Central Texas College must achieve a 2.0 cumulative GPA to maintain satisfactory progress toward graduation.

Probation and Suspension Policies

Students who fail to maintain a 2.0 cumulative GPA during their initial seven semester hours will be notified of unsatisfactory progress and required to participate in an academic counseling session prior to re-enrollment.

Probation

Students who fail to maintain a 2.0 cumulative grade point average after the first seven semester hours will be placed on academic probation during the next term in which they register.

Students who fail to achieve a 2.0 grade point average during any term after the first seven semester hours will be placed on academic probation if their cumulative grade point average is not 2.0 or above. Academic probation will be removed for students who achieve a 2.0 or better grade point average during their term of probation, and whose cumulative grade point average is 2.0 or better. Students who fail to achieve a 2.0 grade point average during their semester of probation will be placed on suspension and cannot register for classes until they complete the following requirements for returning to class.

Suspension

Suspension will also be imposed for those students who fail to achieve a 2.0 grade point average during any term (except upon completion of the first seven semester hours, at which time probation will be imposed) if their cumulative grade point average was below 2.0 prior to that semester.

Students on suspension who attend classes on Central Campus will be required to take a study skills course. Students who have not passed all three parts of the placement and/or TASP test will also be required to take the study skills class.

Students on suspension who achieve a 2.0 or better grade point average during their term of suspension, and whose cumulative grade point average is 2.0 or higher, will be removed from suspension. Students on suspension who achieve a 2.0 or better grade point average during their term of suspension, but whose cumulative grade point average is below 2.0, will be placed on probation. Central Campus students on suspension who fail to achieve a 2.0 grade point average during their term of suspension will remain on suspension and will be required to take a study skills class.

A student suspended for the first time may petition Central Texas College to re-enter the next semester. For a student who receives a second suspension, the mandatory suspension period is one sixteen-week semester or two eight-week terms. A third suspension requires the student to remain suspended from Central Texas College for two consecutive sixteen-week semesters or four eight-week terms.

In self-paced certificate programs, students will be placed on probation after receiving the second consecutive "N" grade. The student will be required to see a counselor for academic advisement.

In the self-paced certificate program, a student will be placed on suspension after receiving the third consecutive "N" grade. The student may petition Central Texas College for re-entry after the first suspension. If a second suspension occurs, the student will remain suspended for 30 days.

Suspension/probation students who receive financial aid or VA benefits are reported to the Office of Student Financial Assistance or to the Veterans Administration, and must meet financial aid or VA requirements prior to the reinstatement of their financial aid or VA benefits. Students attending self-paced certificate programs under VA educational benefits are limited to one repeat of a course in the certificate. If more than one course must be repeated, VA benefits will not be approved for those courses.

Returning to Class

Students on probation must sign a probation agreement and receive re-entry counseling. Students who have been suspended may be permitted to re-enter Central Texas College on an individual petition basis. Students granted re-entry must complete a re-entry petition agreement, have three counseling sessions during the term, complete courses (including remedial or developmental courses) as directed by the counselor, and provide the Guidance and Counseling Office with written proof that they are maintaining required academic standards on each visit.

Academic Fresh Start

Central Texas College provides its students the "right to an academic fresh start." Through this option, Central Texas College students are permitted to apply for "forgiveness" of coursework completed ten or more years prior to the starting date of the semester in which they apply for "Academic Fresh Start."

For more information, contact the Office of Student Services. Students using VA educational benefits must contact the Veterans Services Office.

Classroom Visitors

Permission to visit a class may be granted by the Campus Dean. Such permission carries with it permission to listen and observe, but not to enter into class discussion or laboratory work. Permission to visit is not to be considered auditing on a full-time basis, nor will permission be granted to allow small children in class. Parents must make arrangements for the care of their children during class meetings. Central Texas College policy does not permit a student to audit courses.

Student Responsibilities

Address Changes

All correspondence from Central Texas College to the student will be mailed to the address provided on the Application for Admission. Any address changes must be made in writing to the Records Office. Students are responsible for all communication mailed to the last address on file.

Name Changes

Provide your legal name on your Application for Admission because this is the name that will appear on your official student record. To change a legal name to a new legal name, submit a copy of the signed court order showing the authorized new legal name. To change a last name after marriage, present a copy of the marriage certificate. A female student who wishes to discontinue the use of her married name and resume the use of her maiden name or a different name, must present a divorce decree or signed court order showing restoration of the maiden name or other names. An affidavit must be provided prior to processing the name change. Submit name change documents and affidavits to the Records Office.

Records Access

In compliance with the Family Educational Rights and Privacy Act of 1974, information classified as "directory information" may be disclosed to the general public without prior written consent from a student, unless the Central Texas College Records Office is notified in writing by the student, prior to the 12th class day of Fall and Spring semesters, and the 4th class day of Summer semester. This statement of non-disclosure will be retained for one year after submission. Release of additional information pertaining to the student record must be authorized in writing by the student.

Directory Information

Name
Local address
Home address
Telephone number
Birth date
Major field of study
Dates of attendance
Degrees and awards received
Most recent previous educational agency or institution attended
Classification
Date of graduation

Access to any other records by persons other than the student will be limited to those persons specified in the statute. Records will be maintained of persons granted such access.

Students may inspect and review their educational records upon request to the appropriate record custodian. For more information, contact the Central Texas College Records Office.

Falsification of Records

Students who knowingly falsify Central Texas College records, or who knowingly submit any falsified records to CTC, are subject to disciplinary action which may include suspension and expulsion from CTC.

Hazing and Disruptive Activities

Central Texas College enforces the Texas state laws prohibiting hazing, disruptive activities, or disruption of lawful assemblies on CTC property. Information regarding these prohibited activities appears in the official Student Handbook, available to regularly enrolled students at orientation sessions or in the Office of Student Life Activities.

Scholastic Honesty

All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all coursework and during examinations. The following are considered examples of scholastic dishonesty:

Plagiarism The taking of passages from the writing of others without giving proper credit to the sources.

Collusion (a) Using another's work as one's own, or (b) working together with another person in the preparation of work, unless such joint preparation is specifically approved in advance by the instructor.

Cheating Giving or receiving information on examinations.

Students guilty of scholastic dishonesty will be administratively dropped from the course with a grade of "F" and subject to disciplinary action.

Alcohol and Other Drug Abuse

You are admitted to Central Texas College for the purpose of educational, social, and personal enhancement. As a student, you have rights and privileges, as prescribed by State and Federal Constitutions, statutes, and policies of the Board of Trustees of the Central Texas College District. With these rights and privileges, you also have certain duties and responsibilities essential for creating an environment where all students can learn how to live productive, fulfilling lives. Substance and alcohol abuse disrupts this environment and threatens not only the lives and well being of students, faculty, and staff but also the potential for educational, social, and personal enhancement. Therefore, it is important for all members of the college community to take responsibility for preventing substance and alcohol abuse.

In recognition of the problems associated with alcohol and other drug abuse, Central Texas College has developed a college-wide drug policy. The policy addresses not only disciplinary sanctions associated with substance and alcohol abuse but also education, prevention, intervention, and treatment activities necessary to help eliminate problems that substance and alcohol abuse pose to the college community.

Possession, use, sale, or being under the influence of alcoholic beverages or having alcoholic beverage containers in any Central Texas College owned facility or at any CTC-sponsored event is prohibited except when specifically designated by the Board of Trustees of Central Texas College.

Through this program, Central Texas College will provide educational support programs which will assist in activities to prevent alcohol and other drug abuse. Information regarding drug and alcohol abuse at Central Texas College locations outside of Texas will be provided at individual campus sites.

To ensure compliance with applicable institutional, state, and federal guidelines relating to the illegal use of illicit drugs and the abuse of alcohol, Central Texas College annually distributes an information flyer to all employees and students which addresses standards of conduct, counseling options, legal sanctions, disciplinary action, and health risks.

Those individuals seeking further information should contact the Substance Abuse Resource Center or the Central Texas College site representative.

Student Discipline

Students are admitted to Central Texas College for the purpose of educational, social, and personal enhancement. Each student has rights, privileges, duties and responsibilities, as prescribed by State and Federal Constitutions and statutes and policies of the Board of Trustees of the Institution. These rights and responsibilities are outlined in the official Student Handbook.

Students who do not adhere to Central Texas College disciplinary policies outlined in the Student Handbook will be subject to disciplinary action by the Director of Student Life or a disciplinary committee.

If disciplinary action is taken, a student will be afforded due process and the right to appeal. Details can be found in the Student Handbook, available in the Office of Student Life.

Summons

On some occasions it will be necessary for a faculty member, counselor, or administrative official to contact an individual student. Any student receiving a summons must respond promptly as requested. A summons may take the form of a call from class or a notice by mail. Failure to respond to a summons renders the student subject to disciplinary action.

Student Services

Guidance and Counseling

As a service to students and to the community, Central Texas College maintains a staff of professional counselors and advisors, in addition to faculty advisors in each instructional program.

The Guidance and Counseling Office can assist you in making decisions regarding your vocational, educational, and personal plans. As a part of this program, counselors assist in interpretation of tests, inventories, occupational and educational information.

Course Planning

Proper planning of courses is important for each student in order to assure that individual objectives may be attained. Guidance in educational planning is available to students and prospective students through the Guidance and Counseling Office and at announced registration periods. If you are undecided as to your major field of study, contact the Guidance and Counseling Office for assistance in course planning before beginning the registration process. Students who have decided on a major field of study should contact the appropriate department chair for assistance in course planning. A listing of department chairs is published in the Schedule Bulletin. You have the final responsibility for a proper and successful educational experience.

Transcripts

Student records are confidential. Convenient forms for ordering transcripts are available from the Records Office and transcripts may be provided only upon your written request. The first transcript is issued free of charge. Graduates are provided an information transcript free of charge upon graduation. The fee of $3 for all other transcripts must accompany your written request. There is an additional cost for less-than-24 hour (rush) service. Requests for transcripts will be honored as soon as possible in the order of receipt. During peak periods, such as graduation, end of semester, and registration; additional time will be needed to process requests. Telephone and E-mail requests will not be honored. It is not acceptable to send or receive facsimile (FAX) transcripts. Refund of overpayment of transcript and record fees will be made only upon written application of the student.

The transcript of college work bearing the Central Texas College seal and official signature is an official copy of your permanent record. Transfer credits from other colleges are not listed on the Central Texas College transcript. You should request transcripts directly from other colleges attended, if the coursework is needed.

Requests for transcripts must be addressed to the Records Office at the Central Campus address listed in the front of this Catalog. Transcript requests should include full name, social security number, date of birth, and last month, year, and location of attendance, as well as the complete address to which the transcript is to be sent.

The registrar may deny your transcript request if you have an outstanding obligation to Central Texas College. The obligation may be due to a library fine, parking ticket, returned check, non-repayment of financial aid, or failure to comply with admissions requirements.

Records of students attending Europe and Pacific Far East Campuses are maintained at branch campus offices in Germany and Korea until the branch campus is informed by the student in writing that the student has moved. Academic records are then transferred to the Records Office at the Central Campus in Killeen, Texas.

Testing Services

Central Texas College provides an extensive testing program for interested students and residents of the area. For further information and testing dates, you are encouraged to contact the Testing Office at the Central Campus address listed in the front of the Catalog.

Entrance Examinations-The ACT (American College Test) is administered by Central Texas College on five national test dates each year. It is recommended that all new students who have not previously taken the ACT or SAT (Scholastic Aptitude Test) take the ACT for guidance purposes.

Texas Academic Skills Program Examination (TASP)-The "Certification Form" of the TASP Examination is uniformly administered state-wide six times each year. Students must submit applications for testing approximately one month prior to the date of administration. The cost of testing is $26 which must be mailed with the application. Central Texas College serves as an official Texas Academic Skills Program test site.

Placement Tests-Those students entering CTC who have not completed the Texas Academic Skills Program examination will be required to take the Placement Test. Placement Tests are offered year-round and students are encouraged to complete testing prior to the published registration dates.

Advanced Standing Examinations-CTC administers College Level Examination Program (CLEP) examinations, which are nationally prepared tests for students desiring to receive credit for knowledge already obtained. By this means, students may accelerate their college program and may take courses at the next higher level. To obtain credit, the student must pass the exam, apply for credit, and have completed a minimum of six semester hours of coursework at Central Texas College with a grade of "C" or higher. Credit will not be awarded if student has previously been enrolled in the specific course. Students must submit a written request before credit will be awarded.

High School Equivalency Examination -Central Texas College offers the General Education Development (GED) examination for those who have not completed a formal high school education.

Institutional Challenge Examinations-Students may request, through the appropriate department chair, permission to take challenge examinations for certain courses. An application for challenging a course must be completed and returned to the Testing Office with the appropriate non-refundable fee. The student will then coordinate with the Testing Office or department for the time and place to take the examination. Students must not have previously enrolled in the course for college-level credit. Those who do not make grade "A" or "B" will not be permitted to repeat the challenge examination for that course at a later time. To obtain credit, the student must pass the examination with a grade of "A" or "B," have completed a minimum six semester hours with a grade of "C" or higher, and submit a request for evaluation.

Test of English as a Foreign Language (TOEFL) (Institutional)-An unofficial form of the Test of English as a Foreign Language (TOEFL) is administered to all international and community foreign students taking the TOEFL Preparation course (ESL/DSLA Program) who wish to practice the test.

English Language Pretests-Azar's Grammar Pretest and the vocabulary and listening sections of the Comprehensive English Language Test (CELT) are administered once a month to all non-English or limited-English speakers for placement into the English as a Second Language Program or for screening before administering the CTC Placement Test.

Other Tests-Central Texas College also administers other tests as may be useful to people of the community. For a complete listing of available tests or additional information, students are invited to contact the Testing Office. Proctoring services are also available.

If special accommodations are needed because of a disability, contact the Testing Office before taking the test.

Evaluation of Previous Education

Non-traditional Education

Central Texas College recognizes that each student's educational needs, goals, and experiences are unique and that individuals are skilled in many areas of college work that are not formally documented on transcripts. It is the policy of Central Texas College to recognize non-traditional learning experiences and to award college credit in all cases where such credit is appropriate. In keeping with this policy, Central Texas College has established the Individualized Career Evaluation Process (ICEP).

The purpose of ICEP is to systematically correlate business, industry, government, and military education received by non-traditional methods with institutional curricular requirements.

All students, including military and former military personnel, are eligible for credit consideration based upon documentation of their previous learning experiences.

The non-traditional methods usually considered applicable toward a degree at Central Texas College are:

- The Defense Activity for Non-traditional Educational Support (DANTES) Courses and Subject Standardized Tests
- College Level Examination Program (CLEP)—both the General Examination and Subject Examination
- Institutional Course Challenge Examinations
- Credit for military schools completed as recommended by the American Council on Education and recognized by Central Texas College
- Credit for military service basic training
- Military Job Training and Experience as recommended by the American Council on Education and recognized by Central Texas College
- American College Testing Program (ACT)
- College Board Admission Testing Program
- Correspondence Extension Courses offered by accredited institutions which are members of the National University Extension Association
- Other to include certain types of civilian training, specialized testing, and work experience

Evaluation Procedures

Curriculum plans outlining accepted transfer and non-traditional credit as well as remaining requirements are available from CTC, Military Education Centers or the Navy Campus advisors upon your written request or submission of evaluation documents.

Evaluation and final certificate/degree plans are provided upon receipt of all official transcripts and documents. Evaluated credit must be validated through successful completion ("C" or "P" grade or higher) of a minimum of six semester hours of traditional credit earned in the Central Texas College system. Students on financial or academic hold will not be eligible for final evaluation of non-traditional educational experiences until the financial or academic hold is cleared.

To apply for evaluation and a final certificate/degree plan, submit an Evaluation Request form to Evaluations, Central Texas College, at the administrative office serving your area. Addresses are listed in the front of this Catalog.

Evaluated credit awarded by Central Texas College applies to its programs of study and may transfer to other institutions according to the policies of the receiving institution. If you are planning to transfer to other institutions, consult with those institutions regarding their policies on acceptance of evaluated credit.

Servicemembers Opportunity College (SOC)

Because of its efforts to serve the educational needs of servicemembers and their dependents, Central Texas College has been designated a Servicemembers Opportunity College. As a member of the Servicemembers Opportunity College Associate Degree (SOCAD-2, SOCNAV-2 and SOCMAR-2) program, Central Texas College has committed itself to fully support and comply with SOC Principles and Criteria. Through this commitment Central Texas College ensures that:

- servicemembers and their family members share in the postsecondary educational opportunities available to other citizens;
- servicemembers and their family members are provided with appropriately accredited educational programs, courses, and services; and
- flexibility of programs and procedures, particularly in admissions, counseling, credit transfer, course articulations, recognition of non-traditional learning experiences, scheduling, course format, and residency requirements, are provided to enhance access of servicemembers and their family members to undergraduate education programs.

SOC Criteria

In support of SOC criteria and service to its military students and their family members, Central Texas College:

- has designed a transfer program which minimizes loss of credit, avoids duplication of credit yet maintains program integrity;
- has established guidelines which follow the general principles of good practice outlined in the Joint Statement on Transfer and Award of Academic Credit;
- accepts transfer credit earned from regionally accredited institutions consistent with servicemembers' and their family members' degree programs;
- requires only 25 percent of Central Texas College coursework to meet residency requirements;
- recognizes as study in residence all credit coursework offered by CTC, regardless of location;
- allows students to satisfy residency requirements with courses taken at CTC at any time during their course of study;
- provides the Individualized Career Evaluation Process (ICEP) to assess learning equivalence and awards credit to qualified students for specialized military training and experience in accordance with the ACE Guide to the Evaluation of Educational Experiences in the Armed Services; and
- provides the Individualized Career Evaluation Process (ICEP), which reflects the principles and guidelines set forth in the statement on Awarding Credit for Extra Institutional Learning, and awards credit for non-traditional learning assessment programs.

SOCAD-2/SOCNAV-2/SOCMAR-2 Degree Completion Agreement

All students can continue their Central Texas College certificate/degree programs regardless of location, through the "credit bank" provisions of the Servicemembers Opportunity College. A student may study at any other regionally accredited college and apply the work toward Central Texas College certificate/degree requirements. Students must complete at least 25 percent of degree requirements with a minimum 2.0 GPA at Central Texas College. Courses taken at other institutions must satisfy the course requirements of the Central Texas College degree programs. SOCAD-2/SOCNAV-2/SOCMAR-2 agreements may be issued after the completion of at least six semester hours of coursework with a 2.0 GPA or six semester hours of "C", "P", or higher at Central Texas College. These should be requested from the administrative office serving the student's location. Addresses are listed in the front of this Catalog.

Students no longer at a Central Texas College location should contact the following:
Central Texas College
Director, Evaluation Services
P.O. Box 1800
Killeen, TX 76540-1800
800/792-3348, Extension 1374

Students completing certificate/degree requirements utilizing credits from other institutions should contact the above address for advance approval of specific courses. Please allow at least 4 weeks for approval.

Career Planning and Placement Services

The Career Planning and Placement Services Office provides career planning and employment assistance services for students and alumni. Prospective students and currently enrolled students can receive assistance to determine their career choices and educational planning through self-assessments and career information.

Career Information:

- Computerized Career Guidance Program (DISCOVER)
- Career files
- Video tapes

Employment Assistance:

- Job listings worldwide
- Internet
- Part-time/full-time job referrals
- Texas Workforce Commission-Computer Linkage for Jobs
- Resume referral
- Employer files and directories
- Job fair/job opportunities/seminars

Job Search Training

- Seminars
- Video tapes
- Reference library
- Resume writing assistance
- Interview techniques
- Video taped "mock interviews"

Educational Planning

- Computerized search for colleges/universities
- Printed information on vocational/technical schools
- Two-year colleges

International Student Services

Services include admissions assistance, placement into the English as a Second Language Program (ESL-DSLA courses), registration, orientation, academic and social counseling, preparation for departure, immigration regulations advising and housing assistance. Central Texas College is not responsible for students' immigration status. It is the responsibility of the student to remain in status with the Immigration and Naturalization Service (INS).

Inquiries should be addressed to the Director of International Student Services at the Central Campus address listed in the front of this Catalog.

Learning Resource Center

Individualized, self-paced, open entry/open exit instruction is available year round. Texts, modules, audiovisuals and supplies are dispensed from the Learning Resource Center. Classes are provided in the areas listed below:

- Adult Basic Education (ABE);
- General Education Development (GED);
- mathematics, reading, and English preparation for college; and
- mathematics and reading instruction for nursing students.

Limited English Proficiency Tutoring (LEP/ESOL)

Tutoring is available at no charge for Vocational/Technical ESL/ESOL students with limited English proficiency.

Project PASS (Partners in Academic Success Services)

Project PASS provides academic support for Central Texas College students. Available services include:

- free tutorial assistance for CTC "declared major" students;
- textbook lending library for vocational/technical students;
- free study skills workshops
  - Stress Management
  - Time Management
  - Note Taking and Reading college textbooks
  - Test Taking/Test Anxiety
  - Building Self-Esteem
  - Term Paper Tips
- Academic Success Seminar—four week non-credit study skills seminar; and
- math, accounting and computer science assistance workshops.

Disability Support Services

The Disability Support Services Program provides individualized assistance to persons who are physically or sensorially impaired. Documentation of the disability is required to receive services. Students are encouraged to explore and successfully pursue a wide range of educational training. Services offered are:

- vocational counseling;
- mobility assistance on a temporary basis;
- assistive device loan service (tape recorders, visual aids, spell checkers, and language masters);
- direct liaison to state and national assistance agencies;
- notetaker, scribe and reader service;
- reading machine for the visually impaired and learning disabled (book-wise and KRM for the blind);
- sign language interpretation services for the deaf;
- test proctoring;
- career exploration and guidance;
- classroom and testing accommodations;
- accessible parking for the mobility impaired;
- accessible classrooms;
- Versapoint Braille Embosser
- Megadots Braille Translator
- accessibility via Telecommunication Device for the Deaf (TDD) 254/526-1378;
- sponsorship of the "We Can Do It Club;"
- priority registration;
- IBM voice activated and laptop computers;
- library learning station (computer, monitor, and printer); and
- computer magnification system to assist the visually impaired.

Most campus facilities are reasonably accessible. Where facilities are not accessible, Disability Support Services coordinates modification and/or accommodation with Director of Facilities Management. Accessible parking is provided for those persons who qualify under the provisions of Vernon's Texas Civil Statutes.

Learning Disability Support Services

Learning Disability Support Services provides assistance to individuals with a documented learning disability. Appropriate documentation of the disability is required in order to access services/classroom accommodations. Learning disabled students are invited to register with the Learning Disability Support Services Counselor prior to registration to take advantage of the opportunity to expand their educational opportunities. Services include:

- Assistance with transition planning for high school graduates
- Informal assessment or screening
- Referrals for diagnostic testing
- Specialized vocational/academic counseling
- Accommodation assessment
- Study and compensatory skills assistance
- Language Master, tape recorder, Irlen color filter, and lap top computer loans
- Video tape tutorial loans
- Use of computer assisted reading devices
- Testing accommodations based on individual diagnostically assessed need

Transportation Assistance Program

- Free service to on-campus classes
- All CTC students are eligible
- Special accommodations for disabled within designated bus route available
- Pick-up points throughout the local area

Single Parent/Displaced Homemaker Support Services

Single Parent/Homemaker Support Services provides assistance, support and encouragement to persons finding barriers to remaining in school or who are coming to college after a long absence from formal education. Some services are available campus-wide, while others are limited to those persons of limited income who are enrolled in vocational/technical degree programs. Services offered include:

- individual counseling;
- career and vocational counseling;
- child care funding assistance for qualified applicants;
- community/social service agency referral;
- workshops;
- textbook loan; and
- newsletter.

Gender Equity Project

The Central Texas College Gender Equity Project is designed to assist students who are enrolled in non-traditional majors successfully achieve their educational goals. Some services are available campus-wide, while others are limited to those persons of limited income who are enrolled in non-traditional vocational/technical degree programs. Services offered include:

- career guidance information;
- workshops;
- project newsletter;
- support group; and
- qualified day care funding assistance.

Campus Life

Social and cultural activities play an important part in the life of the college student. The Student Life Activities Office supports and guides student development by providing opportunities for individual and group interaction, through student organizations, tournaments, field trips, and other social and seasonal activities.

The Roy J. Smith Student Center is the social and recreational center of the campus. The first floor contains the Campus Bookstore, cafeteria, snack bar, and the offices for Disability Support Services, Learning Disability Support Services, Project PASS, Auxiliary Services, Single Parent/Displaced Homemaker Support Services, and Student Life Activities.

The Upper Student Center houses the office of the Coordinator of Student Activities, the Student Government Association Office, a meeting room, a game room, a recreational center, a television lounge, and is the principal site for parties and student organization meetings.

Alumni Association

The CTC Alumni Association exists for two reasons:

- to provide a variety of services for its members such as social interaction, job search, counseling, and life-long access to learning opportunities
- to provide possibilities to achieve community service objectives through their alma mater.

Student Organizations

There are approximately 20 officially recognized student clubs and organizations at CTC. They offer a variety of activities and interests for students, faculty and staff. Student organizations include political, social, special interest, and recreational interests, along with international student clubs, honor societies, and religious organizations. Their activities include discussion meetings, guest speakers, movies, picnics and barbecues, fund-raising activities, and field trips.

All student organizations and activities must conform to the educational objectives and administrative regulations of Central Texas College as stated in official documents and the Student Organization and Sponsors Handbook. All activities and fund-raisers must be cleared through the Student Life Activities Office at least two weeks prior to the event. Club sponsors must ensure that all club funds are deposited and disbursed properly through the club's on-campus Agency Fund Account or local bank account.

Student Role in Decision Making

In accordance with its goal of providing quality educational services to all students, Central Texas College recognizes the importance of utilizing student input regarding instructional program and support services to ensure that the needs of the students continue to be met.

Students have many opportunities to actively participate in Central Texas College's decision-making processes through the Student Government Association, CTC Foundation, Strategic Planning Council, and various advisory committees. In addition, student input is requested through surveys, instruments that comprise an integral part of Central Texas College's self-study and strategic planning procedures.

Results from these evaluations are compiled and analyzed to identify specific areas where changes are needed and to plan appropriate topics for professional development workshops.

Providing opportunities for student input in decision-making processes, Central Texas College strives to ensure that its students become leaders in their professions and communities.

KNCT-TV & KNCT-FM

Central Texas College owns and operates a full power UHF television station, KNCT, which is affiliated with the Public Broadcasting Service (PBS). The station broadcasts on channel 46 and is carried on all local cable systems. KNCT FM broadcasts at 91.3 MHZ providing easy listening, classical and jazz music. The stations also serve as a laboratory facility for students enrolled in the Telecommunications Degree Plan. The stations are located in building 109 on the Central Campus.

Child Development Center

Central Texas College has established a Child Development Center to serve as a laboratory where CTC students can obtain practical experience in child care and early childhood education programs. The Center, located on Clear Creek Road, is licensed to care for 60 children. Members of the community, college students, faculty and staff are welcome to enroll their children in this program.

The Center has a qualified staff which provides a safe nurturing environment and developmentally appropriate activities for children ages 2 1/2 - 5. The center is accredited by the National Academy of Early Childhood Programs and meets the emotional, social, physical and intellectual needs of children.

Food Service

The Central Texas College food service facilities are housed in the Roy J. Smith Student Center. Their aim is to serve well-balanced and nutritional meals at the lowest cost. The cafeteria line provides full meals or a la carte entrees Monday through Friday. The snack bar offers fast food grill items, snacks and beverages seven days a week. Both facilities are open to the public. Commuter meal cards are available for purchase from the Food Service Office.

Students and employees are encouraged to make suggestions or recommend changes regarding the CTC food service through the Food Service Advisory Committee, comprised of students, faculty and staff.

Each residence hall student is required to purchase the five day, 15 meal plan. The board plan begins on the first day of classes and ends on the last day of the semester. The board plan is valid for use only by the purchaser. Each student will be issued a picture I.D. card ($5 charge for replacement). The meal card must be presented to the cashier before each meal. Students who leave their meal cards in the residence hall will be required to either pay for meals or go back and get their card prior to eating.

Bookstore

The Campus Bookstore, located in the Student Center on the Central Campus, carries new and used textbooks, supplies, trade books and general merchandise for the convenience of students, faculty and staff.

Intramural Sports

Central Texas College intramural sports offers a wide range of recreational opportunities for men, women, and co-recreational participants. The Intramural Office conducts league play in flag football, volleyball, basketball, and softball. Competition in individual activities such as tennis, golf, bowling, running, badminton, and basketball skills are also provided.

Students from CTC's intramural sports programs also enter competitions with other colleges. The Lone Star Showdown Collegiate Basketball Championship, the Schick Super Hoop 3-on-3, the Texas ASA Collegiate Intramural Softball Championship, and Regional Collegiate Bowling Tournaments are some of the annual competitive events. A complete schedule of activities is available in the Intramural Office in the gymnasium.

Gymnasium

The Central Texas College gymnasium is open during specified times for students' use. Courts are available for basketball, volleyball, badminton, and tennis. A weight room, equipped with free weights, weight machines, bicycles, treadmill, and stair climber is also available. Physical Education staff members are available to issue equipment and assist students who wish to use the facilities.

CTC Identification cards are required for use of equipment and facilities.

Health Services

Central Texas College does not employ a nurse or physician. However, first aid kits are available in the Office of Student Life Activities (Student Center Building 106, Room 100) or the Campus Police Office (Administrative Computer Center Building 139, Room 202). Further information is available in the Student Handbook.

Housing

Residence Hall

Central Texas College operates a co-ed Residence Hall for 120 full-time students. Supervision is provided by a full-time Residence Hall Manager who is responsible for daily operations as well as educational and social programming. Each student residing in the Residence Hall is responsible for respecting the rights of others and for maintaining an atmosphere conducive to study and to harmonious social life. The Residence Hall is closed during the intervals between semesters. The Residence Hall remains open for students' convenience during the Thanksgiving holiday and Spring Break.

Requests for information about the Residence Hall or an application for a room should be addressed to the Residence Hall Manager. Room requests are accepted up to six months in advance of the semester of expected enrollment at CTC. Applications are honored by semester on a first-come first-served basis.

The Residence Hall is accessible to students with disabilities. Students requiring a room that accommodates a disability should notify the Residence Hall Manager. Documentation of the disability should be made available to the office of Disability Support Services in Building 106 for verification purposes.

A non-refundable reservation deposit of $100 is required with each room application. Once you moved into your room, the reservation deposit becomes a security/damage deposit. Upon written request, the security/damage deposit is refundable when the student vacates the room provided that the room is clean and undamaged, all keys are returned, and there is no outstanding balance on the account.

The cost of living in the Residence Hall includes both room and board. The board plan begins on the first scheduled class day and ends on the last scheduled day of final exams. The board plan does not include the days during either the Thanksgiving holiday or Spring Break. In the event a student leaves the Residence Hall prior to the end of the semester, room and board charges are not refundable.

Married Student Housing

Student apartments, located on the Central Campus, are available for married couples and single parents with children. One and two-bedroom, unfurnished apartments are available for rent. Tenants are billed for electricity monthly. Local telephone is provided at no charge and cable television is available in each apartment at the tenant's expense. Long distance charges are the responsibility of the tenant.

Those interested in housing may apply through the Auxiliary Services Office. The Auxiliary Services Office is located in Building 106.

Certain apartments have been made accessible to students with disabilities. Students needing an accessible apartment should notify the Auxiliary Services Office. Documentation of the disability should be made available to the office of Disability Support Services in the Student Center for verification purposes.

Parking

Free parking is available to students who desire to bring their cars to the campus. Each student who drives and parks a car on campus will be required to register the car with Central Texas College. Vehicle registration is conducted throughout registration periods. At other times, vehicles may be registered at the Campus Police office in Building 139 (Administrative Computer Center). Students, faculty, and staff will be required to park in designated parking areas. Parking and traffic regulations are set forth in detail in the Central Campus Student Handbook.

Library

The Oveta Culp Hobby Memorial library is housed in a centrally located building overlooking the duck pond. More than 450,000 books, microforms, audio/visual materials, and periodical subscriptions support the college curriculum and provide general reading for students, faculty, staff, and patrons from the community at large. Open shelves allow free access to all materials except audio/visual materials and back issues of periodicals. The library offers a variety of electronic resources, including CD-ROM indexes, online databases, and access to the Internet. Via the Internet, an automated system provides off-campus access to the card catalog and selected periodical indexes. Bibliographic instruction services include general library tours, subject-oriented lectures and tours given to classes at faculty request, as well as a 20-minute audio-cassette tour. A computer lab, operated jointly with the Communications Department, provides word processing and spreadsheet software along with Internet access. Other services include personal assistance at the reference desk, coin-operated photocopiers, typewriters, and Interlibrary Loan services to borrow materials which are not owned by the library.

Copying Service

Duplicating services may be purchased at the Library, Student Center, and Nursing and Science Building through coin-operated service.

AROTC Affiliated Programs

The Army Reserve Officer Training Corps (ROTC) is designed to provide courses of military instruction which will permit volunteer, selected, male and female college students to prepare themselves for commissions as second lieutenants in the United States Army Reserve while they pursue academic courses leading to baccalaureate degrees. Specific courses are available to Central Texas College students through concurrent enrollment arrangements at the University of Texas at Austin and may also be transferred to other universities with an advanced ROTC program. These courses may be taken without military obligation. ROTC courses will be treated as hours in residence at Central Texas College and may be used for elective credit in some programs. For further information contact the Guidance and Counseling office at Central Texas College 254/526-1104 or the Military Science Department at the University of Texas at Austin 512/471-5919.

Certificate and Degree Requirements

Degrees Offered

Central Texas College confers the Associate in Arts, the Associate in Science, the Associate in Applied Science or the Associate in General Studies degrees upon students who have successfully completed all the minimum and specific requirements for graduation. The minimum requirements for each degree follow. To earn a degree, you must also complete the specific degree requirements in the curriculum plan for your major field of study as shown in the programs of study. Except for the Associate in General Studies degree, you may not use the minimum requirements listed to "tailor" your own degree. It is your responsibility to apply for the degree and pay the appropriate fee by the application deadline listed on page 61. Each degree candidate must earn a minimum of 25% of coursework in traditional study at Central Texas College. No designation of a program discipline will be written on the face of any Central Texas College degree or certificate.

A person may initially be awarded one degree from Central Texas College. If you wish to be awarded a second degree, satisfy all requirements for the second degree, including at least 12 additional semester hours of traditional courses in residence at Central Texas College after degree requirements have been met. This requirement is in addition to those requirements already completed for the award of the first degree. The Associate in General Studies degree may not be awarded more than once to any student.

Developmental Studies

The developmental studies courses offered by Central Texas College are designed to provide a means for students to remove specific deficiencies or provide refresher coursework prior to enrolling in academic, occupational, or technical programs.

Students on academic probation or suspension may be required to complete developmental studies courses to satisfy probation or suspension readmission requirements.

Developmental studies courses may not be used to satisfy degree requirements and cannot be counted in the grade point average at Central Texas College.

Tech Prep and Enhanced Mastery Certification

Central Texas College participates in the Texas state-wide Tech Prep initiative. The Tech Prep degree curriculum awards credit to entering freshmen whose high school has entered into an articulation agreement with CTC and has a TEA approved articulation plan. Central Texas College will award college credit to those students who have successfully graduated from an approved high school tech prep graduation plan and have completed six semester hours in residency with a grade of "C" or higher at the Central Campus. ~~Additionally the student has the option of receiving enhanced mastery certification by completing the appropriate courses as specified by the post secondary degree plan.~~

Central Texas College has developed with independent school districts, and received approval by the Texas Higher Education Coordinating Board, the following Associate Degrees with Enhanced Mastery Certification in:

Agriculture Science
Automotive Service and Repair
Automotive Body Repair
Business Management
Computer Science
Criminal Justice
Diesel Mechanics
Early Childhood Professions
Graphics and Printing
Hospitality Management
Maintenance Technology
Office Management
Welding
Word Processing

Currently Pending Coordinating Board Approval:
Administrative Secretarial
Agriculture Production
Marketing and Sales Management
Television/Radio/Telecommunications

Any student who completes an AAS degree in any of the above programs may enroll in and pursue an enhanced mastery certification in that program. Interested students should see the Department Chair.

Certificates of Completion

A Certificate of Completion will be awarded to students who fulfill the curricular requirements of special courses and programs. Minimum residency requirement is 25% or 12 semester hours, whichever is greater. Unless the student is in a TASP exempt certificate program, all sections of the TASP test must be passed. GPA requirements are the same as degree programs.

Core Curriculum

In the spirit of accomplishing Central Texas College's mission, the core curriculum experience will prepare students to learn effectively through their college years so that they carry these aptitudes for learning into their life careers. It is the goal of Central Texas College to graduate well-educated men and women who are articulate, interested in lifelong learning and capable to become creative citizens. The core curriculum design and implementation will also facilitate the transferability of lower division courses between Central Texas College and universities.

Degree Requirements

Associate In Arts Degree

Students should coordinate with the senior college to which they intend to transfer to ensure that the courses they take at Central Texas College will fulfill degree requirements there. To receive an Associate in Arts degree, students must complete a minimum of 64 semester hours which must include the following:

- Twelve semester hours of communications to include:
  - ENGL 1301 and 1302
  - Three semester hours of ENGL 2322, 2323, 2327, 2328, 2332 or 2333
  - Three semester hours of speech
- Three semester hours of humanities or fine arts (see page 64)
- Three semester hours of Mathematics, MATH 1314 or higher
- HIST 1301 and 1302
- GOVT 2301 and 2302
- Eight semester hours of foreign language (1411, 1412 sequence)
- Eight semester hours of natural science
- Four semester hours of physical education from activity courses
- A minimum of three semester hours of computer instruction (see page 64)
- A minimum of 25 percent of semester hours credit earned within the Central Texas College System
- All required courses in the major as listed in this Catalog;
- Satisfy:
  - A minimum overall grade point average of 2.0 ("C" average)
  - A minimum ("C") on each course in the major
  - A minimum of 2.0 ("C") with Central Texas College
- A passing grade on all sections of the "Certificate Form" of the TASP test*
- Meeting all other Central Texas College and departmental requirements
- In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts degree requirements when approved by the appropriate department chair.

* This does not apply to any student who has earned three or more semester credit hours of college credit prior to the Fall Semester of 1989.

Associate In Science Degree

Students should coordinate with the senior college to which they intend to transfer to ensure that the courses they take at Central Texas College will fulfill degree requirements there. To receive an Associate in Science degree, students must complete a minimum of 64 semester hours which must include:

- Twelve semester hours of communications to include:
  - ENGL 1301 and 1302
  - Three semester hours of ENGL 2322, 2323, 2327, 2328, 2332 or 2333
  - Three semester hours of speech
- Three semester hours of humanities or fine arts (see page 64)
- HIST 1301 and 1302
- GOVT 2301 and 2302
- Twelve semester hours of laboratory science (I and II sequence)
- A minimum of three semester hours of computer instruction (see page 64)
- Six semester hours of mathematics, MATH 1314 or higher
- Four semester hours of physical education from activity courses
- A minimum of 25 percent semester hours of credit earned within the Central Texas College System
- All required courses in the major as listed in this Catalog
- Satisfy:
  - A minimum overall grade point average of 2.0 ("C" average)
  - A minimum ("C") on each course in the major
  - A minimum of 2.0 ("C") with Central Texas College
- A passing grade on all sections of the "Certificate Form" of the TASP test*
- Meeting all other Central Texas College and departmental requirements
- In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Science degree requirements when approved by the appropriate Department Chair.

* This does not apply to any student who has earned three or more semester credit hours of college credit prior to the Fall Semester of 1989.

Associate In General Studies Degree

Students planning to attend a senior college should coordinate with that senior college to ensure that the courses they take at Central Texas College will fulfill degree requirements there. To receive an Associate in General Studies degree students must complete a minimum of 64 semester hours which must include:

- Communications to include either:
  - ENGL 1301 and three semester hours of oral communications, or
  - ENGL 1312
- Three semester hours of humanities or fine arts (see page 64)
- Three semester hours of mathematics, MATH 1314 or higher
- HIST 1301 and 1302
- GOVT 2301 and 2302
- Three semester hours of computer instruction (see page 64)
- Two semester hours of physical education from activity courses
- If the major is music, journalism, or commercial art, all required courses in the major as listed in this Catalog must be completed
- A minimum of 25 percent of semester hours credit earned within the Central Texas College System
- A minimum of overall grade point of 2.0 ("C" average), to include a minimum 2.0 ("C" average) on all courses taken with Central Texas College
- Meeting all other Central Texas College and departmental requirements
- In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in General Studies degree requirements when approved by the appropriate Department Chair
- A passing grade on all sections of the "Certificate Form" of the TASP test*

* This does not apply to any student who has earned three or more semester credit hours of college credit prior to the Fall Semester of 1989.

Associate In Applied Science Degree

Students must complete the specific degree requirements in the degree plan for their major field as shown in the program of study. The degrees consist of a minimum of 64 semester hours and will include:

- Communications to include either:
  - ENGL 1301 and three semester hours of oral communications, or
  - ENGL 1312
- Three semester hours of humanities or fine arts (see page 64)
- Three semester hours of mathematics, MATH 1314 or higher, except for the Associate Degree Nursing program
- Three semester hours of social or behavioral science (see page 64)
- Three semester hours of computer instruction (see page 64)
- A minimum of 36 semester hours of technical courses in the major or a closely related field
- A minimum of 25 percent of semester hours credit earned within the Central Texas College System
- All required courses in the major as listed in this Catalog
- Satisfy:
  - A minimum overall grade point average 2.0 ("C" average)
  - A minimum ("C") on each course in the major
  - A minimum of 2.0 ("C") with Central Texas College
- A passing grade on all sections of the "Certificate Form" of the TASP test*
- Meeting all other Central Texas College and departmental requirements

Students may be required to repeat major courses in their field of study if graduation is not accomplished within seven years after courses are completed.

* This does not apply to any student who has earned three or more semester credit hours of college credit prior to the Fall Semester of 1989.

Graduate Guarantee Program

Transfer Credit

Central Texas College guarantees to its Associate in Arts and Associate in Science students who have met the requirements for the degree, beginning May 1992, and thereafter, that course credits will transfer to other public-supported Texas colleges or universities, provided the following conditions are met:

- Transferability means acceptance of credit toward a specific major and degree at a specific institution. These three components must be identified by the student during the application for admission process prior to the first semester of enrollment at Central Texas College.
- Limitations on total number of credits accepted in transfer, grades required, relevant grade point average, and duration of transferability apply as stated in the general undergraduate catalog of the receiving institution.
- Transferability refers to courses in a written transfer degree plan in the student's file.
- Only college-level courses with Community College Academic Course Guide Manual-approved numbers are included in this guarantee.

If all the above conditions are met, and a course or courses are not accepted by a receiving institution in transfer, the student must notify the Dean of Student Services at Central Texas College within ten days of notice of the transfer credit denial so the "transfer dispute resolution" process can be initiated.

If credit denial is not resolved, Central Texas College will allow the student to take tuition-free alternate courses, semester hour for semester hour, which are acceptable to the receiving institution, within a one-year period from the granting of the degree at Central Texas College. The graduate is responsible for payment of any fees, books, or other course-related expenses associated with the alternate course or courses.

Students are urged to consult the catalog of the institution to which they may transfer for the detailed information concerning coursework transfer. This catalog should be used by students as the basis for course planning. Courses taken in developmental studies will not satisfy degree requirements at the receiving institution.

Guarantee for Job Competency

If a recipient of an Associate in Applied Science degree or Certificate of Completion is judged by his or her employer to be lacking in technical job skills identified as exit competencies for his or her degree program, the graduate will be provided up to 12 tuition-free credit hours of additional skills training by Central Texas College under the conditions of the guarantee policy.

Special conditions which apply to the guarantee include the following:

- The graduate must have earned the Associate in Applied Science degree or Certificate of Completion in May 1992 or later in a technical, vocational, or occupational program identified in this Catalog.
- The graduate must have completed requirements for the Associate in Applied Science degree or Certificate of Completion with the Central Texas College system, with a minimum of 75 percent of credits earned at Central Texas College, and must have completed the degree or certificate within a five-year time span.
- Graduates must be employed full-time in an area directly related to the program concentration as certified by the Director of Career Planning and Placement.
- Employment must commence within 12 months of graduation.
- The employer must certify in writing that the employee is lacking entry-level skills identified by Central Texas College as program exit competencies and must specify the areas of deficiency within 90 days of the graduate's initial employment.
- The employer, graduate, Dean of Student Services, Director of Career Planning and Placement, and appropriate department chair will develop a written educational plan for retraining.
- Retraining will be limited to 12 credit hours related to the identified skills 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, fees and other course-related expenses.
- The guarantee does not imply that the graduate will pass any licensing or qualifying examination for a particular career.

A student's sole remedy against Central Texas College and its employees for skills deficiencies shall be limited to 12 credit hours of tuition-free education under the conditions described above. Activation of the Graduate Guarantee Program may be initiated by the graduate by contacting the Dean of Student Services within 90 days of the graduate's initial employment.

Graduation

Application for Certificate or Degree

Central Texas College awards certificates and degrees each year in May, August, and December. Requests for Certificate and Requests for Degree, with appropriate non-refundable fees, must be submitted to the Guidance and Counseling Office by:

	Deadline
Fall Semester for December Graduation	October 1st
Spring Semester for May Graduation	February 1st
Summer Semester for August Graduation	June 10th

All Central Texas College entrance, course, and degree requirements must be completed prior to a certificate or degree award. Official transcripts or GED scores from previously attended institutions, if applicable, must be on file in the Central Texas College Records Office before the certificate or degree is issued.

Any student who fails to file by the above listed graduation deadlines will be processed in the next degree order time frame. No student will be denied a graduation application. The graduation date on the certificate or degree must conform to the dates listed above.

Students applying for graduation who do not complete remaining degree requirements on or about the graduation date will be declared non-graduates and will forfeit the fee. Students declared non-graduates will be required to reapply for graduation and pay the appropriate graduation fee as published in this Catalog.

Students applying for a Skills Center self-paced program Certificate of Completion must apply through the Skills Center Counseling Office in the Vocational Skills Center Building 118, Room 14.

Replacing a Lost Certificate or Degree

If a certificate or degree has been lost, stolen, or damaged, a replacement may be obtained at the Guidance and Counseling Office. An appropriate fee is required to replace a certificate or degree.

Commencement

Central Texas College holds one consolidated graduation exercise annually, at the end of the Spring semester. Degrees and certificates will be awarded three times a year—May, August, and December. All students who expect to graduate with a degree or certificate at the end of the Spring semester must be measured for their cap and gown in order to participate in the ceremony.

Graduation With Honors

Candidates for degrees for Central Texas College may graduate with highest honors or honors based on the following criteria:

- To graduate with honors, a candidate must have a 3.5 grade point average on a 4.0 scale with no grades below "B" on all coursework taken. In computing the candidate's grade point average for honors, the grades in all courses taken at Central Texas College as well as courses transferred from other accredited institutions of higher learning are included. A repeated course will not clear the graduate for honors; however, the GPA will reflect only the repeated course in the final GPA.
- In any graduating class, the student(s) with the highest grade point average and who meets all other requirements above will be designated as graduating with highest honors.
- Public recognition for graduating with honors or highest honors is conferred only when the student participates in the formal commencement ceremony.
- To qualify for honors, students must have earned a minimum of 30 semester hours of traditional study with Central Texas College. Grades of "P" will not be considered when determining the minimum 30 semester hour residency requirement.

Programs of Study

Program Listings

Curriculum plans for various degrees and certificates are listed alphabetically on the following pages. Course descriptions for all courses offered are listed in alpha-numeric order by course prefix. Many of the curricula presented on the following pages have been designed for students who wish to transfer to a senior college or university. Central Texas College counselors and advisors are available to assist the student in choosing from these suggested programs or in working out special arrangements to meet particular educational plans. It is your responsibility to monitor program offerings and follow the published degree plan requirements. Any deviations from listed courses must be approved in writing by the department. If you plan to transfer to a senior college or university and are taking courses that lead to an Associate in Arts or an Associate in Science degree, refer to the degree requirements on pages 58-59.

Although academic counseling is available, it remains your responsibility to determine the major area of study, the senior college or university to which you wish to transfer, and the required courses and their prerequisites.

Program and Course Availability

Programs of study displayed in this Catalog are offered when sufficient interest indicates a level of enrollment required for program continuation. To enter specific programs of study, seek confirmation of program availability.

Not all courses are available every semester due to the specialized nature of the course content, equipment requirement, or facility availability. Consult the Schedule Bulletin published each term for courses offered. Central Texas College reserves the right to cancel offered courses when insufficient enrollment or other circumstances require such action.

Prerequisite Courses

Be familiar with the course descriptions. If the course description indicates a prerequisite, the prerequisite should be met prior to registering for the advanced course.

For example, ENGL 1302 - Composition and Rhetoric II requires that ENGL 1301-Composition and Rhetoric I be successfully completed prior to registering for ENGL 1302.

If you cannot schedule prerequisites, obtain prior approval to enroll in these courses from their department chair. Failure to obtain approval could result in loss of credit toward your degree.

Semester Credit Hours

The three numbers following (to the right of) the course title indicate: (a) the hours per week the class meets for lectures, (b) the number of laboratory hours required per week and (c) the credit hours awarded for successful completion of the course. One semester hour of credit represents one hour of lecture time per week for 16 weeks; one semester hour of credit also represents two to four hours of laboratory time per week for 16 weeks. Lecture and lab proportions may vary depending on the nature of the course.

For example, ATBR 1403, Roughing and Alignment I, 3-3-4, has three hours of lecture per week conducted over 16 weeks and three hours of laboratory per week conducted over 16 weeks with four hours of credit awarded for successful completion. This weekly requirement is adjusted to compensate for terms/sessions/semesters with lengths other than 16 weeks. For instance, 3-0-3 for an eight-week term would require six hours of lecture per week, and 2-4-3 would require four hours of lecture and eight hours of lab per week.

Technical Electives

Technical electives are courses designed to strengthen the major area of the student's program.

Approved Electives

Approved electives are courses which, although not specifically related to the major, are designed to broaden the student's exposure to various disciplines considered supportive of the program's objectives.

Special Electives

Many programs of study have Humanities/Fine Arts and Social/Behavioral Science elective courses that can be used to satisfy elective requirements. Some courses can be used as either a Humanities/Fine Arts or Social/Behavioral Science elective as stated below. The special electives are listed below.

Humanities/Fine Arts Electives

ANTH 2351	Cultural Anthropology
ARTS	(all ARTS courses except ARTS 2313, 2314, 2356, and 2357)
DANC 2304	Dance Appreciation
DRAM 2366	Motion Picture Art
GEOG 1302	Cultural Geography
GEOG 1303	World Regional Geography
HIST 2381	African-American History
HUMA 1315	Introduction to Fine Arts
SPCH 2341	Oral Performance of Literature

Music courses (MUSI)
Foreign Language courses
HIST 2311 and 2312 Survey of Western Civilization I and II
Literature courses to include ENGL 1302 when it is not used to satisfy the English requirement
Philosophy courses to include Religion (PHIL)

Social/Behavioral Science Electives

AGRI 2317	Introduction to Agriculture Economics
ANTH 2301	Physical Anthropology
ANTH 2351	Cultural Anthropology
ECON 2301	Macroeconomics
ECON 2302	Microeconomics
CRIJ 1307	Crime in America

Geography courses (except GEOG 1302 and 1303)
Government courses (GOVT)
History courses (HIST)
Psychology courses (PSYC)
Sociology courses (SOCI)

Computer Science/Microcomputer Technology Electives

AGRI 1309	Computers in Agriculture
CMET 1403	Computer Systems and Operational Programming
CMET 2402	Computer Circuit Analysis
CMET 2411	Theory of Interface Devices
DRDS 2410	Computer-Aided Drafting I
DRDS 2411	Computer-Aided Drafting II
FRMG 2309	Computers in Agriculture
ARTS 2313	Computer Illustration and Advertising

Computer Science courses (COSC)
Microcomputer Technology courses (MISC)
Word Processing courses (WOPO)

2 Plus 2 Degree Plans

2 Plus 2 articulations are agreements between Central Texas College and senior institutions that permit CTC students to "lock in" to a four-year degree at the time they register at CTC. The students are guaranteed that every course they take at CTC will transfer to the senior institution and that the degree requirements will not change once their 2 Plus 2 degree plans are signed. The following is a list of senior institutions and the 2 Plus 2 degree plans they offer:

University of Central Texas

Bachelor of Science

Applied Science
Aviation Science-Professional Pilot
Aviation Science- Aviation Management
Aviation Science-Computer Science
Business Administration-Marketing Option
Business Administration-Human Resource Option
Business Administration-Computer Science
Business Administration-Business Composite Option
Business Administration with Secondary Teaching Certificate
First Teaching Field-Business Second Teaching Field-Computer Information Systems
Business Administration with Secondary Teaching Certificate
First Teaching Field-Business Administration Second Teaching Field-Government
Business Administration with Secondary Teaching Certificate-Business Composite
Computer Science
Computer Information Systems with Secondary Teaching Certificate
First Teaching Field-Computer Information Systems Second Teaching Field-Government
Computer Information Systems with Secondary Teaching Certificate
First Teaching Field-Computer Information Systems Second Teaching Field-Business Administration
Criminal Justice
Government
Government with Secondary Teaching Certificate
First Teaching Field-Government Second Teaching Field-Computer Information Systems
Government with Secondary Teaching Certificate
First Teaching Field- Government Second Teaching Field-Business Administration
Interdisciplinary Studies-Elementary Education Certificate- History Specialization
Liberal Studies
Psychology
Social Studies Composite with Secondary Teaching Certificate

Bachelor of Social Work

Tarleton State University

Bachelor of Applied Arts and Sciences

Distribution and Marketing or Office Occupations

Bachelor of Arts

Art
Art with Secondary Teacher Certification
English with Secondary Teacher Certification (Option I)
English with Secondary Teacher Certification (Option II)
English with Secondary Teacher Certification (Option IV)
English without Certification
English-Communication Emphasis
Government
Government with Secondary Certification (Option II)
History
History with Secondary Certification (Option II)
History with Secondary Certification (Option III)
History with Secondary Certification Social Studies Composite (Option IV)
Music

Bachelor of Arts, continued
Political Science
Political Science with Secondary Certification
Spanish without Certification
Spanish with Secondary Teacher Certification (Option II)
Speech Communication
Bachelor of Business Administration
Administrative Systems
Computer Information Systems
Human Resource Management
Interdisciplinary Business
Management
Marketing
Bachelor of Business Administration/Bachelor of Science
Accounting
Finance
Bachelor of Fine Arts
Theater
Bachelor of Music
Instrumentalist Certification
Vocalist Certification
Bachelor of Science
Administrative Systems with Secondary Teacher Certification Option III (Business Composite Certificate)
Administrative Systems with Secondary Teacher Certification Option II (Business Secretarial)
Administrative Systems with Secondary Teacher Certification Option II (Business Administration Certificate)
Agricultural Services Development-Agricultural Science With Teacher Certification
Agriculture Services and Development-International Agricultural Services
Agriculture Services and Development-Agricultural Extension/Industry Option
Agriculture Services and Development-Ornamental Horticulture with Teacher Certificate
Agriculture-Agribusiness
Agriculture-Agricultural Economics
Agriculture-Animal Production Option
Agriculture-Animal Science Option
Agriculture-Animal Industries Option
Agriculture-Farm and Ranch Management
Agriculture-General Agriculture Option
Agriculture-Horse Production and Management
Agriculture-Horticulture and Landscape Management Support Area: Business
Agriculture-Horticulture and Landscape Management Support Area: Golf Course Management
Agriculture-Horticulture and Landscape Management Support Area: Science
Agriculture-Mechanized Agriculture Option
Agriculture-Plant and Soil Science
Agriculture-Range and Ranch Management
Chemistry I without Certification
Chemistry II with Teacher Certification
Chemistry III-Interdisciplinary
Computer Information Systems
Criminal Justice I-Law Enforcement Emphasis
Criminal Justice I-Corrections Emphasis
Earth Science I without Certification
Earth Science II with Certification
Economics
Economics II-International Economics Emphasis
Economics III with Secondary Teacher Certification
Exercise & Sport Studies I without Certification
Exercise & Sport Studies II with Secondary Certification (Option II)
Exercise & Sport Studies III with All Level Certification (Option II)

Geology
Home Economics with Extension Option
Human Sciences
Human Sciences with Fashion Merchandising Option
Human Sciences with Secondary Teaching Certification
Human Sciences-Dietetics Option
Hydrology and Water Resources
Interdisciplinary Studies-Middle School Fine Arts Emphasis
Industrial Technology-Non Teacher Certification (Option I)
Industrial Technology-Secondary Certification (Option II)
Industrial Technology Option III with Business Minor
Interdisciplinary Studies
Interdisciplinary Studies-Generic Special Education Emphasis
Interdisciplinary Studies-Middle School Math Emphasis
Interdisciplinary Studies-Middle School Language Arts Emphasis
Interdisciplinary Studies-Middle School Social Science Emphasis
Interdisciplinary Studies-Middle School Science Emphasis
Interdisciplinary Studies-Early Childhood Emphasis
Management
Math I-Pure or Applied Mathematics Emphasis
Math I with Secondary Certification
Physics
Psychology
Sociology I- Gerontology Emphasis
Sociology II-Social Theory Emphasis
Speech Communication
Speech Communication with Secondary Teacher Certificate
Bachelor of Social Work

Prairie View A&M University

Bachelor of Applied Science
Nursing
Bachelor of Arts
Accounting
Administrative Information System
Arts with Teacher Certification
Communication
Communication-Journalism
Communication-Radio & Television
Economics
Finance
Management
Marketing
Bachelor of Science
Interdisciplinary Studies
Psychology

The University of Mary Hardin-Baylor

Bachelor of Science Degree with Texas Teacher Certification (Secondary Option II)
Bachelor of Arts Degree with Texas Teacher Certification (Secondary Option II)
Bachelor of Arts Degree with an Interdisciplinary Academic Major with Texas Teacher Certification (Elementary Option II)
Academic Specialization in:
Art
Biology
Early Childhood Education
English
General Special Education
History
Math
Music
Physical Education
Reading
Spanish

2 Plus 2 Inverted Degree Plans

The following are Inverted Degree Plans between Central Texas College and Tarleton State University:
Air Conditioning and Refrigeration
Auto Body Repair Technician
Automotive Body Repair
Automotive Service and Repair
Automotive Technician
Aviation Maintenance Technology
Building Maintenance Trades
Communications Electronics Technology
Computer Electronics Technology
Consumer Electronics Technology
Diesel Mechanics
Diesel Technician
Drafting and Design
Fire Protection Technology
Maintenance Technology
Maintenance Technology-Masonry Option
Maintenance Technology-Residential Construction Option
Offset Printing
Print Shop Trades
Print Trades Management
Small Gas Engine Repair
Welding
Welding Technology

Accounting Technology

Associate in Applied Science Degree

Not offered in Texas

First Year

First Semester			Credit
ACTE	1301	Principles of Accounting I	3
BUSI	1301	Introduction to Business	3
MATH	1342	Elementary Statistics	3
ENGL	1301	Composition and Rhetoric I	3
COSC	1300	Computer Information Processing	3
or			
MISC	1450	Microcomputers for Business	4
PHED		Physical Education	1
Second Semester			
ACTE	1302	Principles of Accounting II	3
ELCT*		Elective	3
MGMT	1305	Introduction to Management	3
MGMT	1309	Income Tax	3
SPCH	1321	Business and Professional Speaking	3
PHED		Physical Education	1

Second Year

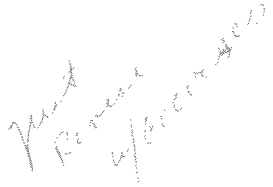
First Semester			
ACTE	2309	Fundamentals of Accounting III	3
MGMT	2305	Business Law I	3
ACTE	2305	Basics of Managerial Accounting	3
ACTE	2311	Accounting and Financial Information Systems I	3
ELCT●		Humanities/Fine Arts Selection	3
PHED		Physical Education	1
Second Semester			
ACTE	2310	Fundamentals of Accounting IV	3
MGMT	2306	Business Law II	3
ACTE**		Elective	3
ENGL	2311	Technical Writing	3
ELCT■		Social/Behavioral Science Selection	3
PHED		Physical Education	1
Total Hours			64-65

* Electives: ECON 2301, 2302; MGMT 1304, 1306, 1307, 2301, 2302; OADM 1309, or 2307.

** Accounting Electives: ACTE 2306, ACTE 2312.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.



Administrative Secretarial

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing an Administrative Secretarial Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
OADM*	1301	Beginning Shorthand	3
WOPO*	1303	Beginning Keyboarding/Data Entry	3
OADM	1305	Information and Records Management	3
OADM	1309	Business Mathematics and Calculating Machines	3
ENGL		English Selection	3
WOPO	1101	MS-DOS: An Introduction	1
Second Semester			
WOPO*	1304	Intermediate Information Processing Applications	3
OADM	1306	Office Procedures and Applications	3
OADM*	1302	Intermediate Shorthand	3
OADM	1308	Business Correspondence	3
WOPO	1307	Word Processing/Transcript	3
PHED		Physical Education	1

Second Year

First Semester			
WOPO***	2303	Office Automation	3
MATH		MATH 1324, 1342, or 1314	3
OADM	2304	Office Accounting I	3
ELCT**		Elective	3
ELCT**		OADM/WOPO Selection	3-4
Second Semester			
WOPO	2302	Advanced Information Processing Applications	3
OADM	2305	Office Accounting II	3
OADM	2307	Automated Office Management	3
SPCH		SPCH 1315 or 1321	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT■		Social/Behavioral Science Selection	3
Total Hours			**65-66**

* Levels of shorthand and typewriting will be determined by the student's previous training in these skills and/or by placement tests.

** Electives or selections approved by Department Chair. Courses may be chosen leading toward general, medical or legal secretarial programs upon department approval.

*** WOPO 1305 may be substituted.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

Certificate of Completion Not offered on Central Campus

Student may apply for a Certificate of Completion, General Office Assistant, upon satisfactory completion of all the following courses: OADM 1305, 1306, 1308, 1309, 2304, 2305, 2307; WOPO 1101, 1303, 1304, and 1307.

Certificate of Completion General Secretarial

Student may apply for a Certificate of Completion, General Secretarial, upon satisfactory completion of all courses listed in the first year.

Enhanced Mastery Certification will be awarded upon completion of the degree and the following courses: TIOA 1310; TIHI 1302, 1303, 1305.

Administrative Secretarial
Advanced Certificate
Certificate of Completion

First Year

First Semester			Credit
WOPO	1101	MS-DOS: An Introduction	1
WOPO*	1303	Beginning Keyboarding/Data Entry	3
OADM	1308	Business Correspondence	3
OADM	1309	Business Mathematics and Calculating Machines	3
OADM	1305	Information and Records Management	3
OADM*	1301	Beginning Shorthand	3
Second Semester			
ENGL		English Selection	3
WOPO**	1102	WordPerfect: An Introduction	1
WOPO*	1304	Intermediate Information Processing Applications	3
WOPO	1307	Word Processing/Transcription	3
OADM*	1302	Intermediate Shorthand	3
OADM	1306	Office Procedures and Applications	3

Second Year

First Semester			
WOPO**	1104	LOTUS 1-2-3: An Introduction	1
OADM	2304	Office Accounting I	3
WOPO	2308	Information System Internship I	3
WOPO	2303	Office Automation	3
WOPO	2304	Automated Accounting	3
Second Semester			
WOPO**	1109	Data Applications	1
WOPO	2302	Advanced Information Processing Applications	3
OADM	2305	Office Accounting II	3
OADM	2307	Automated Office Management	3
WOPO	2309	Information Systems Internship II	3
Total Hours			**58**

* Levels of shorthand and typewriting will be determined by the student's previous training in these skills and/or by placement tests.

** WOPO 1305 may be substituted.

Agriculture Science

Associate in Science Degree and Enhanced Mastery Certification Option

Students successfully completing an Agriculture Science Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
AGRI	1419	Introductory Animal Science (Animal Husbandry)	4
BIOL	1408	General Biology	4
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
MATH	1314	College Algebra	3
PHED		Physical Education	1
AGRI	1131	The Agriculture Industry	1
Second Semester			
AGRI	1307	Agronomy	3
ELCT*		Approved Agriculture Elective	3
BIOL	1411	General Botany	4
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
PHED		Physical Education	1

Second Year

First Semester			
BIOL	2413	Biological Entomology	4
PHYS	1413	Environmental Science	4
GOVT	2301	State and Federal Government I	3
AGRI	2317	Introduction to Agriculture Economics	3
SPCH	1321	Business and Professional Speaking	3
PHED		Physical Education	1
Second Semester			
ELCT•		Humanities/Fine Arts Selection	3
ENGL**		English Selection	3
GOVT	2302	State and Federal Government II	3
AGRI	2330	Wildlife Management	3
AGRI	1309	Computers in Agriculture	3
PHED		Physical Education	1
Total Hours			70

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

** English Selection(s): English courses include ENGL 2322, 2323, 2327, 2328, 2332, or 2333.

• Humanities/Fine Arts Selection: See page 64.

Enhanced Mastery Certification

Enhanced Mastery Certification will be awarded upon completion of the degree and the following courses: AGRI 1415 or CHEM 1411 and ACCT 2301

Agriculture
Animal (Equine) Management
Certificate of Completion

First Year

First Semester			Credit
FRMG	1304	Animal Health	3
FRMG	1306	Elementary Horsemanship	3
AGRI	1419	Introductory Animal Science (Animal Husbandry)	4
AGRI	1131	The Agriculture Industry	1
Second Semester			
FRMG	1307	Intermediate Horsemanship	3
AGRI	1307	Agronomy	3
AGRI	1309	Computers in Agriculture	3
PHED		Physical Education	1

Second Year

First Semester			
FRMG	2304	Horse Production	3
BIOL	2413	Biological Entomology	4
FRMG	2306	Livestock Marketing	3
Second Semester			
FRMG	1302	Range Management/Forage and Pasture Crops	3
FRMG	2303	Feeds and Feeding	3
FRMG	2305	Advanced Equitation	3
Total Hours			**40**

Students wishing to transfer to a four-year university may substitute AGRI courses for FRMG courses with departmental approval.

Agriculture Production
Certificate of Completion

First Year

First Semester			Credit
AGRI	1131	The Agriculture Industry	1
FRMG	1304	Animal Health	3
AGRI	1419	Introductory Animal Science (Animal Husbandry)	4
Second Semester			
AGRI	2330	Wildlife Management	3
FRMG	1302	Range Management/Forage and Pasture Crops	3
ELCT		Approved Elective	3
AGRI	1315	Horticulture - Home Gardening	3

Second Year

First Semester			
FRMG	2303	Feeds and Feeding	3
AGRI	2303	Farm Mechanics I	3
BIOL	2413	Biological Entomology	4
Second Semester			
AGRI	2304	Farm Mechanics II	3
AGRI	1309	Computers in Agriculture	3
AGRI/FRMG		Approved Elective	3-4
Total Hours			**39-40**

Students wishing to transfer to a four-year university may substitute AGRI courses for FRMG courses with departmental approval.

Air Conditioning and Refrigeration
Associate in Applied Science Degree

First Year

			Credit
First Semester			
AIRC	1400	Basic Air Conditioning and Refrigeration Theory	4
AIRC	1401	Electricity for Air Conditioning and Refrigeration I	4
AIRC	1403	Heating Systems	4
MATH		MATH 1324, 1342,1314 or higher	3
PHED		Physical Education	1
Second Semester			
AIRC	1406	Electricity for Air Conditioning and Refrigeration II	4
AIRC	1407	Mechanical Refrigeration Systems	4
ELCT◆		Computer Science/Microcomputer Technology Selection	3
ENGL	1301	Composition and Rhetoric I	3
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3

Second Year

First Semester			
AIRC	2400	Electricity for Air Conditioning and Refrigeration III	4
AIRC	2401	Advanced Air Conditioning and Refrigeration Theory	4
AIRC	2405	Heat Pumps I	4
AIRC	2403	Commercial Air Conditioning Systems	
or			
AIRC	2409	Air Conditioning and Refrigeration Internship	4
Second Semester			
AIRC	2402	Commercial Refrigeration	4
AIRC	2404	Troubleshooting Air Conditioning and Refrigeration Systems	4
ELCT●		Humanities/Fine Arts Selection	3
AIRC	2407	Heat Pumps II	4
SPCH	1321	Business and Professional Speaking	3
Total Hours			67

- ● Humanities/Fine Arts Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.

Certificate of Completion offered at TDCJ only

Students may apply for a Certificate of Completion upon satisfactory completion of the following courses: AIRC 1400, 1401, 1403, 1406, 1407, 2400, 2404, and 2405.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of all AIRC prefix courses.

Applied Management

Associate in Applied Science Degree

Not offered in Texas

First Year

First Semester			Credit
BUSI	1301	Introduction to Business	3
ENGL*		English Selection(s)	3
MATH		MATH 1324, 1342, 1314 or higher	3
MGMT	1305	Introduction to Management	3
MGMT	1306	Human Relations	3
PHED		Physical Education	1

Second Semester			
BUSI	1301	Personal Finance	3
ENGL*		English Selection(s)	3
MGMT**		Management Selection(s)	3
SPCH*		Speech Selection(s)	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3
PHED		Physical Education	1

Second Year

First Semester			
ACCT***	2301	Principles of Accounting I	3
MGMT	2302	Human Resource Management	3
MGMT	2309	Supervision	3
ELCT●		Humanities/Fine Arts Selection	3
MGMT**		Management Selection	3
PHED		Physical Education	1

Second Semester			
ELCT■		Social/Behavioral Science Selection	3
MGMT*4	2303	Law and Legal Assistance	3
MGMT	2310	Personnel Counseling	3
MGMT**		Sophomore Management Selection	3
MGMT**		Sophomore Management Selection	3
PHED		Physical Education	1
Total Hours			**64**

* ENGL 1301, 1302, 1312, 2311; SPCH 1315, 1321

** MGMT 1158, 1301, 1302, 1303, 1304, 1307, 1308, 1309, 1381, 1382, 1383, 1384, 1385, 1386, 2101, 2151, 2152, 2161, 2162, 2164, 2300, 2301, 2304, 2305, 2306, 2307, 2312, 2314, 2315, 2351, 2354, 2381, 2382, 2383, 2384, 2385, 2386; BUSI 1307; COSC 1300, 1403, 1405; OADM 1308, 2307; PSYC 2301; REAE 1301, 2304, or 2305

*** ACCT 2301 may be substituted with OADM 2304 or HMCA 2306.

*4 MGMT 2303 may be substituted with MGMT 2305, REAE 2305 or LEGA 2302.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Applied Management
Computer Applications
Associate in Applied Science Degree

Not offered in Texas

First Year

First Semester			Credit
MGMT	1305	Introduction to Management	3
ELCT*		Computer/Microcomputer Elective	4
MISC	1450	Microcomputers for Business	4
ENGL	1312	Communications Skills	3
MATH		MATH 1324 or 1342	3
PHED		Physical Education	1

Second Semester			
MGMT	1301	Organization and Management	3
MGMT	1304	Work Organization	3
MISC	1430	Spreadsheets for Microcomputers	4
MISC	1440	Data Base for Microcomputers	4
SPCH	1321	Business and Professional Speaking	3
PHED		Physical Education	1

Second Year

First Semester			
MGMT	2305	Business Law I	3
MGMT	2302	Human Resource Management	3
ACCT	2301	Principles of Accounting I	3
MISC	1461	Operating Systems	4
MISC	2402	Systems in the MIS Environment	4

Second Semester			
MGMT	1306	Human Relations	3
ELCT*		Computer/Microcomputer Elective	4
ACCT	2302	Principles of Accounting II	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT■		Social/Behavioral Science Elective	3
Total Hours			**69**

* Any MISC or COSC course for which prerequisites are completed.
● Humanities/Fine Arts Selection: See page 64.
■ Social/Behavioral Science Selection: See page 64.

Art

Associate in Arts Degree

This is a suggested curriculum.

First Year

First Semester			Credit
ARTS		Two courses from ARTS 1303, 1311, 1316 or 2323	6
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
LANG*	1411	Beginning Foreign Language	4
PHED		Physical Education	1
Second Semester			
ARTS		Two courses from ARTS 1304, 1312, 1317, and 2324	6
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
LANG*	1412	Foreign Language	4
PHED		Physical Education	1

Second Year

First Semester			
ARTS		One course, sophomore level	3
ENGL		ENGL 2322, 2323, 2327, 2328, or 2332	3
SCIE**		Physical/Life Science	4
MATH		MATH 1324, 1342, 1314 or higher	3
GOVT	2301	State and Federal Government I	3
PHED		Physical Education	1
Second Semester			
ARTS		One course, sophomore level	3
SPCH		SPCH 1318, 1321, or 2341	3
SCIE**		Physical/Life Science	4
ELCT◆		Computer Science/Microcomputer Technology Selection	4
GOVT	2302	State and Federal Government II	3
PHED		Physical Education	1
Total Hours			69

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* LANG: See course selections under GERM, SPAN, FREN, and JAPN. If German is taken the first year, beginning French or Spanish may be taken the second year.

** SCIE: See course selections under BIOL, CHEM, GEOL, PHYS.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Arts and Sciences
Certificate of Completion

First Semester			Credit
HIST	1301	History of the U.S. to 1877	3
SPCH		SPCH Selection	3
GOVT	2301	State and Federal Government I	3
ELCT*		MATH, ENGL, SCIE or LANG	6-8
PHED		Physical Education	1
Second Semester			
ELCT		Elective Selections	14-15
ELCT●		Humanities/Fine Arts Selection	3
ELCT◆		Computer Science/Microcomputer Technology Selection	4
PHED		Physical Education	1
Total Hours			**38-41**

* See courses under BIOL, CHEM, GEOL, or PHYS for SCIE elective selections. See course selection under FREN, GERM, JAPN or SPAN for LANG elective selections.

● Humanities/Fine Arts Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Automotive Body Repair

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing an Automotive Body Repair Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
INDU	1400	Industrial Fundamentals	4
ATBR	1403	Roughing and Alignment I	4
ATBR	1405	Auto Body Welding I	4
ATBR	1407	Auto Body Fundamentals	4
ELCT		Free Elective	1
Second Semester			
ATBR	1408	Roughing and Alignment II	4
ATBR	1409	Auto Body Welding II	4
ATBR	1410	Auto Body Painting Fundamentals	4
ATBR	1411	Automotive Glass	4
MATH		MATH 1324, 1342, 1314 or higher	3

Second Year

First Semester			
ELCT●		Humanities/Fine Arts Selection	3
ATBR	2406	Frame Repair and Alignment	4
AUTO	2405	Steering and Suspension Systems	4
ENGL	1312	Communications Skills	3
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
Second Semester			
ATBR	2400	Major Vehicle Damage Repair	4
ATBR	2404	Advanced Auto Body Painting	4
ELCT◆		Computer Science/Microcomputer Technology Selection	4
SPCH	1321	Business and Professional Speaking	3
ATBR	2401	Panel Repair and Replacement	
or			
ATBR	2409	Auto Body Internship	4
Total Hours			72

- ● Humanities/Fine Arts Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of all ATBR, AUTO, and INDU prefix courses. (Student must complete ATBR 2401 or 2409)

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one of the following options to receive Enhanced Mastery Certification:
Automotive Service and Repair - AUTO 1402, 1405, 2404
Diesel Mechanics - DIEM 2400, 2405, 2406
Business Management - MGMT 1304, 1306, 1308, 2320

Auto Collision Repair Technician

Certificate of Completion

Courses must be taken in the sequence shown below except as approved by the Department Chair.

First Year

			Credit
First Semester			
TIAB	1400	Auto Body Shop Procedures	4
TIAB	1401	Auto Body Glass, Hardware and Trim	4
TIAB	1403	Auto Body Welding and Cutting	4
Second Semester			
TIAB	1404	Basic Auto Body Refinishing	4
TIAB	1405	Minor Auto Body Repairs	4
TIAB	2406	Auto Body Fiberglass and Plastic Repair	4

Second Year

First Semester			
TIAM	2407	Automotive Steering and Suspension Systems	4
TIAB	2407	Advanced Auto Body Refinishing	4
TIAB	2408	Auto Body Mechanical and Electrical	4
Second Semester			
TIAM	1405	Automotive Air Conditioning	4
TIAB	2409	Major Auto Body Repair	4
TIAM	1406	Automotive Brake Systems	
or			
ATBR*	2409	Auto Body Internship	4
Total Hours			**48**

* Prerequisite: Satisfactory completion of ALL TIAB and TIAM courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Auto Collision Repair Technician
Certificates of Completion

Mechanical and Electrical Component Repair

Courses must be taken in the sequence shown below except as approved by the Department Chair.

First Semester			**Credit**
TIAB	1400	Auto Body Shop Procedures	4
TIAB	2408	Auto Body Mechanical and Electrical	4
TIAM	1405	Automotive Air Conditioning	4
Second Semester			
TIAM	1406	Automotive Brake Systems	4
TIAM	2407	Automotive Steering and Suspension Systems	4
ATBR*	2409	Auto Body Internship	4
Total Hours			**24**

* Prerequisite: Satisfactory completion of ALL TIAB and TIAM courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Painting and Refinishing

Courses must be taken in the sequence shown below except as approved by the Department Chair.

First Semester			**Credit**
TIAB	1400	Auto Body Shop Procedures	4
TIAB	1401	Auto Body Glass, Hardware and Trim	4
TIAB	1404	Basic Auto Body Refinishing	4
Second Semester			
TIAB	1405	Minor Auto Body Repairs	4
TIAB	2407	Advanced Auto Body Refinishing	4
ATBR*	2409	Auto Body Internship	4
Total Hours			**24**

* Prerequisite: Satisfactory completion of ALL TIAB courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Structural/Non-Structural Analysis and Damage Repair

Courses must be taken in the sequence shown below except as approved by the Department Chair.

First Semester			**Credit**
TIAB	1400	Auto Body Shop Procedures	4
TIAB	1401	Auto Body Glass, Hardware and Trim	4
TIAB	1403	Auto Body Welding and Cutting	4
TIAB	1405	Minor Auto Body Repairs	4
Second Semester			
TIAB	2406	Auto Body Fiberglass and Plastic Repair	4
TIAB	2409	Major Auto Body Repair	4
ATBR*	2409	Auto Body Internship	4
Total Hours			**28**

* Prerequisite: Satisfactory completion of ALL TIAB courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Automotive Service and Repair

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing an Automotive Service and Repair Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

			Credit
First Semester			
AUTO	1400	Shop Fundamentals	4
AUTO	1301	Automotive Systems	3
AUTO	1402	Basic Electrical and Test Equipment	4
MATH		MATH 1324, 1342, 1314 or higher	3
SPCH	1321	Business and Professional Speaking	3
Second Semester			
AUTO	1411	Automotive Computer Systems	4
AUTO	1405	Automotive Air Conditioning	4
AUTO	1407	Brake Systems	4
AUTO	1408	Standard Transmissions and Transaxles	4
ENGL	1312	Communications Skills	3

Second Year

First Semester			
AUTO	2404	Ignition, Starting and Charging	4
AUTO	2405	Steering and Suspension Systems	4
ELCT◆		Computer Science/Microcomputer Technology Selection	3
AUTO	2410	Fuel Systems and Injection	4
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
Second Semester			
AUTO	2403	Automatic Transmissions and Transaxles	4
AUTO	2406	Engine Diagnosis and Emission	4
ELCT		Elective	3
ELCT●		Humanities/Fine Arts Selection	3
AUTO	2408	Advanced Engine Service	
or			
AUTO	2409	Auto Internship	4
Total Hours			72

- ● Humanities/Fine Arts Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.

Certificate of Completion Not offered on Central Campus

Students may apply for a Certificate of Completion upon satisfactory completion of the following courses: AUTO 1400, 1402, 1405, 1407, 1408, 2404,2406, and 2410.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of ALL AUTO courses.
(Students must complete AUTO 2408 or 2409)

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one of the following options to receive Enhanced Mastery Certification:
Auto Body Repair - ATBR 1407, 1410, 1411
Diesel Mechanics - DIEM 2400, 2405, 2406
Business Management - MGMT 1304, 1306, 1308, 2320

Automotive Technician

Certificate of Completion

Courses must be taken in the sequence shown below except as approved by the Department Chair.

First Year

First Semester

			Credit
TIAM	1400	Automotive Shop Procedures, Tools and Equipment	4
TIWL	1402	Industrial Shop Welding Procedures	4
TIAM	1401	Automotive Fundamentals	4
TIAM	1502	Automotive Electrical Systems	5

Second Semester

TIAM	1303	Automotive Auxiliary Systems	3
TIAM	1404	Automotive Fuel Systems	4
TIAM	1405	Automotive Air Conditioning	4
TIAM	2511	Automotive Computer Systems	5

Second Year

First Semester

TIAM	1406	Automotive Brake Systems	4
TIAM	2407	Automotive Steering and Suspension Systems	4
TIAM	2408	Automotive Standard Power Trains	4
TIAM	2409	Automotive Automatic Power Trains	4

Second Semester

TIAM	2512	Automotive Engine Diagnosis Tune-Up and Emissions	5
TIAM	2410	Automotive Engine Service	
or			
AUTO*	2409	Automotive Internship	4
Total Hours			**58**

* Prerequisite: Satisfactory completion of ALL TIAM and TIWL courses in the program or approval of the Department Chair.

This is a self-paced open-entry program.

Automotive Technician
Certificates of Completion

Automotive Systems Specialist

Courses must be taken in the sequence shown below except as approved by the Department Chair.

			Credit
First Semester			
TIAM	1400	Automotive Shop Procedures, Tools and Equipment	4
TIAM	1401	Automotive Fundamentals	4
TIWL	1402	Industrial Shop Welding Procedures	4
Second Semester			
TIAM	1405	Automotive Air Conditioning	4
TIAM	1406	Automotive Brake Systems	4
TIAM	2407	Automotive Steering and Suspension Systems	4
Third Semester			
TIAM	2408	Automotive Standard Power Trains	4
TIAM	2409	Automotive Automatic Power Trains	4
AUTO*	2409	Automotive Internship	4
Total Hours			**36**

* Prerequisite: Satisfactory completion of ALL TIAM courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Automotive Tune-Up Specialist

Courses must be taken in the sequence shown below except as approved by the Department Chair.

			Credit
First Semester			
TIAM	1400	Automotive Shop Procedures, Tools and Equipment	4
TIAM	1401	Automotive Fundamentals	4
TIAM	1502	Automotive Electrical Systems	5
Second Semester			
TIAM	1303	Automotive Auxiliary Systems	3
TIAM	1404	Automotive Fuel Systems	4
TIAM	2511	Automotive Computer Systems	5
Third Semester			
TIAM	2512	Automotive Engine Diagnosis, Tune-Up and Emissions	5
TIAM	2410	Automotive Engine Service	4
AUTO*	2409	Automotive Internship	4
Total Hours			**38**

* Prerequisite: Satisfactory completion of ALL TIAM courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Aviation Maintenance Technology

Associate in Applied Science Degree

Not offered in Texas

First Year

			Credit
First Semester			
AVMT	1201	Maintenance Publications-G	2
AVMT	1202	Weight and Balance-G	2
AVMT	1305	Basic Aircraft Electricity-G	3
ENGL	1312	Communications Skills	3
PHYS	1305	Survey of Physics	3
Second Semester			
AVMT	1203	Aircraft Drafting-G	2
AVMT	1204	Airframe Materials and Corrosion Controls-G	2
AVMT	1306	Aircraft Finishes-A	3
AVMT	1402	Sheet Metal Structures-A	4
AVMT	2303	Airframe Inspection-A	3
MATH		MATH 1324, 1342, 1314 or higher	3
Third Semester			
AVMT	2304	Aircraft Fuel Systems-A	3
AVMT	2402	Hydraulics and Pneumatics-A	4

Second Year

First Semester			
AVMT	2305	Aircraft Instrument Systems-A	3
AVMT	2306	Engine Electrical Systems-P	3
AVMT	2307	Engine Lubrication and Cooling Systems-P	3
AVMT	2403	Aircraft Electrical Systems-A	4
Second Semester			
AVMT	2404	Powerplant Maintenance Reciprocating Engines-P	4
AVMT	2405	Engine Fuel Systems-P	4
AVMT	2406	Aircraft Propellers-P	4
AVMT	2407	Powerplant Maintenance Turbine Engines-P	4
Third Semester			
ELCT●		Humanities/Fine Arts Selection	3
ELCT■		Social/Behavioral Science Selection	3
Total Hours			**72**

AVMT courses are designated: G - General, A - Airframe, P - Powerplant.

- ● Humanities/Fine Arts Selection: See page 64.
- ■ Social/Behavioral Science Selection: See page 64.

Aviation Science
Associate in Applied Science Degree

First Year

			Credit
First Semester			
ASCI*	1200	Flight - Basic	2
ASCI*	1301	Aircraft Science	3
ASCI*	1403	Air Navigation	4
ENGL	1301	Composition and Rhetoric I	3
MATH	1314	College Algebra	3
PHED		Physical Education	1
Second Semester			
ASCI*	1201	Flight - Private	2
ASCI*	1306	Meteorology	3
ENGL	1302	Composition and Rhetoric II	3
SPCH	1315	Public Speaking	3
ELCT**		Approved Elective	3
PHED		Physical Education	1
Third Semester			
ASCI*	1204	Flight - Instrument	2
ASCI*	1305	Advanced Air Navigation	3
ASCI*	2318	Propulsion Systems	3

Second Year

First Semester			
ASCI*	2204	Flight - Instrument	2
ASCI*	2301	Aerodynamics	3
ASCI*	2407	Instrument Ground School	4
PHYS	1305	Survey of Physics	3
ELCT●		Humanities/Fine Arts Selection	3
Second Semester			
ASCI*	2205	Flight Commercial	2
ASCI*	2300	Commercial Ground School	3
ASCI*	2303	Air Transportation	3
ELCT■		Social/Behavioral Science Selection	3
ELCT◆		Microcomputer Selection	4
Total Hours			**69**

ASCI 2210 and ASCI 2211 are substitutes for ASCI 2204 and ASCI 2205 for Rotary Wing Transition Students.

** Business or Management Elective

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: (Geography preferred) See page 64.

◆ Microcomputer Selections: MISC 1450 or MISC 1451.

Certificate of Completion

* Students may apply for a Certificate of Completion upon satisfactory completion of ALL ASCI courses.

Barber

Professional Barber-Stylist Science
Certificate of Completion

			Credit
First Semester			
BARB	1701	Introduction to Hair Design	7
BARB	1702	Basic Barber-Styling	7
Second Semester			
BARB	1703	Intermediate Barber-Styling I	7
BARB	1704	Intermediate Barber-Styling II	7
Third Semester			
BARB	2701	Advanced Barber-Styling	7
BARB	2702	Advanced Barber-Styling, Barber Law and Shop Management	7
Total Hours			**42**

Barber

Professional Barber-Stylist Science/Instructor
Certificate of Completion

Prerequisite: Student must be a licensed Barber.

			Credit
First Semester			
BARB	2704	Introduction to Instructor Orientation	7
BARB	2705	Basic Barber Instructor	7
Second Semester			
BARB	2706	Intermediate Barber Instructor	7
BARB	2707	Advanced Barber Instructor	7
Total Hours			**28**

Biology

Associate in Science Degree

This is a suggested curriculum.

First Year

			Credit
First Semester			
BIOL	1408	General Biology I	4
CHEM	1411	General Chemistry I	4
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
MATH	1314	College Algebra	3
PHED		Physical Education	1
Second Semester			
BIOL	1409	General Biology II	
or			
BIOL	1411	General Botany	4
CHEM	1412	General Chemistry II	4
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
MATH	1316	Trigonometry	3
PHED		Physical Education	1

Second Year

First Semester			
BIOL	2428	Vertebrate Zoology	4
CHEM	2423	Organic Chemistry I	4
MISC	1450	Microcomputers for Business	4
ENGL	2311	Technical Writing	3
GOVT	2301	State and Federal Government I	3
PHED		Physical Education	1
Second Semester			
BIOL	1424	Plant Taxonomy	4
CHEM	2425	Organic Chemistry II	4
GOVT	2302	State and Federal Government II	3
ELCT*		Humanities/Fine Arts Selection	3
SPCH	1315	Public Speaking	3
PHED		Physical Education	1
Total Hours			73

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* Humanities/Fine Arts Selection: See page 64.

Building Maintenance Trades

Certificate of Completion

Courses must be taken in the sequence shown below except as approved by the Department Chair.

			Credit
First Semester			
TIBT	1400	Basic Shop Skills	4
TIBT	1401	Basic Masonry/Concrete Applications	4
TIBT	1402	Basic Carpentry	4
TIBT	1403	Carpentry and Insulation	4
Second Semester			
TIBT	1404	Roofing and Floors	4
TIBT	1405	Cabinets I	4
TIBT	1406	Cabinets II	4
TIBT	1407	Paint/Wall Coverings	4
Third Semester			
TIBT	1408	Basic Wiring	4
TIBT	1409	Plumbing Repairs I	4
TIBT	1410	Plumbing Repairs II	
or			
MTNT*	2419	Maintenance Technology Internship	4
Total Hours			**44**

* Prerequisite: Satisfactory completion of ALL TIBT courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Building Maintenance Trades
Certificates of Completion

Carpentry Trades

Courses must be taken in the sequence shown below except as approved by the Department Chair.

			Credit
First Semester			
TIBT	1400	Basic Shop Skills	4
TIBT	1402	Basic Carpentry	4
TIBT	1403	Carpentry and Insulation	4
TIBT	1404	Roofing and Floors	4
Second Semester			
TIBT	1405	Cabinets I	4
TIBT	1406	Cabinets II	4
TIBT	1407	Paint/Wall Coverings	4
MTNT*	2419	Maintenance Technology Internship	4
Total Hours			**32**

* Prerequisite: Satisfactory completion of ALL TIBT courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Construction Trades

Courses must be taken in the sequence shown below except as approved by the Department Chair.

			Credit
First Semester			
TIBT	1400	Basic Shop Skills	4
TIBT	1402	Basic Carpentry	4
TIBT	1401	Basic Masonry and Concrete Applications	4
TIBT	1408	Basic Wiring	4
Second Semester			
TIBT	1409	Plumbing Repairs I	4
TIBT	1410	Plumbing Repairs II	4
MTNT*	2419	Maintenance Technology Internship	4
Total Hours			**28**

* Prerequisite: Satisfactory completion of ALL TIBT courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Business Administration

Associate in Arts Degree

This is a suggested curriculum.

First Year

First Semester

			Credit
SCIE***		Physical/Life Science	4
HIST	1301	History of the U.S. to 1877	3
ENGL	1301	Composition and Rhetoric I	3
MATH		MATH 1324, 1342, 1314 or higher	3
PSYC	2301	Introduction to Psychology	3
PHED		Physical Education	1

Second Semester

SCIE***		Physical/Life Science	4
HIST	1302	History of the U.S. from 1877	3
ENGL	1302	Composition and Rhetoric II	3
BUSI	1301	Introduction to Business	3
ELCT●		Humanities/Fine Arts Selection	3
PHED		Physical Education	1

Second Year

First Semester

ECON	2301	Macroeconomics	3
ACCT	2301	Principles of Accounting I	3
ENGL*		English Selection	3
GOVT	2301	State and Federal Government I	3
LANG**	1411	Foreign Language	4
PHED		Physical Education	1

Second Semester

ACCT	2302	Principles of Accounting II	3
ELCT◆		Computer Science/Microcomputer Technology Selection	4
GOVT	2302	State and Federal Government II	3
ECON	2302	Microeconomics	3
SPCH		SPCH 1315 or 1321	3
LANG**1412		Foreign Language	4
PHED		Physical Education	1
Total Hours			72

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* English courses include ENGL 2322, 2323, 2327, 2328, 2332, or 2333.
** LANG: See course selections under GERM, SPAN, FREN, and JAPN.
*** SCIE: See course selections under BIOL, CHEM, GEOL, PHYS
● Humanities/Fine Arts Selection: See page 64.
◆ Computer Science/Microcomputer Technology Selection: See page 64.

Senior college course requirements vary; it is the student's responsibility to consult with the four-year institution he/she plans to attend to identify specific requirements.

Business Management

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing a Business Management Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

			Credit
First Semester			
MGMT	1306	Human Relations	3
ENGL	1301	Composition and Rhetoric I	3
BUSI	1301	Introduction to Business	3
ELCT		MISC 1450 or WOPO 1305	3-4
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1
Second Semester			
MGMT	1304	Work Organization	3
MGMT	1305	Introduction to Management	3
OADM	1309	Business Math and Calculating Machines	3
ELCT		BUSI/MGMT/REAE	3
ELCT		BUSI/MGMT/REAE	3
PHED		Physical Education	1

Second Year

First Semester			
MATH		MATH 1324 or 1342	3
ACCT*	2301	Principles of Accounting I	3
ELCT		MGMT 1401/2316 or REAE 2401	3-4
MGMT	2302	Human Resource Management	3
MGMT	2305	Business Law I	3
ECON		ECON 2301 or 2302	3
Second Semester			
ELCT		MGMT 1402/2317 or REAE 2402	3-4
MGMT	1308	Small Business Management	3
ACCT*	2302	Principles of Accounting II	3
MGMT	2309	Supervision	3
ELCT•		Humanities/Fine Arts Selection	3
ELCT		Elective	3
Total Hours			**68-71**

* OADM 2304 and OADM 2305 may be substituted.

• Humanities/Fine Arts Selection: See page 64.

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one of the following options to receive Enhanced Mastery Certification:
Real Estate - REAE 1301, 1304, and 2300.
Marketing - MGMT 2301, 2322, and one MGMT elective.

Business Management
Certificates of Completion

First Semester			Credit
BUSI	1301	Introduction to Business	3
MGMT	1305	Introduction to Management	3
MGMT	1306	Human Relations	3
ELCT		MISC 1450 or WOPO 1305	3-4
ELCT		BUSI/MGMT/REAE	3
Second Semester			
MGMT	2302	Human Resource Management	3
MGMT	2309	Supervision	3
ELCT		MGMT 1401/2316 or REAE 2401	3-4
MGMT	2305	Business Law I	3
ELCT		BUSI/MGMT/REAE	3
Total Hours			**30-32**

Entrepreneurship

First Semester			Credit
MGMT	1308	Small Business Management	3
OADM	1309	Business Math and Calculating Machines	3
ELCT		MISC 1450 or WOPO 1305	3-4
MGMT	2301	Marketing Principles	3
ACCT	2301	Principles of Accounting I	3
Second Semester			
MGMT	2302	Human Resource Management	3
MGMT	2305	Business Law I	3
ELCT		BUSI/MGMT/REAE	3
MGMT	2319	Small Business Accounting	3
MGMT	2321	Entrepreneurship and Business Plan Development	3
Total Hours			**30-31**

Chemistry

Associate in Science Degree

This is a suggested curriculum.

First Year

			Credit
First Semester			
CHEM	1411	General Chemistry I	4
MATH*	1316	Trigonometry	3
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
SPCH	1315	Public Speaking	3
PHED		Physical Education	1
Second Semester			
CHEM	1412	General Chemistry II	4
MATH	1348	Analytic Geometry	3
HIST	1302	History of the U.S. from 1877	3
ENGL	1302	Composition and Rhetoric II	3
MISC	1450	Microcomputers for Business	4
PHED		Physical Education	1

Second Year

First Semester			
CHEM	2423	Organic Chemistry I	4
MATH	2313	Calculus I	3
GOVT	2301	State and Federal Government I	3
ENGL	2311	Technical Writing	3
PHYS	2425	Modern Physics	4
PHED		Physical Education	1
Second Semester			
CHEM	2425	Organic Chemistry II	4
PHYS	2426	Modern Physics II	4
GOVT	2302	State and Federal Government II	3
ELCT•		Humanities/Fine Arts Selection	3
MATH	2314	Calculus II	3
PHED		Physical Education	1
Total Hours			71

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* Students deficient in mathematics must take college algebra. This course should be taken during the summer term prior to the freshman year.

• Humanities/Fine Arts Selection: See page 64.

Commercial Art

Associate in Arts Degree

This is a suggested curriculum.

First Year

			Credit
First Semester			
ARTS		Two course from ARTS 1303, 1311, 1316, or 2323	6
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the US to 1877	3
LANG*	1411	Foreign Language	4
PHED		Physical Education	1
Second Semester			
ARTS		Two courses from ARTS 1304, 1312, 1317, and 2324	6
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the US from 1877	3
LANG*	1412	Foreign Language	4
PHED		Physical Education	1

Second Year

First Semester			
ARTS	2313	Computer Illustration and Advertising Art I	3
ENGL		ENGL 2322, 2323, 2327, 2328, or 2332	3
SCIE**		Physical/Life Science	4
MATH		MATH 1324, 1342, 1314 or higher	3
GOVT	2301	State and Federal Government I	3
PHED		Physical Education	1
Second Semester			
ARTS	2314	Computer Illustration and Advertising Art II	3
SPCH		SPCH 1318, 1321, or 2341	3
SCIE**		Physical/Life Science	4
ELCT◆		Computer Science/Microcomputer Tech Selection	4
GOVT	2302	State and Federal Government II	3
PHED		Physical Education	1
Total Hours			**69**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* LANG: See course selections under GERM, SPAN, FREN, AND JAPN. If German is taken the first year, beginning French or Spanish may be taken the second year.

** SCIE: See course selections under BIOL, CHEM, GEOL, PHYS.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

A General Studies Degree with Commercial Art emphasis may be earned by substituting LANG 1411 and 1412, both Physical/Life Science Electives, and the Computer Science/Microcomputer Tech Elective with ARTS 1303, 1304, 2323, 2356, 2357, 2376 and ENGR 1304.

Communications Electronics Technology
Associate in Applied Science Degree

First Year

			Credit
First Semester			
CMET	1400	Electronics and Computer Skills	4
CMET	1401	Digital Circuits	4
ELTE	1401	Electrical Circuits I	4
CMET	1402	Computer Systems	4
Second Semester			
CMET	1403	Computer Systems and Operational Programming	4
MATH	1314	College Algebra	3
ELTE	1402	Electrical Circuits II	4
ELTE	1403	Solid State Electronics	4
ENGL	1312	Communications Skills	3

Second Year

First Semester			
CMET	1409	CRT Systems	4
ELTE	1404	Communications Circuits I	4
ELTE	2406	Integrated Devices	4
ELCT■		Social/Behavioral Science Selection	3
ELCT*		Approved Technical Elective	4
Second Semester			
ELTE	2407	Communications Circuit II	4
ELTE	2412	Circuits and Systems	4
ELCT●		Humanities/Fine Arts Selection	3
CMET	2408	Digital Communications	4
ELCT**		Academic Elective	3
Total Hours			71

* Selected course approved by the Department Chair: CMET 2411, ELTE 2401, 2405, ELTE 2103 & 2303, ELTE 2409, ELTE 2411, and ELTE 2421.

** Elective from one of the following: Agriculture, Art, Business, Communications, Engineering, Mathematics, Music, Science or Social Science.

● Humanities/Fine Arts Selection: See page 64.

■ Social Behavioral Science Selection: See page 64.

Computer-Aided Drafting and Design
Associate in Applied Science Degree

First Year

First Semester			Credit
ENGR*	1304	Engineering Graphics	3
DFTG	2412	Technical Illustration	4
DFTG	2410	Structural Drafting	4
MATH	1314	College Algebra	3
Second Semester			
ENGR*	1305	Descriptive Geometry	3
DFTG	2402	Machine Drafting	4
DFTG	1409	Basic Computer-Aided Drafting	4
ENGL	1312	Communications Skills	3
ELCT		Elective	3

Second Year

First Semester			
DFTG	1417	Architectural Drafting-Residential	4
DFTG	1458	Electrical/Electronics Drafting	4
DFTG	1452	Intermediate Computer-Aided Drafting	4
ELCT**		Approved Elective	3-4
ELCT●		Humanities/Fine Arts Selection	3
Second Semester			
DFTG	1444	Pipe Drafting	4
DFTG	1448	Topographical Drafting	4
DFTG	1471	Industrial Practice	4
ELCT■		Social/Behavioral Science	3
Total Hours			**64-65**

* **Selected Locations** may substitute DFTG 1405 for ENGR 1304 and DFTG 1456 for ENGR 1305.

** Approved Electives: DFTG 1391; ARTS 1316; MISC 1450 or other elective approved by the Department Chair.

● Humanities/Fine Arts Selection: ANTH 2351, ARTS courses (except ARTS 2313, 2314) LANG courses, GEOG 1302, 1303, HIST 2311, 2312, SPCH 2341, MUSI, PHIL (to include religion) and Literature courses.

■ Social/Behavioral Science Selection: AGRI 2317, ANTH 2301, 2351, ECON 2301, 2302, CRIJ 1307, HIST, GOVT, PSYC, SOCI, and GEOG, (except GEOG 1301) courses.

Certificate of Completion

3 3 4 4 4

Students may apply for a certificate of completion upon satisfactory completion of ENGR 1304, 1305; DFTG 1409, 2402, 2410, 2412, and TMTH 1301.

3

Computer Electronics Technology
Associate in Applied Science Degree

First Year

First Semester			Credit
CMET	1400	Electronics and Computer Skills	4
CMET	1401	Digital Circuits	4
ELTE	1401	Electrical Circuits I	4
CMET	1402	Computer Systems	4
Second Semester			
CMET	1403	Computer Systems and Operational Programming	4
MATH	1314	College Algebra	3
ELTE	1402	Electrical Circuits II	4
ELTE	1403	Solid State Electronics	4
ENGL	1312	Communications Skills	3

Second Year

First Semester			
CMET	1409	CRT Systems	4
CMET	2402	Computer Circuit Analysis	4
CMET	1405	LAN	4
ELTE	2406	Integrated Devices	4
ELCT■		Social/Behavioral Science Selection	3
Second Semester			
CMET	2404	Computer System: Diagnosis and Maintenance	4
ELTE	2412	Circuits and Systems	4
ELCT●		Humanities/Fine Arts Selection	3
ELCT**		Approved Technical Elective	4
ELCT***		Academic Elective	3
Total Hours			71

** Elective Selection approved by the Department Chair: CMET 1404, 2405, 2406, 2408; ELTE 2103, 2303, 2409, 2411, 2421; CMET 2400, 2200 and 2201.

*** Elective from one of the following: Agriculture, Art, Business, Communications, Engineering, Mathematics, Music, Science or Social Science.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of these courses: CMET 1400, 1401, 1403, ELTE 1401, 1402, 1403, ENGL 1312 and one approved elective.

Computer Science
Business Programmer/Analyst
Associate in Applied Science Degree

First Year

First Semester			Credit
COSC	1403	Introduction to Computer Science and Programming	4
MISC	1450	Microcomputers for Business	4
ENGL	1301	Composition and Rhetoric I	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
Second Semester			
COSC	1404	COBOL Programming	4
COSC	1406	Computer Organization and Architecture	4
MISC	1461	Operating Systems	4
COSC	1408	AS/400 Concepts and Operations	4

Second Year

First Semester			
COSC	2403	JCL/Machine Language Program	4
MISC	2456	C Language Programming I	4
COSC	1407	RPG/400 Programming	4
ELCT*		ACCT Elective Selection	3
ELCT■		Social/Behavioral Science Selection	3
Second Semester			
COSC	2401	Advanced COBOL	4
MISC	2458	C Language Programming II	4
ELCT		COSC Sophomore-level Technical Elective	4
SPCH	1321	Business and Professional Speaking	3
ELCT●		Humanities/Fine Arts Selection	3
Total Hours			67

* ACCT Elective Selection includes WOPO 2304, OADM 2304, ACCT 2301.
** COSC/MISC Technical Elective Selection includes COSC 1409/2494 and MISC 2460.
● Humanities/Fine Arts Selection: See page 64.
■ Social/Behavioral Science Selection: See page 64.

Computer Science

Information Technology Option

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Student successfully completing a Computer Science Information Technology Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
COSC	1401	Computer Operations	4
MISC	1420	Word Processing for Microcomputers	4
MISC	1430	Spreadsheets for Microcomputers	4
MISC	1450	Microcomputers for Business	4
PHED		Physical Education	1
Second Semester			
MISC	1400	Microcomputers Fundamentals	4
MISC	1440	Data Base for Microcomputers	4
MISC	1460	Desk Top Publishing	4
MISC	1461	Operating Systems	4

Second Year

First Semester			
COSC	2490	Computer Resource Management	4
MISC	2454	Basic Communications, Networking and Internet	4
ELCT*		ACCT Elective Selection	3
ENGL	1301	Composition and Rhetoric I	3
ELCT●		Humanities/Fine Arts Selection	3
Second Semester			
COSC	2409	Field Projects	4
ELCT		COSC/MISC Technical Elective	4
MATH		MATH 1324, 1342, 1314 or higher	3
ELCT■		Social/Behavioral Science Selection	3
SPCH	1321	Business and Professional Speaking	3
Total Hours			67

* ACCT Elective Selections include WOPO 2304, OADM 2304, ACCT 2301.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

Enhanced Mastery Certification

Enhanced Mastery Certification will be awarded upon completion of the degree and two of the following courses: COSC 2491, 1402; MISC 1451, 1454, 2402, 2453, 2456

Computer Science
Network Systems Administrator Option
Associate in Applied Science Degree

First Year

First Semester			Credit
MISC	1450	Microcomputers for Business	4
MISC	1451	Introduction to Microcomputer Programming	4
ENGL	1301	Composition and Rhetoric I	3
MATH		MATH 1324, 1342,1314 or higher	3
PHED		Physical Education Selection	1
Second Semester			
COSC	1406	Computer Organization and Architecture	4
MISC	1461	Operating Systems	4
ELCT		COSC/MISC Technical Elective	4
ELCT■		Social/Behavioral Science Selection	3
ELCT		Elective	3

Second Year

First Semester			
COSC	2490	Computer Resource Management	4
COSC	2491	Network Management	4
ENGL	2311	Technical Writing	3
ACCT	2301	Principles of Accounting I	3
ELCT●		Humanities and Fine Arts Selection	3
Second Semester			
COSC	2492	Network Installation, Service and Support	4
COSC	2493	Network Architectures, Standards and Protocols	4
COSC	2409	Field Projects	4
SPCH	1321	Business and Professional Speaking	3
Total Hours			**65**

- ● Humanities/Fine Arts Selection: See page 64.
- ■ Social/Behavioral Science Selection: See page 64.

Certificate of Completion Network Systems Specialist

Students may apply for a Certificate of Completion upon satisfactory completion of: COSC 1406, 2490, 2491; MISC 1450, 1451, 1461, 2454 and one COSC/MISC elective.

Computer Science
Certificates of Completion

Computer Operator

First Semester			Credit
COSC	1400	Computer Science Fundamentals	4
COSC	1401	Computer Operations	4
MISC	1450	Microcomputers for Business	4
OADM	1305	Information and Records Management	3
Second Semester			
COSC	1406	Computer Organization and Architecture	4
COSC	2403	JCL/Machine Language Program	4
ELCT		COSC/MISC Technical Elective	4
ELCT		COSC/MISC Technical Elective	4
Total Hours			**31**

Information Center Specialist

First Semester			Credit
MISC	1400	Microcomputer Fundamentals	4
MISC	1420	Word Processing for Microcomputers	4
MISC	1430	Spreadsheets for Microcomputers	4
MISC	1450	Microcomputers for Business	4
Second Semester			
MISC	1440	Data Base for Microcomputers	4
MISC	1460	Desk Top Publishing	4
MISC	1461	Operating Systems	4
MISC	2455	Microcomputer Field Projects	4
Total Hours			**32**

Data Control Specialist

First Semester			Credit
COSC	1400	Computer Science Fundamentals	4
COSC	1401	Computer Operations	4
MISC	1450	Microcomputers for Business	4
WOPO	1303	Beginning Keyboarding/Data Entry	3
Second Semester			
MISC	1420	Word Processing for Microcomputers	4
MISC	1440	Data Base for Microcomputers	4
OADM	1305	Information and Records Management	3
ELCT		COSC/MISC Technical Elective	3-4
Total Hours			**29-30**

Cosmetology
Certificate of Completion

			Credit
First Semester			
COSM	1701	Orientation and Introduction to Cosmetology	7
COSM	1702	Basic Cosmetology	7
Second Semester			
COSM	1703	Intermediate Cosmetology, Manicuring and Hair Removal	7
COSM	1704	Intermediate Cosmetology and Skin Care	7
Third Semester			
COSM	2705	Advanced Cosmetology	7
COSM	2706	Preparation for the State Board and Advanced Cosmetology	7
Total Hours			**42**

Criminal Justice

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing a Criminal Justice Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
CRIJ	1301	Introduction to Criminal Justice	3
CRIJ	1304	The Courts and Criminal Procedures	3
CRIJ	1307	Crime in America	3
CRIJ	1308	Fundamentals of Criminal Law	3
ENGL	1301	Composition and Rhetoric I	3
PHED	1130	Physical Conditioning	1
Second Semester			
CRIJ	1201	Defensive Tactics	2
CRIJ*		Criminal Justice Option (three courses)	9
ENGL		ENGL 1302 or 2311	3
ELCT		Criminal Justice Elective	3

Second Year

First Semester			
CRIJ	2101	Emergency Medical Aid	1
CRIJ	2304	Juvenile Procedures	3
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
SOCI	1301	Introduction to Sociology	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
ELCT		Criminal Justice Elective	3
Second Semester			
CRIJ	2201	Firearms	2
PSYC	2301	Introduction to Psychology	3
SPCH	1321	Business and Professional Speaking	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3
ELCT		Elective	3
Total Hours			67

As early as possible, students planning to complete a baccalaureate degree in Criminal Justice/Law Enforcement should declare a major and develop a degree plan which will meet the transfer requirements of the college of their choice.

* Criminal Justice Options:
Students intending to major in Law Enforcement may take CRIJ 1309, 1302, 1303.
Students intending to major in Corrections may take CRIJ 1306, 1314 and 1309/1302/1303.
Students who prefer a general Criminal Justice curriculum may take any three from CRIJ 1302, 1303, 1306, 1309, 1314 2307, 2320.

● Humanities/Fine Arts Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of CRIJ 1301, 1302, 1303, 1304, 1307, 1308, 1309, 2201, and a CRIJ Elective.

Enhanced Mastery Certification

Enhanced Mastery Certification will be awarded upon completion of the degree and twelve hours of the following courses: CRIJ 1302, 1305, 1309, 1310, 1312, 1314, 2301, 2306, 2308, 2310, 2311, or 2409 - if not already taken as an elective.

Criminal Justice
Law Enforcement
Certificate of Completion

			Credit
First Semester			
CRIJ	1301	Introduction to Criminal Justice	3
CRIJ	1305	Traffic Law	3
CRIJ	1309	Police Systems/Practices	3
CRIJ	1201	Defensive Tactics	2
CRIJ	2201	Firearms	2
CRIJ	2101	Emergency Medical Aid	1
Second Semester			
CRIJ	1302	Criminal Investigation I	3
CRIJ	1303	Legal Aspects of Law Enforcement	3
CRIJ	1304	Courts and Criminal Procedures	3
CRIJ	1307	Crime in America	3
Third Semester			
CRIJ	1308	Fundamentals of Criminal Law	3
CRIJ	1310	Criminal Investigation II	3
CRIJ	2304	Juvenile Procedures	3
Total Hours			**35**

Criminal Justice
Texas Peace Officer
Certificate of Completion

			Credit
First Semester			
CRIJ	1301	Introduction to Criminal Justice	3
CRIJ	1302	Criminal Investigation I	3
CRIJ	1303	Legal Aspects of Law Enforcement	3
CRIJ	1304	Courts and Criminal Procedures	3
CRIJ	1307	Crime in America	3
CRIJ	1308	Fundamentals of Criminal Law	3
Second Semester			
CRIJ	1309	Police Systems and Practices	3
CRIJ	2433	Texas Peace Officer Law	4
CRIJ	2434	Texas Peace Officer Procedures	4
CRIJ	2435	Texas Peace Officer Skills	4
Total Hours			**33**

Criminal Justice
Corrections Option
Associate in Applied Science Degree

First Year

First Semester			Credit
CRIJ	1301	Introduction to Criminal Justice	3
CRIJ	1304	The Courts and Criminal Procedures	3
CRIJ	1307	Crime in America	3
CRIJ	1308	Fundamentals of Criminal Law	3
ENGL	1301	Composition and Rhetoric I	3
PHED	1130	Physical Conditioning	1
Second Semester			
CRIJ	1201	Defensive Tactics	2
CRIJ	1306	Correctional Systems and Practices	3
CRIJ	1314	Community Resources in Corrections	3
CRIJ*		Criminal Justice Selections (two courses)	6
ENGL		ENGL 1302 or 2311	3

Second Year

First Semester			
CRIJ	2101	Emergency Medical Aid	1
CRIJ	2304	Juvenile Procedures	3
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
SOCI	1301	Introduction to Sociology	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
ELCT		Criminal Justice Elective	3
Second Semester			
CRIJ	2201	Firearms	2
PSYC	2301	Introduction to Psychology	3
SPCH	1321	Business and Professional Speaking	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3
ELCT		Elective	3
Total Hours			67

As early as possible, students planning to complete a baccalaureate degree in Criminal Justice/Law Enforcement should declare a major and develop a degree plan which will meet the transfer requirements of the college of their choice.

* Criminal Justice Selections: Any two from CRIJ 1302, 1303, 1309, and 2307.
● Humanities/Fine Arts Selection: See page 64.
◆ Computer Science/Microcomputer Technology Selection: See page 64.

Criminal Justice
Non-Credit Certificates

Police Academy Clock Hour Program
Basic Peace Officer Training *
One Semester Certificate of Completion

			Clock Hours
First Semester			
CEPO	0107	Basic Peace Officer Training	592
Total Hours			**592**

* Registration restricted to peace officers only.

Corrections Academy Clock Hour Program
Correctional Officer Pre-Service Training*

			Clock Hours
First Semester			
CEPO	0108	Correctional Officer Pre-Service Training	160
Total Hours			**160**

* Registration restricted to TDCJ-approved applicants only.

Police Academy Clock Hour Program
Reserve Peace Officer Training
Three-Semester Certificate of Completion

			Clock Hours
First Semester			
CEPO	0120	Basic Reserve Peace Officer Training	230
Second Semester			
CEPO	0121	Intermediate Reserve Peace Officer Training	198
Third Semester			
CEPO	0122	Advanced Reserve Peace Officer Training	164

Diesel Mechanics

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing a Diesel Mechanic Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep Criteria.

First Year

First Semester			Credit
INDU	1400	Industrial Fundamentals	4
DIEM	1301	Diesel Engine Fundamentals	3
DIEM	1405	Diesel Engine Auxiliary Systems	4
ENGL	1312	Communications Skills	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3

Second Semester			
DIEM	1404	Standard Power Trains	4
DIEM	1406	Diesel Starting and Charging Systems	4
AUTO	1407	Brake Systems	4
MATH		MATH 1324, 1342, 1314 or higher	3
SPCH	1321	Business and Professional Speaking	3

Second Year

First Semester			
DIEM	2400	Hydraulic Systems Fundamentals and Service	4
DIEM	2406	Diesel Fuel Injection Systems	4
DIEM	2407	Diesel Cylinder Head Service	4
ELCT		Elective	3
ELCT●		Humanities/Fine Arts Selection	3

Second Semester			
DIEM	2404	Automatic Power Train	4
AUTO	2405	Steering and Suspension Systems	4
DIEM	2405	Advanced Diesel Engine Service	4
DIEM	2403	Diesel Engine Overhaul	
or			
DIEM	2409	Diesel Internship	4
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
Total Hours			72

● Humanities/Fine Arts Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of ALL DIEM, AUTO, and INDU courses. (Student must complete DIEM 2403 or 2409.)

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one of the following options to receive Enhanced Mastery Certification:
Automotive Service and Repair - AUTO 1402, 1405, 2404
Auto Body Repair - ATBR 1407, 1410, 1411
Business Management - MGMT 1304, 1306, 1308, 2320

Diesel Technician

Certificate of Completion

Courses must be taken in the sequence shown below except as approved by the Department Chair.

			Credit
First Semester			
TIDM	1401	Shop Procedures, Tools and Equipment	4
TIDM	1402	Industrial Shop Welding Procedures	4
TIDM	1302	Diesel Engine Fundamentals and Operating Principles	3
TIDM	1405	Diesel Electrical Systems	4
Second Semester			
TIDM	1404	Diesel Engine Support Systems	4
TIDM	1406	Diesel Fuel Injection Systems	4
TIDM	2407	Diesel Engine Troubleshooting, Diagnosis and Tune-Up	4

Second Year

First Semester			
TIDM	2307	Diesel Cylinder Head Repair	3
TIDM	2408	Industrial Hydraulics	4
TIDM	2409	Heavy Duty Standard Power Trains	4
TIDM	2410	Heavy Duty Automatic Power Trains	4
Second Semester			
TIDM	2411	Brake Systems	4
TIDM	2412	Steering and Suspension Systems	4
TIAM	1405	Automotive Air Conditioning	4
TIDM	2413	Diesel Engine Rebuild	4
or			
DIEM*	2409	Diesel Internship	4
Total Hours			**58**

* Prerequisite: Satisfactory completion of ALL TIDM, TIWL and TIAM courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Diesel Technician
Certificates of Completion

Diesel Engine Specialist

Courses must be taken in the sequence shown below except as approved by the Department Chair.

First Semester			**Credit**
TIDM	1401	Shop Procedures, Tools and Equipment	4
TIDM	1302	Diesel Engine Fundamentals and Operating Principles	3
TIDM	1405	Diesel Electrical Systems	4
Second Semester			
TIDM	1404	Diesel Engine Support Systems	4
TIDM	1406	Diesel Fuel Injection Systems	4
TIDM	2407	Diesel Engine Troubleshooting, Diagnosis and Tune-Up	4
Third Semester			
TIDM	2307	Diesel Cylinder Head Repair	3
TIDM	2413	Diesel Engine Rebuild	4
DIEM*	2409	Diesel Internship	4
Total Hours			**34**

* Prerequisite: Satisfactory completion of ALL TIDM courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Diesel Systems Specialist

Courses must be taken in the sequence shown below except as approved by the Department Chair.

First Semester			**Credit**
TIDM	1401	Shop Procedures, Tools and Equipment	4
TIWL	1402	Industrial Shop Welding Procedures	4
TIDM	2408	Industrial Hydraulics	4
Second Semester			
TIDM	2409	Heavy Duty Standard Power Trains	4
TIDM	2410	Heavy Duty Automatic Power Trains	4
TIDM	2411	Brake Systems	4
Third Semester			
TIDM	2412	Steering and Suspension Systems	4
TIAM	1405	Automotive Air Conditioning	4
DIEM*	2409	Diesel Internship	4
Total Hours			**36**

* Prerequisite: Satisfactory completion of ALL TIDM, TIWL and TIAM courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Early Childhood Professions

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing an Early Childhood Professions Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
CDEC	1311	Introduction to Early Childhood Education	3
CDEC	1313	Curriculum Resources for Early Childhood Professions	3
CDEC	1319	Child Guidance	3
ENGL		ENGL 1301 or 1312	3
CDEC*	1359	Child with Special Needs	3
PHED		Physical Education	1
Second Semester			
CDEC	1358	Creative Arts for Early Childhood	3
CDEC	1354	Child Growth and Development	3
CDEC	1318	Nutrition, Safety and Health	3
CDEC	1303	Family and the Community	3
CDEC	1356	Emergent Literacy for Early Childhood	3

Second Year

First Semester			
CDEC	2321	The Infant and Toddler	3
CDEC	2326	Administration of Programs for Children I	
or			
CDEC	2328	Administration of Programs for Children II	3
ELCT◆		Computer Science/Microcomputer Technology Selection	4
SPCH		SPCH 1315 or 1321	3
MATH		MATH 1324, 1342, 1314 or higher	3
CDEC	1374	Preschool Age	3
Second Semester			
CDEC	1357	Math and Science for Early Childhood	3
CDEC	2384	Cooperative Education in Child Development	3
CDEC	2341	The School Age Child	3
CDEC	1195	Special Topics in Child Care	1
ELCT●		Humanities/Fine Arts Selection	3
ELCT■		Social/Behavioral Science Selection	3
Total Hours			**66**

- ● Humanities/Fine Arts Selection: See page 64.
- ■ Social/Behavioral Science Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.
- * CDEC 1371 and 1372 may substitute.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of all child development courses in the first year and CDEC 1359 and 1371.

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one of the following options to receive Enhanced Mastery Certification:
Administration - CDEC 2328, 1391, OADM 2304, MGMT 1308
Special Needs - CDEC 1371, 1372

Early Childhood Professions
Certificates of Completion

Administrator's Credentials

First Semester			Credit
CDEC	1311	Introduction to Early Childhood Education	3
CDEC	1313	Curriculum Resources for Early Childhood Professions	3
CDEC	1319	Child Guidance	3
CDEC	2326	Administrator of Programs for Children I	3
ENGL		ENGL 1301 or 1312	3
Second Semester			
CDEC	1354	Child Growth and Development	3
CDEC	1318	Nutrition, Safety and Health	3
CDEC	2328	Administration of Programs for Children II	3
CDEC	2384	Cooperative Education in Child Development	3
ELCT*		Approved Elective	3
Total Hours			**30**

* COSC 1300 or PHED 1306

Child Development Associate

First Semester			Credit
CDEC	1311	Introduction to Early Childhood Education	3
CDEC	1313	Curriculum Resources for Early Childhood Professions	3
CDEC	1319	Child Guidance	3
CDEC	2326	Administration of Programs for Children I	3
CDEC	2384	Cooperative Education in Child Development	3
Total Hours			**15**

This certificate provides work to assist the student in preparation for the National Child Development Associate (CDA) credential.

Early Childhood Professions
Certificates of Completion

Intergenerational Professions Option

First Semester			Credit
PSYC	2314	Life Span Development	3
CDEC	1318	Nutrition, Safety and Health	3
CDEC	1313	Curriculum Resources	3
Second Semester			
CDEC	1373	Management Intergenerational Professions	3
CDEC	1303	Family and the Community	3
CDEC	1195	Early Childhood Seminar	1
CDEC	2371	Program Planning and Implementation	3
Total Hours			**19**

Special Child Option

First Semester			Credit
CDEC	1311	Introduction to Early Childhood Education	3
CDEC	1359	Children with Special Needs	3
CDEC	1303	Family and the Community	3
CDEC	1371	Physical Development and Disorder in Children	3
ENGL		ENGL 1301 or 1312	3
Second Semester			
CDEC	1313	Curriculum Resources in Early Childhood Professions	3
CDEC	1372	Techniques of Child Guidance for the Special Child	3
CDEC	1354	Child Growth and Development	3
CDEC	1318	Nutrition, Safety and Health	3
Total Hours			**27**

Education

Associate in Arts Degree

This is a suggested curriculum.
Not offered in Texas

First Year

First Semester			Credit
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
SCIE**		Physical/Life Science	4
LANG*	1411	Foreign Language	4
ELCT*[4]		Elective	3
PHED		Physical Education	1

Second Semester			
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
SCIE**		Physical/Life Science	4
LANG*	1412	Foreign Language	4
SPCH	1315	Public Speaking	3
PHED		Physical Education	1

Second Year

First Semester			
ENGL***		English Selection(s)	3
GOVT	2301	State and Federal Government I	3
MATH		MATH 1324, 1342, 1314 or higher	3
PSYC	2301	Introduction to Psychology	3
SOCI	1301	Introduction to Sociology	3
PHED		Physical Education	1

Second Semester			
ENGL***		English Selection(s)	3
GOVT	2302	State and Federal Government II	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3
ELCT*[4]		Elective	3
ELCT*[4]		Elective	3
PHED		Physical Education	1
Total Hours			**68**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* LANG: See course selection under FREN, GERM, SPAN, and JAPN. If German is taken during the first year, Beginning French or Spanish may be taken during the second semester.

** SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.

*** English Selection(s) include: ENGL 2322, 2323, 2327, 2328, 2332, or 2333.

*[4] Students should check requirements of the institution to which they intend to transfer as requirements may vary. Students should choose electives that support their major.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Emergency Medical Technology/Paramedic
Associate in Applied Science Degree

First Year

			Credit
First Semester			
EMPT	1402	Emergency Medical Technician	4
BIOL	2401	Human Anatomy	4
MATH	1342	Elementary Statistics	3
PHED		Physical Education	1
Second Semester			
EMPT	1403	Paramedic Technology Phase I	4
BIOL	2402	Human Physiology	4
PSYC	2301	Introduction to Psychology	3
ELCT		Free Elective	3
Third Semester			
EMPT	1504	Paramedic Technology Phase II	5
ENGL	1312	Communications Skills	3

Second Year

First Semester			
EMPT	1505	Paramedic Technology Phase III	5
MGMT	1306	Human Relations	3
PHED		Physical Education	1
HUMA	1315	Introduction to Fine Arts	3
Second Semester			
EMPT	1506	Paramedic Technology Phase IV	5
MGMT	2309	Supervision	3
MISC	1450	Microcomputers for Business	4
Third Semester			
EMPT	1507	Paramedic Technology Phase V	5
Total Hours			**64**

Upon successful completion of EMPT 1502, students are eligible to sit for the Basic EMT exam by the Texas Department of Health and/or the National Registry.

Upon successful completion of EMPT 1403 and 1504, students are eligible to sit for the Intermediate EMT exam by the Texas Department of Health or the National Registry.

Upon successful completion of EMPT 1505, 1506, and 1507, students are eligible to sit for the Paramedic exam by the Texas Department of Health or the National Registry

Emergency Medical Technician

Associate in Applied Science Degree

Not offered in Texas

First Year

First Semester			Credit
EMET	1402	Emergency Medical Technician-Ambulance	4
ENGL	1301	Composition and Rhetoric I	3
MGMT	1305	Introduction to Management	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
Second Semester			
MGMT	1306	Human Relations	3
EMET		Technical Elective	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT*		Approved Elective	3
PHED		Physical Education	1

Second Year

First Semester			
EMET	2101	Introduction to Paramedic	1
EMET	2301	Disaster Planning	3
ACCT**	2301	Principles of Accounting I	3
MGMT	2302	Human Resource Management	3
MGMT	2309	Supervision	3
SPCH		SPCH 1315 or 1321	3
Second Semester			
EMET	2302	Emergency Medical Center Management	3
EMET	2303	Psychology of Emergencies	3
ENGL	2311	Technical Writing	3
ACCT**	2302	Principles of Accounting II	3
ELCT■		Social/Behavioral Science Selection	3
ELCT*		Approved Elective	3
Total Hours			**64**

* Approved Electives: EMET 1303, 1304, 1305, 1403, PSYC 2301, MGMT 1301 or BIOL 2401.

** OADM 2304 and 2305 may be substituted.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

National Registry EMT-Basic exam requirements:

1. Applicant must be 18 years of age or older.
2. Successfully complete, within the last two years, a state approved National standard EMT-Basic training program, as developed and promulgated by the US Department of Transportation.

Emergency Medical Technician

Certificate of Completion

Not offered in Texas

For this certificate, only six hours will be accepted as evaluated credit.

First Semester			Credit
EMET	1402	Emergency Medical Technician-Ambulance	
or			
EMET	1200	Emergency Medical Technician-Recertification	2-4
ELCT*		Approved Electives	11
Total Hours			**13-15**

* Approved Electives: EMET 1302, 1303, 1304, 1305, 2101, 2301, 2302, 2303.

Emergency Medical Technician

Non-Credit Certificate of Completion

			Clock Hours
CEEM	0102	Emergency Medical Technician	144
Total Clock Hours			**144**

Engineering

Associate in Science Degree

This is a suggested curriculum.

First Year

First Semester			Credit
ENGR	1304	Engineering Graphics	3
MATH	1348	Analytic Geometry	3
MATH	2313	Calculus I	3
ENGL	1301	Composition and Rhetoric I	3
SCIE**		Physical/Life Science	4
PHED		Physical Education	1

Second Semester			
ENGR	1305	Descriptive Geometry	3
MATH	2314	Calculus II	3
ENGL	1302	Composition and Rhetoric I	3
SCIE**		Physical/Life Science	4
PHED		Physical Education	1
COSC/MISC		COSC 1403 or MISC 1451	4

Second Year

First Semester			
HIST	1301	History of the U.S. to 1877	3
ENGL*		English Elective	3
GOVT	2301	State and Federal Government I	3
ELCT•		Humanities/Fine Arts Selection	3
PHYS	2425	Modern Physics I	4
PHED		Physical Education	1

Second Semester			
HIST	1302	History of the U.S. from 1877	3
SPCH		SPCH 1315 or 1321	3
GOVT	2302	State and Federal Government II	3
PHYS	2426	Modern Physics II	4
ELCT		Elective	3
PHED		Physical Education	1
Total Hours			**69**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* English Electives include: ENGL 2322, 2323, 2327, 2328, 2332, 2333.

** SCIE: See course selection under BIOL, CHEM, GEOL, PHYS

• Humanities/Fine Arts Selection: See page 64.

English

Associate in Arts

This is a suggested curriculum.

First Year

First Semester			Credit
ENGL	1301	Composition and Rhetoric I	3
MATH	1314	College Algebra	3
LANG*	1411	Foreign Language	4
SCIE**		Physical/Life Science	4
HIST	1301	History of the U.S. To 1877	3
PHED		Physical Education	1
Second Semester			
ENGL	1302	Composition and Rhetoric II	3
MATH	1316	Trigonometry	3
LANG*	1412	Foreign Language	4
SCIE**		Physical/Life Science	4
HIST	1302	History of the U.S. from 1877	3
PHED		Physical Education	1

Second Year

First Semester			
ENGL***		English Elective	3
LANG*	2311	Intermediate Foreign Language	3
SPCH	1315	Public Speaking	3
GOVT	2301	State and Federal Government I	3
ELCT●		Humanities/Fine Arts Selection	3
PHED		Physical Education	1
Second Semester			
ENGL***		English Elective	3
LANG*	2312	Intermediate Foreign Language	3
MISC	1450	Microcomputers for Business	4
GOVT	2302	State and Federal Government II	3
ELCT		Elective	3
PHED		Physical Education	1
Total Hours			**69**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* LANG: See course selection under FREN, GERM, SPAN, and JAPN.
** SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.
*** English electives include: ENGL 2322, 2323, 2327, 2328, 2332, or 2333.
● Humanities/Fine Arts Selection: See page 64.

Environmental Science

Associate in Science Degree

This is a suggested curriculum.

First Year

First Semester			Credit
ENGL	1301	Composition and Rhetoric I	3
CHEM	1411	General Chemistry I	4
BIOL	1408	General Biology I	4
MATH	1314	College Algebra	3
HIST	1301	History of the U.S. to 1877	3
PHED		Physical Education	1

Second Semester			Credit
ENGL	1302	Composition and Rhetoric II	3
CHEM	1412	General Chemistry II	4
BIOL		BIOL 1409, 1411, or 1413	4
HIST	1302	History of the U.S. from 1877	3
MISC	1450	Microcomputers for Business	4
PHED		Physical Education	1

Second Year

First Semester			
GEOL	1403	Physical Geology	4
GOVT	2301	State and Federal Government I	3
ELCT•		Humanities/Fine Arts Selection	3
SPCH	1315	Public Speaking	3
PHED		Physical Education	1
ELCT*		Elective	3

Second Semester			
PHYS	1413	Environmental Science	4
GOVT	2302	State and Federal Government II	3
CHEM	2401	Analytical Chemistry	4
ENGL	2311	Technical Writing	3
PHED		Physical Education	1
MATH	1342	Elementary Statistics	3
Total Hours			72

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- * Recommended Electives include MATH 2313, 2314, 1316 and/or 1348, PHYS 1401, 1402, ECON 2301, 2302, COSC 1400 or 1403.
- • Humanities/Fine Arts selection: GEOG 1302, 1303, or ANTH 2351.

Environmental Science Technology
Certificate of Completion

First Year

First Semester			Credit
ENGL	1301	Composition and Rhetoric I	3
CHEM	1411	General Chemistry I	4
BIOL	1408	General Biology I	4
MATH	1314	College Algebra	3
MISC	1450	Microcomputers for Business	4
Second Semester			
ENGL	2311	Technical Writing	3
CHEM	1412	General Chemistry II	4
BIOL		BIOL 1409 or 1413	4
PHYS	1413	Environmental Science	4

Second Year

First Semester			
GEOL	1403	Physical Geology	4
CHEM	1407	Physiological Chemistry	4
BIOL	1411	Botany	4
SPCH	1315	Public Speaking	3
Second Semester			
ECON	2302	Microeconomics	3
CHEM	2401	Analytical Chemistry	4
BIOL	2421	Microbiology	4
MATH	1342	Elementary Statistics	3
Total Hours			**62**

Fire Protection Technology

Associate in Applied Science Degree

Not offered in Texas

First Year

First Semester			Credit
FPRT	1301	Fundamentals of Fire Protection	3
FPRT	1303	Fire Protection Systems	3
FPRT	1304	Fire Administration I	3
FPRT*	1307	Fire Service Chemistry I	3
ENGL	1301	Composition and Rhetoric I	3
PHED		Physical Education	1
Second Semester			
FPRT	1302	Fire Prevention	3
FPRT	1305	Fire Administration II	3
FPRT	1308	Fire Service Chemistry II	3
MATH		MATH 1324, 1342, 1314 or higher	3
SPCH	1315	Public Speaking	3
PHED		Physical Education	1

Second Year

First Semester			
FPRT	2301	Industrial Fire Protection I	3
FPRT	2303	Hazardous Material I	3
FPRT	2305	Building Codes and Construction	3
ELCT●		Humanities/Fine Arts Selection	3
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
ENGL	2311	Technical Writing	3
Second Semester			
FPRT	2302	Industrial Fire Protection II	3
FPRT	2306	Fire and Arson Investigation	3
FPRT	2404	Fire Fighting Tactics and Strategies	4
ELCT◆		Computer Science/Microcomputer Technology Selection	3
FPRT**		Elective	3
Total Hours			66

* CHEM 1406 may be substituted for FPRT 1307.

** FPRT Electives include: FPRT 2304, 2308, 2309, 2310, 2314.

● Humanities/Fine Arts Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Foreign Language

Associate in Arts Degree

This is a suggested curriculum.

First Year

First Semester			Credit
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S to 1877	3
LANG*	1411	Foreign Language	4
MATH		MATH 1324, 1342, 1314 or higher	3
SCIE**		Physical/Life Science	4
PHED		Physical Education	1

Second Semester			
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
LANG*	1412	Foreign Language	4
ELCT•		Humanities/Fine Arts Selection	3
SCIE**		Physical/Life Science	4
PHED		Physical Education	1

Second Year

First Semester			
ENGL***		English Selection	3
LANG*	2311	Intermediate Foreign Language	3
GOVT	2301	State and Federal Government I	3
SPCH	1315	Public Speaking	3
LANG*		Second Language	4
PHED		Physical Education	1

Second Semester			
ENGL***		English Selection	3
LANG*	2312	Intermediate Foreign Language	3
GOVT	2302	State and Federal Government II	3
MISC	1450	Microcomputers for Business	4
LANG*		Second Language	4
PHED		Physical Education	1
Total Hours			**71**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* LANG: See course selection under FREN, GERM, SPAN and JAPN.
** SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.
*** English Electives include: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.
• Humanities/Fine Arts Selection: See page 64.

General Studies

Associate in General Studies Degree

This is a suggested curriculum.
Student must have a minimum of 16 semester credit hours within the Central Texas College System.

First Year

First Semester			Credit
ENGL	1301	Composition and Rhetoric I	
or			
ENGL	1312	Communications Skills	3
HIST	1301	History of the U.S. to 1877	3
PHED		Physical Education	1
ELCT**		Electives	9
Second Semester			
SPCH*		SPCH Selection	
or			
ELCT*		Elective	3
HIST	1302	History of the U.S. from 1877	3
MATH		MATH 1324, 1342, 1314 or higher	3
ELCT**		Electives	4
ELCT◆		Computer Science/Microcomputer Technology Selection	3

Second Year

First Semester			
GOVT	2301	State and Federal Government I	3
ELCT**		Electives	12
PHED		Physical Education	1
Second Semester			
GOVT	2302	State and Federal Government II	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT**		Electives	10
Total Hours			64

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* If ENGL 1301 is taken, student must complete SPCH requirement. If ENGL 1312 is taken, student may substitute an elective.
** Students may select 34-37 Semester Credit hours from courses that fulfill the student's educational goals.
● Humanities/Fine Arts Selection: See page 64.
◆ Computer Science/Microcomputer Technology Selection: See page 64.

Geology

Associate in Science Degree

This is a suggested curriculum.

First Year

First Semester			Credit
GEOL	1403	Physical Geology	4
MATH*	1316	Trigonometry	3
HIST	1301	History of the U.S. to 1877	3
CHEM	1411	General Chemistry I	4
ENGL	1301	Composition and Rhetoric I	3
PHED		Physical Education	1

Second Semester			
GEOL	1404	Historical Geology	4
MATH	1348	Analytic Geometry	3
HIST	1302	History of the U.S. from 1877	3
CHEM	1412	General Chemistry II	4
ENGL	1302	Composition and Rhetoric II	3
PHED		Physical Education	1

Second Year

First Semester			
PHYS	1401	College Physics I	4
GOVT	2301	State and Federal Government I	3
MATH	2313	Calculus I	3
ENGL**		English Elective	3
PHED		Physical Education	1
MISC	1450	Microcomputers for Business	4

Second Semester			
PHYS	1402	College Physics II	4
GOVT	2302	State and Federal Government II	3
MATH	2314	Calculus II	3
SPCH	1315	Public Speaking	3
PHED		Physical Education	1
ELCT•		Humanities/Fine Arts Selection	3
Total Hours			**71**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* Students deficient in mathematics must take College Algebra. This course should be taken during the summer term prior to the freshman year.

** English Electives include: ENGL 2311, 2322, 2323, 2327, 2328, 2332, 2333.

• Humanities/Fine Arts Selection: See page 64.

Graphics and Printing

Associate in Applied Science Degree and Enhanced Mastery Certification

Students successfully completing a Print Trades Management Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
GRPH	1405	Introduction to Graphic Arts and Printing	4
GRPH	1471	Basic Camera	4
GRPH	1409	Press Operations I	4
ENGL	1301	Composition and Rhetoric I	3
WOPO	1303	Beginning Keyboarding/Data Entry	3
Second Semester			
GRPH	1419	Binding and Finishing Operations	4
GRPH	1422	Electronic Publishing I	4
GRPH	1474	Preventive Maintenance	4
MATH		MATH 1324, 1342, 1314 or higher	3
MGMT	1305	Introduction to Management	3

Second Year

First Semester			
GRPH	2436	Prepress Techniques	4
SPCH	1321	Business and Professional Speaking	3
MISC	1450	Microcomputers for Business	4
MGMT	1306	Human Relations	3
GOVT		GOVT 2301 or 2302	3
ELCT		Elective	1
Second Semester			
GRPH	2438	Press Operations II	4
MGMT	2309	Supervision	3
ELCT•		Humanities/Fine Arts Selection	3
ELCT		Management Elective	3
PHED		Physical Education	1
ELCT		Management/Business Elective	3
or			
GRPH	2488	Internship - Graphics and Printing Equipment Operator	4
Total Hours			**71/72**

• Humanities/Fine Arts Selection: See page 64.

Certificate of Completion Level I Not offered on Central Campus

Students may apply for a Certificate of Completion, Graphics and Printing, upon satisfactory completion of GRPH 1405, 1409, 1419, 1422, 1471, 1474, 2436 and 2438.

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one of the following options to receive Enhanced Mastery Certification:
Art - ARTS 1311, 1312, 2313, 2314
Computer Science - MISC 1420, 1430, 1460
Business Management - MGMT 1304, 1308, 2320, 2322

Graphics and Printing Technology

Certificate of Completion

Courses must be taken in the sequence shown below except as approved by the Department Chair.

First Semester			**Credit**
TIPT	1401	Basic Shop Skills, Layout, Design and Composition	4
TIPT	1402	Desk Top Publishing I	4
TIPT	1410	Desk Top Publishing II	4
TIPT	1403	Offset Press Operations I	4
TIPT	1404	Advanced Camera	4
Second Semester			
TIPT	1405	Offset Press Operations II	4
TIPT	1406	Offset Press Operations III	4
TIPT	1407	Preventive Maintenance and Bindery	4
TIPT	1408	Advanced Bindery	4
TIPT	1409	Print Shop Applications	
or			
GRPH*	2488	Internship- Graphics and Printing Equipment Operator	4
Total Hours			**40**

* Prerequisite: Satisfactory completion of ALL TIPT courses in the program or consent of the Department Chair.

This is a self-paced open-entry program.

Health Information Specialist
Medical Office Specialist
Certificate of Completion

First Year

First Semester			Credit
TIOA	1301	Fundamentals of Keyboarding	3
TIHI	1301	Medical Office Orientation	3
TIOA	1314	Business English Fundamentals	3
TIOA	1303	Beginning Word Processing	3
Second Semester			
TIOA	1305	Business Correspondence	3
TIOA	1307	Word Processing and Transcription	
or			
TIOA	1322	Intermediate Information Processing	3

Second Year

First Semester			
TIOA	1310	Fundamentals of Terminology and Transcription	3
TIOA	1316	Information and Records Management	3
TIOA	1306	Applied Business Mathematics	3
Second Semester			
TIOA	1315	Integrated Software Applications	3
TIHI	1310	Computerized Medical Office Practice	3
TIHI	1311	Medical Insurance	3
TIHI	1312	Health Information Practicum III	3
Total Hours			**39**

This is a self-paced, open-entry program.

Health Information Specialist
Medical Record Clerk
Certificate of Completion

First Year

First Semester			Credit
TIHI	1301	Medical Office Orientation	3
TIOA	1301	Fundamentals of Keyboarding	3
TIOA	1314	Business English Fundamentals	3
TIOA	1303	Beginning Word Processing	3
Second Semester			
TIOA	1305	Business Correspondence	3
TIOA	1307	Intermediate Word Processing and Transcription	
or			
TIOA	1322	Intermediate Information Processing	3
TIOA	1316	Information and Records Management	3

Second Year

First Semester			
TIOA	1310	Fundamentals of Medical Terminology and Transcription	3
TIHI	1302	Medical Terminology and the Human Body	3
TIHI	1313	Intermediate Medical Terminology	3
Second Semester			
TIHI	1306	Medical Record Technology	3
TIHI	1307	Classification Systems	3
TIHI	1309	Health Information Practicum II	3
Total Hours			39

This is a self-paced, open-entry program.

Health Information Specialist
Medical Secretary/Transcriptionist
Certificate of Completion

First Year

First Semester			Credit
TIHI	1301	Medical Office Orientation	3
TIOA	1301	Fundamentals of Keyboarding	3
TIOA	1316	Information and Records Management	3
TIOA	1303	Beginning Word Processing	3
Second Semester			
TIOA	1314	Business English Fundamentals	3
TIOA	1307	Word Processing and Transcription	3
TIOA	1310	Fundamentals of Medical Terminology and Transcription	3

Second Year

First Semester			
TIHI	1302	Medical Terminology and the Human Body	3
TIOA	1305	Business Correspondence	3
TIOA	1313	Advanced Word Processing	3
Second Semester			
TIHI	1303	Medical Terminology in Radiology and the Laboratory	3
TIHI	1304	Specialized Medical Terminology	3
TIHI	1308	Health Information Practicum I	3
Total Hours			**39**

This is a self-paced, open-entry program.

Hospitality Management
Culinary Arts
Associate in Applied Science Degree

First Year

First Semester			Credit
HMCA	1601	Fundamentals of Food Theory	6
HMCA	1309	Introduction to Hospitality Industry	3
HMCA	1202	Safety and Sanitation	2
HMCA	1207	Menu Planning	2
Second Semester			
HMCA	1606	Culinary Principles	6
HMCA	1303	Food Purchasing	3
ELCT		Elective	3
Third Semester			
ENGL	1301	Composition and Rhetoric I	3
SPCH	1315	Public Speaking	3
MGMT	1306	Human Relations	3
HMCA	1304	Hospitality Law	3

Second Year

First Semester			
HMCA	2302	Hospitality Industry Computer System	3
HMCA	2612	Advanced Culinary Arts	6
HMCA	2308	Hospitality Sales	3
PHED		Physical Education	1
Second Semester			
MATH	1342	Elementary Statistics	3
HMCA	2304	Nutrition for HMCA Professionals	3
HMCA	2301	Management Practice HMCA	3
ELCT■		Social/Behavioral Science Selection	3
Third Semester			
HMCA	2311	Culinary Arts, Practicum (Field Experience)	3
HMCA		Elective	3
ELCT●		Humanities/Fine Arts Selection	3
Total Hours			71

- ● Humanities/Fine Arts Selection: See page 64.
- ■ Social/Behavioral Science Selection: See page 64.

Certificate of Completion Restaurant Skills
Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 1202, 1207, 1601, 2164, MGMT 2302 and one Elective.

Certificate of Completion Culinary Arts
Students may apply for a certificate of completion upon satisfactory completion of: HMCA 1202, 1207, 1303, 1304, 1601, 1606, 2301, 2302, 2612, MGMT 1306 and one Elective.

Hospitality Management
Lodging and Tourism Management
Associate in Applied Science Degree

First Year

First Semester			Credit
HMCA	1601	Fundamentals of Food Theory	6
HMCA	1202	Safety and Sanitation	2
HMCA	1309	Intro to Hospitality Industry and Quality Customer Care	3
ELCT●		Humanities/Fine Arts Selection	3
Second Semester			
HMCA	1305	Convention and Tourism	3
HMCA	1308	Front Office Procedures	3
HMCA	1304	Hospitality Law	3
ELCT		Elective	3
Third Semester			
ELCT■		Social/Behavioral Science Selection	3
SPCH	1315	Business Speaking	3
MGMT	1306	Human Relations	3
HMCA		Elective	3
PHED		Physical Education	1

Second Year

First Semester			
HMCA	2302	Hospitality Industry Computer Systems	3
HMCA	2305	Facility Design, Layout and Security	3
HMCA	2306	Hospitality Accounting I	3
HMCA	2310	Property Management	3
Second Semester			
HMCA	2301	Management Practice HMCA	3
MATH	1342	Elementary Statistics	3
HMCA	2307	Tourism Management	3
HMCA	2308	Hospitality Sales	3
Third Semester			
HMCA	2309	Lodging and Tourism, Practicum (Field Experience)	3
HMCA		Elective	3
ENGL	1301	Composition and Rhetoric I	3
Total Hours			72

- ● Humanities/Fine Arts Selection: See page 64.
- ■ Social/Behavioral Science Selection: See page 64.

Certificate of Completion Lodging and Tourism

Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 1202, 1305, 1308 1601, 2164, 2301, 2306, 2308 and MGMT 1306.

Hospitality Management

Restaurant and Institutional Management

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing a Hospitality Management Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

			Credit
First Semester			
HMCA	1601	Fundamentals of Food Theory	6
HMCA	1202	Safety and Sanitation	2
HMCA	1309	Introduction to Hospitality Industry and Quality Customer Care	3
HMCA	1207	Menu Planning	2
Second Semester			
HMCA	1606	Culinary Principals	6
HMCA	1303	Food Purchasing	3
ELCT		Elective	3
Third Semester			
ELCT■		Social/Behavioral Science Selection	3
SPCH	1315	Public Speaking	3
MGMT	1306	Human Relations	3
HMCA	1304	Hospitality Law	3

Second Year

First Semester			
HMCA	2302	Hospitality Industry Computer System	3
HMCA	2304	Nutrition for HMCA Professionals	3
HMCA	2306	Hospitality Accounting I	3
HMCA	2305	Facility Design, Layout and Security	3
Second Semester			
HMCA	2301	Management Practice HMCA	3
MATH	1342	Elementary Statistics	3
ELCT●		Humanities/Fine Arts Selection	3
HMCA	2308	Hospitality Sales	3
Third Semester			
HMCA	2303	Restaurant/Institutional Management, Practicum (Field Experience)	3
HMCA		Elective	3
ENGL	1301	Composition and Rhetoric I	3
PHED		Physical Education	1
Total Hours			**71**

- ● Humanities/Fine Arts Selection: See page 64.
- ■ Social/Behavioral Science Selection: See page 64.

Certificate of Completion Hospitality Management

Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 1202, 1303, 1309, 2301, 2304, 2306, 2308, MGMT 1306.

Certificate of Completion Cooking and Supervision

Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 1202, 1303, 1304, 1309, 2164, 2301, 2302, 2304, 2306, 1601, 1606, MGMT 1306, and one elective.

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one one of the following options to receive Enhanced Mastery Certification:
Entrepreneurship - MGMT 1301, 1308, 2301
Diet Manager - HMCA 2355, 2358, 2359

Hospitality Management
Certificates of Completion

Dietary Manager

First Semester			Credit
HMCA	1202	Safety and Sanitation	2
HMCA	1303	Food Purchasing	3
HMCA	2358	Dietary Food Service Operations	3
Second Semester			
HMCA	2359	Diet Therapy	3
HMCA	2164	Capstone, HMCA	1
HMCA	2355	Dietary Manager, Field Experience	3
Total Credits			**15**

Lodging and Restaurant Entrepreneurship

First Semester			Credit
MGMT	1308	Small Business Management	3
MGMT	2301	Marketing Principles	3
HMCA	2350	Hospitality Advertising	3
Second Semester			
MGMT	2309	Supervision	3
HMCA	2307	Tourism Management	3
HMCA	2164	Capstone, HMCA	1
Total Credits			**16**

School Cafeteria Operations

First Semester			Credit
HMCA	1202	Safety and Sanitation	2
HMCA	2304	Nutrition for HMCA Professionals	3
HMCA	2351	Cafeteria Management	3
HMCA	1303	Food Purchasing	3
HMCA	1601	Fundamentals of Food Theory	6
Second Semester			
HMCA	1309	Introduction to Hospitality Industry and Quality Customer Care	3
HMCA	1606	Culinary Principles	6
HMCA	2359	Diet Therapy	3
HMCA	2308	Hospitality Sales	3
HMCA	2356	Advanced Baking	3
Total Credits			**35**

Interdisciplinary Studies

Associate in Arts Degree

This is a suggested curriculum.

First Year

			Credit
First Semester			
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
SCIE**		Physical/Life Science	4
LANG*	1411	Foreign Language	4
ELCT		Elective	3
PHED		Physical Education	1
Second Semester			
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
SCIE**		Physical/Life Science	4
LANG*	1412	Foreign Language	4
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1

Second Year

First Semester			
ENGL***		English Selection(s)	3
GOVT	2301	State and Federal Government I	3
MATH		MATH 1324, 1342 1314 or higher	3
PSYC	2301	Introduction to Psychology	3
SOCI	1301	Introduction to Sociology	3
PHED		Physical Education	1
Second Semester			
ENGL***		English Selection(s)	3
GOVT	2302	State and Federal Government II	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3
ELCT		Elective	3
ELCT		Elective	3
PHED		Physical Education	1
Total Hours			**68**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* LANG: See course selection under FREN, GERM, SPAN and JAPN. If German taken first year, Beginning French or Spanish may be taken second semester.

** SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.

*** English Selection(s) include: ENGL 2322, 2323, 2327, 2328, 2332, or 2333.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Journalism/Communications

Associate in Arts Degree

This is a suggested curriculum. See page for degree requirements.

First Year

First Semester			Credit
LANG*	1411	Foreign Language	4
COMM	1307	Communications Media	3
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
MISC	1420	Word Processing for Microcomputers	4
PHED		Physical Education	1

Second Semester			
LANG*	1412	Foreign Language	4
COMM	2311	News Gathering and Reporting I	3
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
MISC	1460	Desk Top Publishing	4
PHED		Physical Education	1

Second Year

First Semester			
SCIE**		Physical/Life Science	4
COMM	2315	News Gathering and Reporting II	3
GOVT	2301	State and Federal Government I	3
MATH		MATH 1324, 1342, 1314 or higher	3
ELCT•		Humanities/Fine Arts Selection	3
PHED		Physical Education	1

Second Semester			
SCIE**		Physical/Life Science	4
COMM	2305	Editing, Layout and Design	3
GOVT	2302	State and Federal Government II	3
SPCH	1315	Public Speaking	3
ENGL***		English Selection	3
PHED		Physical Education	1
Total Hours			**70**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* LANG: See course selection under FREN, GERM, SPAN and JAPN.
** SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.
*** English Electives include: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.
• Humanities/Fine Arts Selection: See page 64.

Kinesiology (Physical Education)
Associate in Science Degree

This is a suggested curriculum.

First Year

First Semester			Credit
ENGL	1301	Composition and Rhetoric I	3
BIOL	1408	General Biology I	4
HIST	1301	History of the U.S. to 1877	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED	1301	Foundations of Physical Health	3
PHED		Physical Education (Team Sport)	1
Second Semester			
ENGL	1302	Composition and Rhetoric II	3
BIOL	1409	General Biology II	4
HIST	1302	History of the U.S. from 1877	3
MATH		MATH 1324, 1342, 1314 or higher	3
COSC	1300	Computer Information Processing	3
PHED		Physical Education (Individual Sport)	1

Second Year

First Semester			
ENGL*		English Selection	3
BIOL	2401	Human Anatomy	4
GOVT	2301	State and Federal Government I	3
PHED	1308	Sport Officiating	3
SPCH**		Speech Selection	3
PHED	1130	Physical Conditioning	1
Second Semester			
ENGL*		English Selection	3
BIOL	2402	Human Physiology	4
GOVT	2302	State and Federal Government II	3
PHED	1306	Safety and First Aid	3
SOCI	1301	Introduction to Sociology	3
PHED	1138	Rhythmic Aerobics	1
Total Hours			**68**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* English Selection: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

** Speech Selection: SPCH 1321, 1318.

Law Enforcement

Associate in Applied Science Degree

(Not offered in Texas)

First Year

First Semester			Credit
LAWE	1301	Introduction to Criminal Justice	3
LAWE	1304	The Courts and Criminal Procedures	3
LAWE	1307	Crime in America	3
LAWE	1308	Fundamentals of Criminal Law	3
ENGL	1301	Composition and Rhetoric I	3
PHED		Physical Education	1
Second Semester			
LAWE	1201	Defensive Tactics	2
LAWE*		Law Enforcement Option Elective	3
LAWE*		Law Enforcement Option Elective	3
LAWE*		Law Enforcement Option Elective	3
ENGL		ENGL 1302 or 2311	3
ELCT**		Law Enforcement Elective	3

Second Year

First Semester			
LAWE	2101	Emergency Medical Aid	1
LAWE	2304	Juvenile Procedures	3
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
SOCI	1301	Introduction to Sociology	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
ELCT**		Law Enforcement Elective	3
Second Semester			
LAWE	2201	Firearms	2
PSYC	2301	Introduction to Psychology	3
SPCH	1321	Business and Professional Speaking	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3
ELCT**		Law Enforcement Elective	3
Total Hours			67

Students planning to complete a baccalaureate degree in Criminal Justice/Law Enforcement should declare a major and develop a degree plan which will meet the transfer requirements of the college of their choice, as soon as it can be determined.

- ● Humanities/Fine Arts Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.
- * Law Enforcement Options:
  Students intending to major in Law Enforcement may take LAWE 1302, 1303, 1309.
  Students intending to major in Corrections may take LAWE 1306, and one of the following: LAWE 1302, 1303, or 1309.
  Students who prefer a general Law Enforcement curriculum may take any three from LAWE 1302, 1303, 1306, 1309.
- ** Law Enforcement Elective Selection includes: LAWE 1310, 1315, 2301, 2303, 2306, 2308, 2310, 2312, 2313, 2314, 2315, 2319; EMET 1402.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of LAWE 1301, 1302, 1303, 1304, 1307, 1308, 1309, 2201, and a LAWE Elective.

Law Enforcement

Certificate of Completion

(Not Offered in Texas)

			Credit
First Semester			
LAWE	1301	Introduction to Criminal Justice	3
LAWE	1302	Criminal Investigations	3
LAWE	1303	Legal Aspects of Law Enforcement	3
LAWE	1304	The Courts and Criminal Procedures	3
LAWE	1307	Crime in America	3
Second Semester			
LAWE	1308	Fundamentals of Criminal Law	3
LAWE	1309	Police Systems and Practices	3
LAWE	2201	Firearms	3
LAWE		Elective	3
Total Hours			27

Maintenance Technology

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing a Maintenance Technology Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
INDU	1400	Industrial Fundamentals	4
AIRC	1400	Basic Air Conditioning and Refrigeration Theory	4
MTNT	1401	Carpentry I	4
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
Second Semester			
AIRC	1401	Electricity for Air Conditioning and Refrigeration I	4
MTNT	1402	Electricity	4
ENGL	1312	Communications Skills	3
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	4
ELCT●		Humanities/Fine Arts Selection	3

Second Year

First Semester			
MTNT	2402	Carpentry II	4
MTNT	2403	Plumbing I	4
AIRC	1403	Heating Systems	4
ELCT◆		Computer Science/Microcomputer Technology Selection	4
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
Second Semester			
MTNT	2404	Painting and Refinishing	4
MTNT	2410	Plumbing II	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
SPCH	1321	Business and Professional Speaking	3
DFTG	1391	Architectural Blue Print Reading	
or			
MTNT	2419	Maintenance Technology Internship	3-4
Total Hours			**71-72**

- ● Humanities/Fine Arts Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of ALL MTNT, AIRC, WLDG, INDU and DFTG (if selected) courses. Students must complete DFTG 1391 or MTNT 2419.

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one of the following options to receive Enhanced Mastery Certification:
Welding - WLDG 1434, 1457, 2439
Air Conditioning - AIRC 1406, 1407, 2400
Business Management - MGMT 1304, 1306, 1308, 2320

Maintenance Technology
Masonry Option
Associate in Applied Science Degree

Not offered on Central Campus

First Year

First Semester			Credit
MTNT	1401	Carpentry I	4
MTNT	1411	Basic Masonry I	4
INDU	1400	Industrial Fundamentals	4
MATH		MATH 1324, 1342, 1314 or higher	3
Second Semester			
MTNT	1412	Basic Masonry II	4
MTNT	1413	Intermediate Masonry I	4
ENGL	1312	Communications Skills	3
ELCT◆		Computer Science/Microcomputer Technology Selection.	3
ELCT		Approved Elective	3

Second Year

First Semester			
MTNT	2402	Carpentry II	4
MTNT	2414	Intermediate Masonry II	4
MTNT	2415	Advanced Masonry I and Blueprint Reading	4
ELCT		Maintenance Technology Elective	4
Second Semester			
MTNT	2416	Advanced Masonry II and Estimating	4
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
ELCT●		Humanities/Fine Arts Selection	3
SPCH	1321	Business and Professional Speaking	3
ELCT		Approved Elective	3
Total Hours			**64**

- ● Humanities/Fine Arts Selections: See page 64.
- ◆ Computer Science/Microcomputer Technology Selections: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of these courses: MTNT 1411, 1412, 1413, 2414, 2415 and 2416.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of these courses: MTNT 1401, 1411, 1412, 1413, 2402, 2414, 2415, 2416, INDU 1400.

Maintenance Technology
Residential Construction Option
Associate in Applied Science Degree

Not offered on Central Campus

First Year

First Semester

INDU	1400	Industrial Fundamentals	4
MTNT	1401	Carpentry I	4
MTNT	1402	Electricity	4
MTNT	1411	Basic Masonry I	4
ENGL	1312	Communication Skills	3

Second Semester

AIRC	1400	Basic Air Conditioning and Refrigeration Theory	4
MTNT	2402	Carpentry II	4
MTNT	2403	Plumbing I	4
MTNT	2404	Painting and Refinishing	4
MATH		MATH 1324, 1342, 1314 or higher	

Second Year

First Semester

MTNT	2408	Mill Cabinetry Construction and Installation	4
AIRC	1401	Electricity for Air Conditioning and Refrigeration I	4
DFTG	1491	Special Topics in Drafting	4
PHED		Physical Education	1
ELCT■		Social/Behavioral Science Selection	3

Second Semester

MTNT	2410	Plumbing II	4
AIRC	1403	Heating Systems	4
ELCT◆		Computer Science/Microcomputer Technology Selection	4
MTNT	2405	Foundations, Framing and Roofing	4
ELCT●		Humanities/Fine Arts Selection	3
Total Hours			**72**

- ● Humanities/Fine Arts Selection: See page 64.
- ■ Social/Behavioral Science Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of all MTNT, AIRC and DFTG courses.

Marketing and Sales Management

Associate in Applied Science and Enhanced Mastery Certification Option

Students successfully completing a Marketing and Sales Management Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
MGMT	1306	Human Relations	3
ENGL	1301	Composition and Rhetoric I	3
BUSI	1301	Introduction to Business	3
ELCT		MISC 1450 or WOPO 1305	3-4
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1
Second Semester			
MATH		MATH 1324 or 1342	3
MGMT	2301	Marketing Principles	3
MGMT	1304	Work Organization	3
MGMT	1311	Retail Management	3
ELCT		MGMT/BUSI/REAE	3
PHED		Physical Education	1

Second Year

First Semester			
ELCT		MGMT 1401/2316 or REAE 2401	3-4
ECON		ECON 2301 or 2302	3
ELCT•		Humanities/Fine Arts Selection	3
ELCT		MGMT/BUSI/REAE	3
ACCT*	2301	Principles of Accounting I	3
ELCT		MGMT/BUSI/REAE	3
Second Semester			
ELCT		MGMT 1402/2317 or REAE 2402	3-4
MGMT	2305	Business Law I	3
MGMT	2322	Salesmanship	3
ELCT		Elective	3
ACCT*	2302	Principles of Accounting II	3
ELCT		MGMT/BUSI/REAE	3
Total Hours			**68-71**

* OADM 2304 and 2305 may be substituted.

• Humanities/Fine Arts Selection: See page 64.

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one of the following options to receive Enhanced Mastery Certification:
Real Estate - REAE 1301, 1304 and 2300
Business Management - MGMT 1305, 1308 and OADM 1309

Marketing and Sales Management
Certificate of Completion

			Credit
First Semester			
MGMT	1306	Human Relations	3
BUSI	1301	Introduction to Business	3
ELCT		MISC 1450 or WOPO 1305	3-4
ELCT		BUSI/MGMT/REAE	3
Second Semester			
MGMT		MGMT 1401/2316 or REAE 2401	3-4
MGMT	2301	Marketing Principles	3
MGMT	2322	Salesmanship	3
ELCT		BUSI/MGMT/REAE	3
Total Hours			**24-26**

Marketing and Sales Management
Food Service Option
Associate in Applied Science

(Not offered in Texas)

First Year

First Semester			Credit
MGMT	1306	Human Relations	3
ENGL	1301	Composition and Rhetoric I	3
BUSI	1301	Introduction to Business	3
WOPO	1305	Applicational Software	3
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1
Second Semester			
MATH	1342	Elementary Statistics	3
MGMT	2301	Marketing Principles	3
HMCA	1202	Sanitation and Safety	2
MGMT	1311	Retail Management	3
HMCA	1207	Menu Planning	2
HMCA	1304	Hospitality Industry Law	3

Second Year

First Semester			
HMCA	1303	Food Purchasing	3
ECON		ECON 2301 or 2302	3
ELCT•		Humanities/Fine Arts Selection	3
HMCA	2302	Hospitality Industry Computer System	3
HMCA	2305	Facility Design, Layout and Security	3
HMCA	2306	Hospitality Accounting I	3
Second Semester			
HMCA	2308	Hospitality Industry Sales Promotion	3
HMCA	2351	Cafeteria Management	3
MGMT	2322	Salesmanship	3
ELCT		Elective	3
HMCA	2357	Hospitality Accounting II	3
HMCA	2304	Nutrition for HMCA Professionals	3
Total Hours			**68**

• Humanities/Fine Arts Selection: See page 64.

Mathematics

Associate in Arts or Science Degree

This is a suggested curriculum.

This curriculum is recommended for students pursuing either an Associate in Arts degree or an Associate in Science degree from Central Texas College. Students should check requirements of the institution to which they intend to transfer, as requirements may vary.

First Year

			Credit
First Semester			
MATH	1314	College Algebra	3
MATH	1316	Trigonometry	3
SCIE*		Physical/Life Science	
or			
LANG**	1411	Foreign Language	4
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
PHED		Physical Education	1
Second Semester			
MATH	1348	Analytic Geometry	3
COSC	1403	Introduction to Computer Science and Programming	4
SCIE*		Physical/Life Science	
or			
LANG**	1412	Foreign Language	4
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
PHED		Physical Education	1

Second Year

First Semester			
MATH***	2413	Calculus I	4
ENGL*4		English Elective	3
GOVT	2301	State and Federal Government I	3
SCIE*		Physical/Life Science	4
ELCT†		Humanities/Fine Arts Selection	3
PHED		Physical Education	1
Second Semester			
MATH	2414	Calculus II	4
SPCH		SPCH 1315 or 1321	3
GOVT	2302	State and Federal Government II	3
SCIE*		Physical/Life Science	4
ELCT*5		Elective	3
PHED		Physical Education	1
Total Hours			71

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* SCIE: See course selection under BIOL, CHEM, GEOL, PHYS. Choice of elective determines the type of degree.

** LANG: See course selection under FREN, GERM, SPAN, and JAPN. Choice of elective determines the type of degree.

*** Freshmen with adequate Mathematics background may enroll in MATH 2413 during the fall semester with the consent of the Mathematics Department Chair.

*4 English Elective selection includes: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

*5 To meet the requirement of 18 hours of sophomore credits, student must take a sophomore-level Speech or elective.

• Humanities/Fine Arts Selection: See page 64.

Medical Laboratory Technician
Associate in Applied Science Degree

Application must be submitted 30 days prior to enrollment. Upon acceptance to the program, all requirements must be completed within four years. After successful completion of this program and required comprehensive exams, graduates are eligible to take the National Board of Registry administered by the American Society of Clinical Pathologist.

First Year

First Semester			**Credit**
MELT	1601	Introduction to Medical Laboratory Technician	6
BIOL*	2401	Human Anatomy	4
CHEM*	1411	General Chemistry I	4
MATH	1314	College Algebra	3
Second Semester			
MELT	1402	Hematology	4
BIOL*	2402	Human Physiology	4
CHEM	1412	General Chemistry II	4
MISC	1450	Microcomputer for Business	4
Summer Session			
MELT	2502	Clinical Practice	5

Second Year

First Semester			
MELT	2401	Clinical Practice II	4
MELT	2402	Medical Microbiology I	4
MELT	2403	Immunology/Immunohematology	4
Second Semester			
MELT	2404	Medical Microbiology II	4
MELT	2405	Clinical Chemistry	4
MELT	2406	Clinical Practice III	4
Summer Session			
ENGL	1312	Communications Skills	3
ELCT•		Humanities/Fine Arts Selection	3
ELCT		PSYC 2301 or SOCI 1301	3
Total Hours			**71**

* Credit in science courses must have been received within 5 years prior to enrollment in MELT 1601.
• Humanities/Fine Arts Selection: See page 64.

Medical Technology

Associate in Science Degree

This is a suggested curriculum.

First Year

			Credit
First Semester			
BIOL	2401	Human Anatomy	4
CHEM	1411	General Chemistry I	4
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
MATH	1314	College Algebra	3
PHED		Physical Education	1
Second Semester			
BIOL	2402	Human Physiology	4
CHEM	1412	General Chemistry II	4
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
MATH	1342	Elementary Statistics	3
PHED		Physical Education	1

Second Year

First Semester			
BIOL	2421	Microbiology	4
CHEM	2423	Organic Chemistry I	4
GOVT	2301	State and Federal Government I	3
PHYS	1401	College Physics I	4
MISC	1450	Microcomputers for Business	4
PHED		Physical Education	1
Second Semester			
ENGL	2311	Technical Writing	3
ELCT•		Humanities/Fine Arts Selection	3
GOVT	2302	State and Federal Government II	3
PHYS	1402	College Physics II	4
SPCH	1315	Public Speaking	3
PHED		Physical Education	1
Total Hours			73

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- Humanities/Fine Arts Selection: See page 64.

Mental Health Services
Associate of Applied Science Degree

First Year

First Semester			Credit
MHSV**		Specialization Course	3
MHSV**		Specialization Course	3
MHSV	1303	Introduction to Counseling Theories	3
MHSV	1304	Basic Communication Skills in Human Services	3
PSYC	2301	Introduction to Psychology	3
Second Semester			
MHSV	1305	Drug Education	3
MHSV	1307	Diversity in Human Services	3
MHSV**		Specialization Course	3
PSYC**		Specialization Course	3
ENGL	1301	Composition and Rhetoric I	3
Third Semester			
MHSV	1311	Ethics and Legal Issues in Human Services	3
MHSV	2303	Group Dynamics	3
PHED		Physical Education	1

Second Year

First Semester			
MHSV	2307	Introduction to Mental Disorders	3
MHSV		Elective	3
MHSV**		Specialization Course	3
MHSV	2301	Family Issues in Human Services	3
SPCH		SPCH 1315 or 1321	3
Second Semester			
MATH		MATH 1324, 1342,1314 or higher	3
MISC	1450	Microcomputers for Business	4
MHSV**		Specialization (Field Placement/Practicum) Course	4
ELCT*		Elective	3
ELCT•		Humanities/Fine Arts Selection	3
Total Hours			**69**

* Recommended: SOCI 1301, PHED 1306, PHED 1336, or See Department Advisor

** Chemical Dependency Specialization - MHSV 1301, 1302, 1306, 2302, 2401, PSYC 2314.
Community Child and Youth Work Specialization - MHSV 1308, 1309, 1310, 2308, 2402, PSYC 2308.

• Humanities/Fine Arts Selection: See page 64.

Mental Health Services
Certificate of Completion - Basic

First Semester			Credit
MHSV	1304	Basic Communication Skills in Human Services	3
MHSV	1305	Drug Education	3
MHSV	1307	Diversity in Human Services	3
MHSV	1311	Ethics and Legal Issues in Human Services	3
MHSV*		Specialization Course	3
MHSV*		Specialization Course	3
Total Hours			**18**

* Chemical Dependency Counseling Specialization-MHSV 1301, 1302.
Community Child and Youth Work Specialization-MHSV 1308, 1310.

Mental Health Services
Certificate of Completion - Advanced

First Year

First Semester			Credit
MHSV*		Specialization Course	3
MHSV*		Specialization Course	3
MHSV	1304	Basic Communications Skills in Human Services	3
MHSV	1305	Drug Education	3
Second Semester			
MHSV*		Specialization Course	3
MHSV	1307	Diversity in Human Services	3
MHSV	1311	Ethics and Legal Issues in Human Services	3
MHSV	2303	Group Dynamics	3

Second Year

First Semester			
MHSV	1303	Introduction to Counseling Theories	3
MHSV	2301	Family Issues in Human Services	3
MHSV*		Specialization Course	3
MHSV	2307	Introduction to Mental Disorders	3
Second Semester			
MHSV*		Specialization Course	4
Total Hours			**40**

* Chemical Dependency Counseling Specialization - MHSV 1301, 1302, 1306, 2302, 2401.
Community Child and Youth Work Specialization - MHSV 1308, 1309, 1310, 2308, 2402.

Microcomputer Technology
Information Management
Associate in Applied Science Degree

Not offered on Central Campus

First Year

First Semester			Credit
MISC	1400	Microcomputer Fundamentals	4
MISC	1420	Word Processing for Microcomputers	4
MISC	1430	Spreadsheets for Microcomputers	4
MISC	1450	Microcomputers for Business	4
PHED		Physical Education	1
Second Semester			
MISC	1440	Data Base for Microcomputers	4
MISC	1451	Introduction to Microcomputer Programming	4
MISC	1461	Operating Systems	4
MGMT	1305	Introduction to Management	3
ENGL	1301	Composition and Rhetoric I	3

Second Year

First Semester			
ELCT		COSC/MISC Technical Elective	4
MATH		MATH 1324, 1342, 1314 or higher	3
ELCT*		ACCT Elective Selection	3
ELCT●		Humanities/Fine Arts Elective	3
ELCT■		Social/Behavioral Science Elective	3
Second Semester			
MISC	2301	Information Center Management	3
MISC	2402	Systems in the MIS Environment	4
MISC	2454	Basic Communications, Networking and Internet	4
ELCT		COSC/MISC Technical Elective	4
SPCH	1321	Business and Professional Speaking	3
Total Hours			**69**

* ACCT Elective selection includes WOPO 2304, OADM 2304, ACCT 2301

● Humanities/Fine Arts Elective: See page 64.

■ Social/Behavioral Science Elective: See page 64.

Microcomputer Technology
Programmer Analyst
Associate in Applied Science Degree

Not offered on Central Campus

First Year

First Semester			Credit
MISC	1405	Computer Concepts and Analysis	4
MISC	1451	Introduction to Microcomputer Programming	4
ENGL	1301	Composition and Rhetoric I	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
Second Semester			
MISC	1404	COBOL Programming	4
MISC	1406	Computer Organization and Architecture	4
MISC	1454	PASCAL Programming	4
MISC	1461	Operating Systems	4

Second Year

First Semester			
MISC	2456	C Language Programming I	4
ELCT		COSC/MISC Technical Elective	4
ELCT		COSC/MISC Technical Elective	4
ELCT*		ACCT Selection	3
ELCT■		Social/Behavioral Science Selection	3
Second Semester			
MISC	2402	Systems in the MIS Environment	4
MISC	2454	Basic Communications, Networking and Internet	4
ELCT		COSC/MISC Technical Elective	4
SPCH	1321	Business and Professional Speaking	3
ELCT●		Humanities/Fine Arts Selection	3
Total Hours			67

* ACCT Elective selection includes WOPO 2304, OADM 2304, ACCT 2301.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

Military Science Management

Associate in Applied Science Degree

Not Offered in Texas

First Year

First Semester			Credit
MILS*	1101	Military Science I	1
MILS	1301	U.S. Heritage, Mission, Organization	3
MILS	1300	Military Organization and Staff Functions	3
MILS	1202	Briefing Techniques, Aids and Devices	2
MGMT	1204	Setting Goals and Objectives	2
MILS		Lower Level MILS Elective	2
ENGL	1301	Composition and Rhetoric I	3
PHED		Physical Education	1
Second Semester			
MILS	1102	Fundamentals of Leadership	1
MILS	2101	Stress Management	1
MILS**	1201	Military Science II	2
MILS	1203	Professionalism and Responsibility	2
MGMT	1205	Analysis of Training Requirements	2
MATH	1342	Elementary Statistics	3
SPCH	1321	Business and Professional Speaking	3
PHED		Physical Education	1
ELCT•		Humanities/Fine Arts Selection	3

Second Year

First Semester			
MILS	2211	Job Performance and Motivation	2
MILS***	2201	Military Science III	2
MILS	1207	Professional Development of the Manager	2
MILS*[4]		MILS Elective	3
GEOG*[5]	1302	Cultural Geography	3
ELCT		MILS or MGMT Elective	3
PHED		Physical Education	1
Second Semester			
MILS	2206	Management and Learning Strategies	2
MILS	2351	Advanced Leadership	3
MILS	2354	Management Problems	3
MILS	2103	Time Management	1
ELCT*[6]		MILS or MGMT Elective	3
WOPO	1101	Introduction to MS-DOS	
WOPO	1102	Introduction to WordPerfect	1
WOPO	1104	Introduction to Lotus 123	1
PHED		Physical Education	1
Total Hours			**67**

* May substitute MILS 1106, 1107

** May substitute MILS 1210, 1212,

*** May substitute MILS 1211, 1213

*[4] MILS 2371, 2372, 2373.

*[5] May Substitute any foreign language or PHIL 2303.

*[6] Approved Electives: MILS 1105, 1108, 1204, 1205, 1208, 1209, 2109, 2202, 2203, 2204, 2205, 2207, 2208, 2209, 2210, 2261, 2301, 2309, 2352, 2372; and MGMT 1206, 1305, 2309, 2310 .

• Humanities/Fine Arts Selection: See page 64.

Music

Associate in Arts Degree

This is a suggested curriculum.

First Year

First Semester			Credit
MUSI	1216	Ear Training/Sight Singing I	2
MUSI	1169	Individualized Instruction I	1
MUSI*	1141	Choir/Ensemble	1
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
LANG**	1411	Beginning Foreign Language	4
PHED		Physical Education	1
Second Semester			
MUSI	1170	Individualized Instruction II	1
MUSI	1312	Music Theory II	3
MUSI	1141	Choir/Ensemble	1
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the US from 1877	3
LANG**	1412	Foreign Language	4
PHED		Physical Education	1

Second Year

First Semester			
MUSI	2271	Individualized Instruction III	2
MUSI	1141	Choir/Ensemble	1
ENGL		ENGL 2322, 2323, 2327, 2328, 2332, or 2333	3
SCIE		Physical/Life Science	4
MATH		MATH 1324, 1342, 1314 or higher	3
GOVT	2301	State and Federal Government I	3
PHED		Physical Education	1
Second Semester			
MUSI	2272	Individualized Instruction IV	2
MUSI	1141	Choir/Ensemble	1
SPCH		SPCH 1318, 1321, or 2341	3
SCIE		Physical/Life Science	4
ELCT◆		Computer Science/Microcomputer Technology Selection	4
GOVT	2302	State and Federal Government II	3
PHED		Physical Education	1
Total Hours			**66**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approve by the appropriate department chair.

* MUSI 1141 is a residency requirement but does not transfer as credit.

** LANG: See course selections under GERM, SPAN, FREN AND JAPN. If German is taken the first year, beginning French or Spanish may be taken the second year.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

A General Studies Degree with Music emphasis may be earned by substituting LANG 1411 and 1412, both Physical/Life Science selections and two PHED selections with MUSI 1181, 1182, 1217, 1306, 1308, 1309, 1311, 2311, 2312.

Nursing-Associate Degree Nursing

Associate in Applied Science Degree

A curriculum revision is in progress and will become effective Fall 1998

First Year

Prerequisites to NURI 1901			Credit
ENGL	1301	Composition and Rhetoric I	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3-4
PSYC	2301	Introduction to Psychology	3
MATH**			

First Semester

NURI	1901	Fundamentals of Nursing	9
BIOL*	2401	Human Anatomy	4

Second Semester

NURI	1101	Psychiatric Nursing I	1
NURI	1902	Medical-Surgical Nursing I	9
BIOL*	2402	Human Physiology	4

Second Year

Summer Session

ELCT●		Humanities/Fine Arts Selection	3
PSYC	2314	Life Span Development	3
SPCH		SPCH 1315 or 1318	3

First Semester

NURI	2102	Psychiatric Nursing II	1
NURI	2903	Maternal Child Health Nursing	9
BIOL*	2421	Microbiology	4

Second Semester

NURI	2904	Medical-Surgical Nursing II	9
NURI	2101	Nursing Trends Seminar	1
NURI	2103	Psychiatric Nursing III	1
PHED		Physical Education	1
Total Hours			**71-72**

* Credit in Science courses must have been received within 5 years prior to enrollment in NURI 1901.

** Students are required have a score of 220 or higher on the Math Placement Exam, or successful completion of DSMA 0303, or college-level Algebra.

● Humanities/Fine Arts Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: MISC 1420, 1450; WOPO 1303, 1304, or 1305.

Nursing-Associate Degree Nursing

Nursing For Licensed Vocational Nurses

Associate in Applied Science Degree

A curriculum revision is in progress and will become effective Fall 1998

First Year

Prerequisites to NURI 1401			Credit
ENGL	1301	Composition and Rhetoric I	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3-4
BIOL**	2401	Human Anatomy	4
BIOL**	2402	Human Physiology	4
PSYC	2301	Introduction to Psychology	3
MATH***			

Courses to be completed prior to graduation			
ELCT●		Humanities/Fine Arts Selection	3
SPCH		SPCH 1315 or 1318	3

Summer Session			
PSYC	2314	Life Span Development	3
NURI*	1401	Bridging Course (NURI 1101, 1901 and 1902)	4

Second Year

First Semester			
NURI	2102	Psychiatric Nursing II	1
NURI	2903	Maternal Child Health Nursing	9
BIOL**	2421	Microbiology	4

Second Semester			
NURI	2904	Medical-Surgical Nursing II	9
NURI	2101	Nursing Trends Seminar	1
NURI	2103	Psychiatric Nursing III	1
PHED		Physical Education	1
Total Hours			**71-72**

* NURI 1401 is a bridging course available to Licensed Vocational Nurses (LVN). Upon successful completion, LVN's will receive credit for NURI 1101, 1901 and 1902.

** Credit in science courses must have been received within 5 years prior to enrollment in NURI 1401.

*** Students are required to have a score of 220 or higher on the Math Placement Exam, or successful completion of DSMA 0303, or college-level algebra.

● Humanities/Fine Arts Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: MISC 1420, 1450; WOPO 1303, 1304, or 1305.

Nursing - Nurse Aide
Certificate of Completion
Non-Credit

			Clock Hours
CENA	0101	Nurse Aide in Long-term Care Facilities	80
Total Hours			**80**

Following completion, individuals are eligible to take the Nurse Aide Registry examination administered by the Texas Department of Health.

Nursing-Vocational
Certificate of Completion

This is a one-year, Vocational Nursing Program that satisfies the requirements established by the Board of Vocational Nurse Examiners. After successful completion of this program, the graduate is eligible to take the licensing examination administered by Texas State Board of Vocational Nurse Examiners. Contact the Nursing Department for current information.

Office Management

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing an Office Management Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
WOPO*	1303	Beginning Keyboarding/Data Entry	3
OADM	1309	Business Mathematics and Calculating Machines	3
MGMT	1304	Work Organization	3
MGMT	1305	Introduction to Management	3
ENGL	1301	Composition and Rhetoric I	3
WOPO	1101	MS-DOS: An Introduction	1

Second Semester			
WOPO	1304	Intermediate Information Processing Applications	3
WOPO	1307	Word Processing and Transcription	3
OADM	1305	Information and Records Management	3
OADM	1308	Business Correspondence	3
WOPO	1305	Applicational Software	3
PHED		Physical Education	1

Second Year

First Semester			
OADM	2304	Office Accounting I	3
MGMT	2305	Business Law I	3
SPCH	1321	Business and Professional Speaking	3
ELCT■		Social/Behavioral Science Selection	3
MATH		MATH 1324, 1342, 1314, or higher	3
PHED		Physical Education	1

Second Semester			
OADM	2305	Office Accounting II	3
OADM	2307	Automated Office Administration	3
MGMT	2302	Human Resource Management	3
WOPO	2302	Advanced Information Processing Applications	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT		OADM/WOPO Selection	3
Total Hours			**66**

* Levels of shorthand and typewriting will be determined by the student's previous training in these skills and/or by placement tests.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion, General Office Assistant, upon satisfactory completion of ALL first-year courses.

Enhanced Mastery Certification

Enhanced Mastery Certification will be awarded upon completion of the degree and the following courses: ACCT 2301, 2302 and WOPO 2304.

Office Management - Advanced Certificate

Certificate of Completion

First Year

First Semester			Credit
WOPO	1101	MS-DOS: An Introduction	1
WOPO*	1303	Beginning Keyboarding/Data Entry	3
OADM	1308	Business Correspondence	3
OADM	1309	Business Mathematics and Calculating Machines	3
OADM	1305	Information and Records Management	3
MGMT	1305	Introduction to Management	3
Second Semester			
ENGL		ENGL 1301, 1302, or 1312	3
WOPO**	1102	WordPerfect: An Introduction	1
WOPO*	1304	Intermediate Information Processing Applications	3
WOPO	1307	Word Processing/Transcription	3
MGMT	1304	Work Organization	3
OADM	1306	Office Procedures and Applications	3

Second Year

First Semester			
WOPO**	1104	LOTUS 1-2-3: An Introduction	1
OADM	2304	Office Accounting I	3
WOPO	2308	Information Systems Internship I	3
MGMT	2305	Business Law I	3
WOPO	2304	Automated Accounting	3
Second Semester			
WOPO**	1109	Data Applications	1
WOPO	2302	Advanced Information Processing Applications	3
OADM	2305	Office Accounting II	3
OADM	2307	Automated Office Management	3
WOPO	2309	Information Systems Internship II	3
Total Hours			**58**

* Level of keyboarding will be determined by the student's previous training in this skill and/or by placement tests.

** WOPO 1305 or WOPO 2303 may be substituted.

Office Information Systems
Certificate of Completion

First Year

First Semester			Credit
TIOA	1301	Fundamentals of Keyboarding	3
TIOA	1302	Business Office Orientation	3
TIOA	1303	Beginning Word Processing	3
Second Semester			
TIOA	1314	Business English Fundamentals	3
TIOA	1305	Business Correspondence	3
TIOA	1306	Applied Business Mathematics	3

Second Year

First Semester			
TIOA	1316	Information and Records Management	3
TIOA	1323	Customer Service and Organizational Ethics	3
TIOA	1311	Legal Terminology and Transcription	3
Second Semester			
TIOA	1307	Word Processing and Transcription	3
TIOA	1310	Fundamentals of Medical Terminology and Transcription	3
TIOA	1317	Principles of Accounting	3
TIOA	1318	Office Information Systems Practicum (Field Experience)	3
Total Hours			**39**

Office Information Technology
Certificate of Completion

First Year

First Semester			Credit
TIOA	1301	Fundamentals of Keyboarding	3
TIOA	1302	Business Office Orientation	3
TIOA	1303	Beginning Word Processing	3
Second Semester			
TIOA	1314	Business English Fundamentals	3
TIOA	1305	Business Correspondence	3
TIOA	1316	Information and Records Management	3

Second Year

First Semester			
TIOA	1307	Word Processing and Transcription	3
TIOA	1317	Principles of Accounting	3
TIOA	1313	Advanced Word Processing	3
Second Semester			
TIOA	1320	Automated Accounting	3
TIOA	1321	Office Procedures and Applications	3
TIOA	1324	Microsoft Office Applications	3
TIOA	1319	Office Systems Technology Practicum (Field Experience)	3
Total Hours			

Paralegal/Legal Assistant
Associate in Applied Science Degree

First Year

First Semester			Credit
LEGA	1401	Introduction to Paralegalism	4
LEGA	1302	Legal Office Ethics and Management	3
LEGA	1304	Principles of Family Law	3
ENGL	1312	Communications Skills	3
GOVT	2301	State and Federal Government I	3
WOPO**	1303	Beginning Keyboarding	3
Second Semester			
LEGA	1306	Criminal Law	3
LEGA	1307	Civil Litigation	3
MATH		MATH 1324 or 1342	3
MISC	1420	Word Processing for Microcomputers	4
LEGA	2301	Torts and Personal Injury	3
PHED		Physical Education	1

Second Year

First Semester			
LEGA	2302	Contract Law and the UCC	3
LEGA	2406	Techniques of Legal Research	4
LEGA*		Approved Elective	3
ELCT		ACCT 2301 or OADM 2304	3
GOVT	2302	State and Federal Government II	3
PHED		Physical Education	1
Second Semester			
LEGA	2405	Wills, Trust and Probate	4
LEGA*		Approved Elective	3
LEGA*		Approved Elective	3
HUMA●		Humanities/Fine Arts Selection	3
LEGA	2401	Techniques of Legal Practice	
or			
LEGA	2404	Legal Assistant Internship	4
Total Hours			**70**

* Approved Elective Selection includes: LEGA 1305, 1308, 1309, 1403, 2101, 2301, 2303, 2307, 2308.

** Demonstrated proficiency to type 30 wpm may be substituted.

● Humanities/Fine Arts Selection: See page 64.

Paramedic Program

Non-Credit Certificate of Completion

			Clock Hours
CEEM	0103	Paramedic Phase I	128
CEEM	0104	Paramedic Phase II	144
CEEM	0105	Paramedic Phase III	144
CEEM	0106	Paramedic Phase IV	144
CEEM	0107	Paramedic Phase V	176
Total Clock Hours			**736**

Pre-Med

Associate in Science Degree

This is a suggested curriculum.

First Year

First Semester			Credit
BIOL	1408	General Biology I	4
CHEM	1411	General Chemistry I	4
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
MATH	1314	College Algebra	3
PHED		Physical Education	1
Second Semester			
BIOL	1409	General Biology II	4
CHEM	1412	General Chemistry II	4
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
MATH	1316	Trigonometry	3
PHED		Physical Education	1
Third Semester			
ENGL*		English Selection	3
SPCH	1315	Public Speaking	3

Second Year

First Semester			
BIOL	2428	Vertebrate Zoology	4
CHEM	2423	Organic Chemistry I	4
GOVT	2301	State and Federal Government I	3
PHYS	1401	Physics I	4
PHED		Physical Education	1
MISC	1450	Microcomputers for Business	4
Second Semester			
CHEM	2425	Organic Chemistry II	4
GOVT	2302	State and Federal Government II	3
ELCT•		Humanities/Fine Arts Selection	3
PHYS	1402	Physics II	4
PHED		Physical Education	1
Total Hours			77

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approve by the appropriate department chair.

* English Selection includes: ENGL 2322, 2323, 2327, 2328, 2332 and 2333.

• Humanities/Fine Arts Selection: See page 64.

Real Estate

Real Estate Sales Agent
Certificate of Completion

First Semester			Credit
REAE*	1301	Real Estate Fundamentals	3
REAE*	1304	Real Estate Law: Agency	3
REAE*	2300	Contract Law	3
ELCT*		REAE (Except 2401/2402) or Approved Selection	3
REAE	2401	Real Estate Internship I	4
Total Hours			**16**

* Upon successful completion of these courses, the student is eligible to sit for the Texas Real Estate Sales Agent License exam.

Science

SEE (BIOL), (CHEM), (GEOL), OR (PHYS)

Small Gas Engine Repair

Associate in Applied Science

Not offered in Texas

First Year

First Semester			Credit
INDU	1400	Industrial Fundamentals	4
SGER	1401	Gas Engine Fundamentals	4
ENGL	1312	Communications Skills	3
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	4
SGER	2311	Shop Organization and Management	3
Second Semester			
SGER	1407	Small Gas Engine Service	4
MATH		MATH 1324, 1342, 1314 or higher	3
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
ELCT●		Humanities/Fine Arts Selection	3
SGER	2402	Chain Saw Service and Repair	4

Second Year

First Semester			
WLDG	1430	Introduction to Gas Metal Arc (MIG) Welding	4
SGER	2408	Outboard Motor Service and Repair	4
SGER	2412	Motion Drive Systems	4
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
ELCT		Elective	3
Second Semester			
SGER	2410	Lawn and Garden Equipment Service	4
SGER	2413	Large Air Cooled Engines	4
MGMT	1308	Small Business Management	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3
SPCH	1321	Business and Professional Speaking	3
PHED		Physical Education	1
Total Hours			72

- ● Humanities/Fine Arts Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of ALL SGER, MGMT, WLDG and INDU courses.

Social Science

Associate in Arts Degree

This is a suggested curriculum.

First Year

First Semester			Credit
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
LANG*	1411	Foreign Language	4
SCIE**		Physical/Life Science	4
MATH	1314	College Algebra	3
PHED		Physical Education	1
Second Semester			
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
LANG*	1412	Foreign Language	4
SCIE**		Physical/Life Science	4
ELCTa		Humanities/Fine Arts Selection	3
PHED		Physical Education	1

Second Year

First Semester			
ENGL***		ENGL Selection	3
GOVT	2301	State and Federal Government I	3
PSYC	2301	Introduction to Psychology	3
ELCT◆		Computer Science/Microcomputer Technology Selection	4
ELCT*4		Social Science	3
PHED		Physical Education	1
Second Semester			
SPCH		SPCH Selection	3
GOVT	2302	State and Federal Government II	3
SOCI	1301	Introduction to Sociology	3
ELCT■		Social/Behavioral Science Selection	3
ELCT		Elective	3
PHED		Physical Education	1
Total Hours			**69**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* LANG: See course selection under FREN, GERM, SPAN and JAPN.
** SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.
*** English Elective selections include: ENGL 2322, 2323, 2327, 2328, 2332 and 2333.
*4 Social Science Elective selection should be made from sophomore-level courses.
● Humanities/Fine Arts Selection: See page 64.
■ Social/Behavioral Science Selection: See page 64.
◆ Computer Science/Microcomputer Selection: See page 64.

Speech

Associate in Arts Degree

This is a suggested curriculum.

First Year

First Semester			Credit
ENGL	1301	Composition and Rhetoric I	3
HIST	1301	History of the U.S. to 1877	3
LANG*	1411	Foreign Language	4
SPCH	1315	Public Speaking	3
ELCT***		Elective	3
PHED		Physical Education	1
Second Semester			
ENGL	1302	Composition and Rhetoric II	3
HIST	1302	History of the U.S. from 1877	3
LANG*	1412	Foreign Language	4
ELCT***		Elective	3
MATH	1314	College Algebra	3
PHED		Physical Education	1

Second Year

First Semester			
ENGL*4		English Selection	3
GOVT	2301	State and Federal Government I	3
SPCH	2341	Oral Performance of Literature	3
SCIE**		Physical/Life Science	4
ELCT•		Humanities/Fine Arts Selection	3
PHED		Physical Education	1
Second Semester			
ENGL*4		English Selection	3
GOVT	2302	State and Federal Government II	3
SPCH	1318	Interpersonal Communications	3
MISC	1450	Microcomputers for Business	4
SCIE**		Physical/Life Science	4
PHED		Physical Education	1
Total Hours			**69**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

* LANG: See course selections under FREN, GERM, SPAN and JAPN.

** SCIE: See course selections under BIOL, CHEM, GEOL, PHYS.

*** Students should check requirements of the institution to which they intend to transfer as requirements may vary. Students should choose electives that will support their major.

*4 English courses include ENGL 2322, 2323, 2327, 2328, 2332 and 2333.

• Humanities/Fine Arts Selection: See page 64.

Television/Radio/Telecommunications

Production or Performance Emphasis

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing a Television/Radio/Telecommunications Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			**Credit**
TELE	1301	Introduction to Telecommunications	3
TELE	1402	Beginning Radio Production	4
TELE	1403	Beginning Television Production	4
TELE	1406	Introduction to Field Production	4
SPCH	1315	Public Speaking	3
Second Semester			
TELE	1305	Writing for Broadcast and Media	3
TELE	1407	Advanced Audio Production	
or			
TELE	1405	Announcing and Performance for Radio and Television	4
TELE	1408	Advanced Television Production	4
ENGL	1301	Composition and Rhetoric I	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1

Second Year

First Semester			
TELE	2309	Broadcast and Cable Operations	
or			
TELE	2306	Telecommunications Seminar	3
TELE	2407	Advanced Field Production	4
ELCT		Elective	3
MISC	1450	Microcomputers for Business	4
COMM*		Elective Selection	3
Second Semester			
TELE	2409	Telecommunications Projects	4
TELE	2408	Telecommunications Internship	4
TELE	2311	Advertising and Promotions I	
or			
TELE	2304	Broadcast Sales	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT■		Social/Behavioral Science Selection	3
PHED		Physical Education	1
Total Hours			71

* Communications Elective Selection includes: COMM 1307 and 2311

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

Enhanced Mastery Certification

Enhanced Mastery Certification will be awarded upon completion of the degree and the following courses: TELE 2310 and two Advanced Telecommunications Electives.

Television/Radio/Telecommunications
Technical Emphasis - Option 1
Associate in Applied Science Degree

First Year

First Semester			Credit
ELTE	1401	Electrical Circuits I	4
CMET	1401	Digital Circuits	4
TELE	1402	Beginning Radio Production	4
TELE	1403	Beginning Television Production	4
SPCH	1315	Public Speaking	3
Second Semester			
ELTE	1402	Electrical Circuits II	4
ELTE	1403	Solid State Electronics	4
TELE	2401	Technical Aspects of Broadcasting I	4
TELE	1406	Introduction to Field Production	4
MATH		MATH 1 324, 1342,1314 or higher	3

Second Year

First Semester			
TELE	2402	Technical Aspects of Broadcasting II	4
TELE	2309	Broadcast and Cable Operations	3
TELE	2409	Telecommunications Project I	4
ENGL	1301	Composition and Rhetoric I	3
ELCT●		Humanities/Fine Arts Selection	3
Second Semester			
TELE	2310	Telecommunications Independent Study Project	3
TELE	2408	Telecommunications Internship	4
ELCT		Elective	3
ELCT■		Social/Behavioral Science Selection	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3
PHED		Physical Education	1
Total Hours			72

- ● Humanities/Fine Arts Selection: See page 64.
- ■ Social/Behavioral Science Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.

Television/Radio/Telecommunications
Multi-Media Emphasis - Option 2
Associate in Applied Science Degree

First Year

First Semester			Credit
ARTS	1311	Design 2-D	3
ENGL	1301	Composition and Rhetoric I	3
TELE	1406	Introduction to Field Production	4
TELE	1403	Beginning Television Production	4
MISC	1450	Microcomputers for Business	4
Second Semester			
ARTS	2313	Computer Illustration and Advertising I	3
TELE	2311	Advertising and Promotions I	3
TELE	1408	Advanced Television Production	4
MISC	1460	Desk Top Publishing	4
SPCH	1315	Public Speaking	3

Second Year

First Semester			
ARTS	2314	Computer Illustration and Advertising II	3
MISC	2460	Multimedia Applications	4
TELE	1407	Advanced Audio Production	4
TELE	1305	Writing for Broadcasting and Media	3
TELE	2312	Advertising and Promotions II	3
PHED		Physical Education	1
Second Semester			
TELE	2408	Telecommunications Internship	4
TELE	2409	Telecommunications Projects	
or			
MISC	2455	Microcomputer Field Projects	4
ELCT■		Social/Behavioral Science Selection	3
ELCT		Elective	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
Total Hours			71

■ Social/Behavioral Science Selection: See page 64.

Television/Radio/Telecommunications

Radio Broadcasting

Certificate of Completion

First Year

First Semester			Credit
TELE	1301	Introduction to Telecommunications	3
TELE	1402	Beginning Radio Production	4
TELE	1405	Announcing and Performance for Radio and Television	4
COMM	2311	News Gathering and Reporting I	3
Second Semester			
TELE	1305	Writing for Broadcasting and Media	3
TELE	1407	Advanced Audio Production	4
TELE	2408	Telecommunications Internship	4
TELE	2309	Broadcast and Cable Operations	3
Total Hours			**28**

Television/Radio/Telecommunications

Television/Radio/Broadcasting

Certificate of Completion

First Semester			Credit
TELE	1301	Introduction to Telecommunications	3
TELE	1402	Beginning Radio Production	4
TELE	1403	Beginning Television Production	4
TELE	1406	Introduction to Field Production	4
COMM	2311	News Gathering and Reporting I	3
Second Semester			
TELE	1305	Writing for Broadcasting and Media	3
TELE	1405	Announcing and Performance for Radio and Television	4
TELE	1407	Advanced Audio Production	4
TELE	1408	Advanced Television Production	4
Third Semester			
TELE	2304	Broadcast Sales	3
TELE	2306	Telecommunications Seminar	3
TELE	2407	Advanced Field Production	4
TELE	2408	Telecommunications Internship	4
TELE	2309	Broadcast and Cable Operations	3
Total Hours			**50**

Training Management Systems

Associate in Applied Science Degree

Not offered in Texas

First Year

First Semester			Credit
MGMT	1381	Management of Performance Oriented Training	3
MGMT	1383	Evaluation of Instruction and Training	3
MGMT	1384	Setting Objectives and Goals	3
ENGL	1312	Communications Skills	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
Second Semester			
MGMT	1385	Analysis of Training Requirements	3
MGMT*		Training Management Electives	6
ELCT**		Approved Elective	3
ELCT◆		Computer Science/Microcomputer Technology Selection	4
PHED		Physical Education	1

Second Year

First Semester			
MGMT	2381	Job Performance and Motivation	3
MGMT*		Training Management Elective	3
ELCT***		Sophomore Management Elective	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT**		Approved Elective	3
PHED		Physical Education	1
Second Semester			
MGMT	2384	Assessing Training Standards, Goals and Objectives	3
MGMT*		Training Management Elective	3
SPCH	1321	Business and Professional Speaking	3
ELCT■		Social/Behavioral Science Selection	3
ELCT**		Approved Elective	3
PHED		Physical Education	1
Total Hours			**65**

* Training Management Electives include: MGMT 1382, 1386, 1387, 1388, 1389, 2382, 2383, 2385, 2386

** Approved Electives: MGMT 2150, 2151, 2161, 2162, 2255, 2256, 2257, 2258, 2259, 2351, 2358.

*** Sophomore Management Electives include: MGMT 2302, 2310, or BUSI 1307.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Transportation Technology

Associate in Applied Science Degree

Not offered in Texas

First Year

First Semester			Credit
ENGL*		ENGL 1301 or 1312	3
MATH		MATH 1314 or 1342	3
OADM	2304	Office Accounting I	
or			
ACCT	2301	Principles of Accounting I	3
TRAN	1301	Introduction to Transportation	3
TRAN	1302	International Trade	3
PHED		Physical Education	1

Second Semester			
ELCT*		SPCH 1315 or ENGL 2311	3
OADM	2305	Office Accounting II	
or			
ACCT	2302	Principles of Accounting II	3
TRAN	1303	Economics of Transportation I	3
TRAN	1304	Interstate Commerce and Practice	3
MGMT	1306	Human Relations	3
PHED		Physical Education	1

Second Year

First Semester			
MGMT	2302	Human Resource Management	3
TRAN	2301	Economics of Transportation II	3
TRAN		Transportation Elective	3
TRAN	2303	Traffic Management I	3
TRAN	2311	Transportation Marketing	3
ELCT◆		Computer Science/Microcomputer Technology Selection	3

Second Semester			
MGMT	2309	Supervision	3
TRAN	2304	Traffic Management II	3
TRAN	2302	Transportation Law and Regulation	3
TRAN		Transportation Elective	3
ELCT■		Social/Behavioral Science Selection	3
ELCT●		Humanities/Fine Arts Selection	3
Total Hours			**68**

* If student completes ENGL 1301, then SPCH 1315 must be taken. If student completes ENGL 1312, either SPCH 1315 or ENGL 2311 may be taken.

● Humanities/Fine Arts Selection: See page 64.

■ Social/Behavioral Science Selection: See page 64.

◆ Computer Science/Microcomputer Technology Selection: See page 64.

Welding

Associate in Applied Science Degree and Enhanced Mastery Certification Option

Students successfully completing a Welding Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

			Credit
First Semester			
INDU	1400	Industrial Fundamentals	4
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
MATH		MATH 1324, 1342, 1314 or higher	3
ELCT		Elective	3
Second Semester			
WLDG	1457	Intermediate Shielded Metal Arc Welding (SMAW)	4
WLDG	2439	Advanced Oxy-Fuel Welding and Cutting	4
WLDG	1413	Introduction to Blueprint Reading for Welders	4
PHED		Physical Education	1
ENGL	1312	Communications Skills	3

Second Year

First Semester			
WLDG	2443	Advanced Shielded Metal Arc Welding (SMAW)	4
WLDG	1435	Introduction to Pipe Welding	4
WLDG	1434	Introduction to Gas Tungsten Arc (TIG) Welding	4
ELCT◆		Computer Science/Microcomputer Technology Selection	3
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
Second Semester			
WLDG	2453	Advanced Pipe Welding	4
SPCH	1321	Business and Professional Speaking	3
WLDG	1430	Introduction to Gas Metal Arc (MIG) Welding	4
ELCT†		Humanities/Fine Arts Selection	3
WLDG	1417	Introduction to Layout and Fabrication	
or			
WLDG	2488	Internship- Welder/Welding Technologist	4
Total Hours			**70**

- † Humanities/Fine Arts Selection: See page 64.
- ◆ Computer Science/Microcomputer Technology Selection: See page 64.

Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of ALL WLDG and INDU courses.

Enhanced Mastery Certification

Upon completion of the AAS degree, students may select one of the following options to receive Enhanced Mastery Certification:
Auto Body Repair - ATBR 1405, 1407, 1409
Maintenance Technology - MTNT 1401, 1402, 2403
Business Management - MGMT 1304, 1306, 1308, 2320

Welding Technology

Certificates of Completion

Courses must be taken in the sequence shown below unless approved by the Department Chair.

First Semester			**Credit**
TIWL	1300	Basic Shop Practices	3
TIWL	1401	Occupational Blueprint Reading	4
TIWL	1302	Oxyacetylene Welding/Cutting Procedures	3
TIWL	1303	Introduction to Arc Welding	3
TIWL	1304	Arc Welding, AWS Position 1G	3
Second Semester			
TIWL	1305	Arc Welding, AWS Position 2G	3
TIWL	1306	Arc Welding, AWS Position 3G	3
TIWL	1307	Arc Welding, AWS Position 4G	3
TIWL	1408	Gas Metal Arc Welding (GMAW) (MIG)	4
Third Semester			
TIWL	2409	Gas Tungsten Arc Welding (GTAW) (TIG)	4
TIWL	2410	Beginning Pipe Welding	4
TIWL	2411	Advanced Pipe Welding	4
TIWL	2412	Welding Application	
or			
WLDG*	2488	Internship-Welder/Welding Technologist	4
Total Hours			**45**

* Prerequisite: Satisfactory completion of ALL TIWL courses in the program or consent of Department Chair.

This is a self-paced, open-entry program.

Fitter

Courses must be taken in the sequence shown below unless approved by the Department Chair.

First Semester			**Credit**
TIWL	1300	Basic Shop Practices	3
TIWL	1401	Occupational Blueprint Reading	4
TIWL	1302	Oxyacetylene Welding	3
TIWL	1303	Introduction to Arc Welding	3
Second Semester			
TIWL	1304	Arc Welding, AWS Position 1G	3
TIWL	1408	Gas Metal Arc Welding (GMAW) (MIG)	4
TIWL	2409	Gas Tungsten Arc Welding (GTAW) (TIG)	4
Third Semester			
TIWL	2410	Beginning Pipe Welding	4
TIWL	2411	Advanced Pipe Welding	4
TIWL	2412	Welding Applications	
or			
WLDG*	2488	Internship-Welder/Welding Technologist	4
Total Hours			**36**

* Prerequisite: Satisfactory completion of ALL TIWL courses in the program or consent of the Department Chair.

This is a self-paced, open-entry program.

Tacker

Courses must be taken in the sequence shown below unless approved by the Department Chair.

			Credit
First Semester			
TIWL	1300	Basic Shop Practices	3
TIWL	1401	Occupational Blueprint Reading	4
TIWL	1302	Oxyacetylene Welding	3
Second Semester			
TIWL	1303	Introduction to Arc Welding	3
TIWL	1304	Arc Welding, AWS Position 1G	3
TIWL	1408	Gas Metal Arc Welding (GMAW) (MIG)	4
Third Semester			
TIWL	2409	Gas Tungsten Arc Welding (GTAW) (TIG)	4
TIWL	2410	Beginning Pipe Welding	4
TIWL	2412	Welding Applications	
or			
WLDG*	2488	Internship-Welder/Welding Technologist	4
Total Hours			**32**

* Prerequisite: Satisfactory completion of ALL TIWL courses in the program or consent of the Department Chair.

This is a self-paced, open-entry program.

Welder

Courses must be taken in the sequence shown below unless approved by the Department Chair.

			Credit
First Semester			
TIWL	1300	Basic Shop Practices	3
TIWL	1401	Occupational Blueprint Reading	4
TIWL	1303	Introduction to Arc Welding	3
TIWL	1304	Arc Welding, AWS Position 1G	3
Second Semester			
TIWL	1305	Arc Welding AWS Position 2G	3
TIWL	1306	Arc Welding AWS Position 3G	3
TIWL	1307	Arc Welding AWS Position 4G	3
TIWL	1408	Gas Metal Arc Welding (GMAW) (MIG)	4
Third Semester			
TIWL	2409	Gas Tungsten Arc Welding (GTAW) (TIG)	4
TIWL	2410	Beginning Pipe Welding	4
TIWL	2411	Advanced Pipe Welding	4
TIWL	2412	Welding Applications	
or			
WLDG*	2488	Internship-Welder/Welding Technologist	4
Total Hours			**42**

* Prerequisite: Satisfactory completion of ALL TIWL courses in the program or consent of the Department Chair.

This is a self-paced, open-entry program.

Word Processing Specialist

Associate in Applied Science Degree and Enhanced Mastery Certification

Students successfully completing a Word Processing Specialist Tech-Prep High School program will be awarded CTC credit for those articulated courses which meet the Tech-Prep criteria.

First Year

First Semester			Credit
WOPO	1101	MS-DOS: An Introduction	1
WOPO*	1303	Beginning Keyboarding/Data Entry	3
OADM	2304	Office Accounting I	3
ENGL		English Selection	3
OADM	1305	Information and Records Management	3
ELCT**		OADM/WOPO Selection	3
Second Semester			
SPCH		SPCH 1315 or 1321	3
WOPO	1305	Applicational Software	3
WOPO*	1304	Intermediate Information Processing Applications	3
WOPO	1307	Word Processing/Transcription	3
OADM	1308	Business Correspondence	3

Second Year

First Semester			
MATH		MATH 1324, 1342, 1314 or higher	3
WOPO	2303	Office Automation	3
WOPO	2308	Information System Internship I	3
ELCT●		Humanities/Fine Arts Selection	3
ELCT**		OADM/WOPO Selection	3
PHED		Physical Education	1
Second Semester			
OADM	2305	Office Accounting II	3
OADM	2307	Automated Office Management	3
WOPO	2 302	Advanced Information Processing Applications	3
WOPO	2309	Information Systems Internship II	3
ELCT■		Social/Behavioral Science Selection	3
PHED		Physical Education	1
Total Hours			**63**

* Level of keyboarding will be determined by the student's previous training in these skills and/or by placement tests.
** Elective selection must be approved by the Department Chair.
● Humanities/Fine Arts Selection: See page 64.
■ Social/Behavioral Science Selection: See page 64.

Humanities/Fine Arts Selection or Social/Behavioral Science Selection must be sophomore level.

Certificate of Completion

Students may apply for a Certificate of Completion, Word Processing Operator, after satisfactory completion of ALL first-year courses.

Enhanced Mastery Certification

Enhanced Mastery Certification will be awarded upon completion of the degree and the following courses: TIOA 1310, TIHI 1302, 1303, 1305, 1307.

Word Processing Specialist
Certificate of Completion

First Year

			Credit
First Semester			
WOPO	1101	MS-DOS: An Introduction	1
WOPO*	1303	Beginning Keyboarding/Data Entry	3
OADM	1308	Business Correspondence	3
OADM	1309	Business Mathematics and Calculating Machines	3
OADM	1305	Information and Records Management	3
ELCT***		OADM/WOPO Selection	3
Second Semester			
ENGL		English Selection	3
WOPO**	1102	WordPerfect: An Introduction	1
WOPO*	1304	Intermediate Information Processing Applications	3
WOPO	1307	Word Processing/Transcription	3
OADM	1306	Office Procedures and Applications	3

Second Year

First Semester			
WOPO**	1104	LOTUS 1-2-3: An Introduction	1
WOPO	2303	Office Automation	3
OADM	2304	Office Accounting I	3
WOPO	2308	Information Systems Internship I	3
ELCT***		Elective	3
Second Semester			
WOPO**	1109	Data Base Applications	1
WOPO	2304	Automated Accounting	3
OADM	2305	Office Accounting II	3
OADM	2307	Automated Office Management	3
WOPO	2302	Advanced Information Processing Applications	3
WOPO	2309	Information Systems Internship II	3
Total Hours			**58**

* Level of keyboarding will be determined by the student's previous training in these skills and/or by placement tests.

** WOPO 1305 may be substituted.

*** Elective selections must be approved by Department Chair. Courses may be chosen leading toward general, medical, or legal secretarial programs upon department approval.

(ACCT) Accounting

ACCT 2301 Principles of Accounting I 3-0-3
An introduction to accounting with emphasis on the accounting cycle and accounting systems. Topics include cash transactions, receivables, inventories, assets, liabilities, and partnerships.

ACCT 2302 Principles of Accounting II 3-0-3
A continuation of ACCT 2301 including accounting for corporations, analysis of financial statements, accounting for manufacturing operations, and intr... concepts. Prerequisite: ACCT 2301.

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ACTE ...ounting I 3-0-3
An intro... sis on the accounting cycle and accounti... insactions, receivables, inventori... ips.

ACTE ...unting II 3-0-3
Continuat... r corporations, analysis of financial s... cturing operations, and introducto... managerial accounting concepts. Prerequisite: ACTE 1301.

ACTE 2305 Basics of Managerial Accounting 3-0-3
A study of the methods by which accounting data are used by management in planning, coordinating, and controlling the operations of a business. Measurement of financial position, analysis of financial statements, cost accumulation and analysis, budgeting, product costing, and quantitative decision techniques. Prerequisite: ACTE 1302.

ACTE 2306 Cost Accounting 3-0-3
An introduction to the objectives and procedures of cost accounting and control for business firms. It covers the principles and methods of accounting for materials, direct labor, and the distribution of overhead expenses as well as cost records, operating reports, and budgetary control. Prerequisite: ACTE 1302.

ACTE 2309 Fundamentals of Accounting III 3-0-3
A detailed study of financial accounting with emphasis on financial statements, current assets, current liabilities, property, plant and equipment, present value concepts, short-term investments, and intangible assets. Prerequisite: ACTE 1302 with a minimum grade of C.

ACTE 2310 Fundamentals of Accounting IV 3-0-3
Continuation of ACTE 2309. Long-term liabilities, corporate capital, accounting for leases and pensions, analysis of financial statements, sources and uses of funds, long-term investments, and price level impact on financial statements. Prerequisite: ACTE 2309.

ACTE 2311 Accounting and Financial Information Systems I 3-0-3
Study of overall flow systems emphasizing financial data and computerized systems. It covers flow and logic concepts, development of meaningful control concepts, and data reporting techniques. Prerequisite: ACTE 1302.

ACTE 2312 Accounting and Financial Information Systems II 3-0-3
This course is a continuation of ACTE 2311. Prerequisite: ACTE 2311.

(AGRI) Agriculture

AGRI 1131 The Agriculture Industry 2-0-1
An overview of world agriculture, nature of the industry, resource conservation, and the American system, including production, distribution, and marketing.

AGRI 1307 Agronomy 2-4-3
Classification and distribution of farm crops, their use, production, and identification will be studied with emphasis placed on those crops important in Texas. New crop improvement, value of rotation, and use/need of fertilizer will be determined by soil testing. Meadow and pasture management will be practiced on the College farm. Weeds, plant diseases, and insect enemies will be discussed.

AGRI 1309 Computers in Agriculture 2-2-3
This course covers the use of computers in agricultural applications. It includes an introduction to programming languages, word processing, electronic spreadsheets, and agriculture software.

AGRI 1315 Horticulture-Home Gardening 2-2-3
This course provides the students with the fundamental skills necessary for planting and maintaining gardens and lawns. Specific topics covered include soils, fertilizers, growing vegetables, landscaping, lawns, watering, compost, container gardening, shrubs, trees, pests, propagation, and more.

AGRI 1325 Marketing of Agricultural Products 3-0-3
Operations in the movement of agricultural commodities from producer to consumer, including the essential marketing functions of buying, selling, transporting, storing, financing, standardizing, pricing, and risk bearing.

AGRI 1413 Plant Protection (AGRI 2313 Entomology) *see* **BIOL 2413**

AGRI 1415 Horticulture 3-3-4
Growth and structure of fruit, vegetable, and ornamental plants. Environmental effects on plant production and principles/methods of propagation.

AGRI 1419 Introductory Animal Science (Animal Husbandry) 3-3-4
An introductory survey course. Farm animals as a source of food, clothing, and labor. The place of livestock in farming and ranching. The value of heredity and breeding for improvement, importance of judging, pedigrees, and proper nutrition. The place and adaptation of each class of livestock: show ring classification, and market and slaughter classes.

AGRI 2301 Agriculture Power Units 2-2-3
Fundamentals of internal combustion engines: gasoline, diesel, and liquefied petroleum. Maintenance and adjustments of the electrical, ignition, fuel, lubricating, and cooling systems.

AGRI 2303 Agriculture Mechanics I 2-2-3
Basic farm skills in tool conditioning, sketching, carpentry, concrete, farm surveying, small engine repair, plumbing, and general farmstead maintenance.

AGRI 2304 Agriculture Mechanics II 2-2-3
A second course in farm shop skills for the agriculture student. Construction, repair and maintenance of farm machinery. Covers metalwork including arc welding, oxyacetylene welding, cutting, and soldering.

AGRI 2306 Flowers and Plants Used in Interior Design 2-2-3

Topics covered include the history and principles of floral design as well as the use of floral art in society. In addition, floral design techniques, line form, textures, rhythm, proportion, visual impact, color, and aesthetic appreciation of flowers and plants will be explained.

AGRI 2317 Introduction to Agriculture Economics 2-2-3

Fundamental economic principles including assembly, food production and processing, distribution, and agribusiness industries and their application to the problems of the agriculture industry.

AGRI 2330 Wildlife Management 3-0-3

This course covers the principles and practices used in the production improvement of wildlife resources and the aesthetic, ecological, and recreational uses of public and private lands.

(AIRC) Air Conditioning

➲AIRC 1201 Air Conditioning and Refrigeration Theory and Application I 1-2-2

This course deals with the basic physical principles of air conditioning and refrigeration equipment. Introduction to basic thermodynamics and physics that pertain to heat, temperatures, pressures, fluids and refrigerants. Mechanics pertaining to piping and the specialized tools needed for piping.

➲AIRC 1202 Air Conditioning and Refrigeration Theory and Application II 1-2-2

Continuation of AIRC 1201. This course includes the identification of various types of air conditioning systems, compressors, metering devices and a service procedure for basic air conditioning and refrigeration systems. Prerequisite: AIRC 1201.

AIRC 1400 Basic Air Conditioning and Refrigeration Theory 3-3-4

This course introduces the student to basic thermodynamics-heat transfer, temperature-pressures, and characteristics of refrigerants; pressure-temperature relationships of refrigerants; the refrigeration cycle; major components of refrigeration systems and their relationship to each other. The use of temperature measuring devices and special tools (manifold gauge set, charging station, vacuum and vacuum pump, and micron gauge) is covered. EPA requirements for refrigerant handling and recovery are also covered.

AIRC 1401 Electricity for Air Conditioning and Refrigeration I 3-3-4

This course introduces the student to the basic concepts of electricity as they apply to air conditioning and refrigeration. It includes quantities, units, circuits, laws, measurements, alternating current fundamentals, magnetism, electromagnetism, instruments, power, inductance, capacitance and transformers.

AIRC 1403 Heating Systems 3-3-4

This course introduces the student to residential, natural gas, liquefied petroleum, and electrical heating systems. Emphasis will be placed on natural gas and electrically forced air systems, heat exchanger, gas circuits, air side, cabinet construction, sequencer, limits, and heating elements. Corequisite: AIRC 1401.

AIRC 1406 Electricity for Air Conditioning and Refrigeration II 3-3-4

This course reviews the alternating current fundamentals; simple alternating current circuits; single-phase air conditioning circuits; three-phase circuits; single- and three-phase transformers; three-phase induction motors; single-phase motors and motor control; and generation, transmission, and distribution of electrical energy. Prerequisite: AIRC 1401.

AIRC 1407 Mechanical Refrigeration Systems 3-3-4

This course provides the student with an in-depth study of mechanical refrigeration systems. The major components of a refrigeration system are examined to include compressors, evaporators, condensers, refrigerant flow control devices, interconnecting lines, driers, receivers and accumulators. Charging with refrigerants, household refrigeration and air conditioning systems and refrigerant piping, and the use of pressures in diagnosis of refrigeration circuit malfunctions are also covered. Corequisites: AIRC 1400 and 1401.

AIRC 2400 Electricity for Air Conditioning and Refrigeration III 3-3-4

This course will provide the student with an in-depth study of schematic wiring diagrams and electrical troubleshooting using the diagrams. Prerequisite: AIRC 1401 and 1406.

AIRC 2401 Advanced Air Conditioning and Refrigeration Theory 3-3-4

This course provides the student with an in-depth study of the basic principles of air conditioning design, heat load calculation, air distribution design, building components composition, and insulation. The student will construct ducts, including flex ducts, and install galvanized round pipe and equipment. Prerequisites: All AIRC 1400-series courses.

AIRC 2402 Commercial Refrigeration 3-3-4

This course introduces the student to the different types of commercial refrigeration units and systems. Instruction is provided in controls and control circuits for commercial refrigeration. Heat loss and gain calculations for commercial applications, equipment selection, locating and piping procedures, and service procedures for different systems will be covered. Prerequisites: All AIRC 1400-series courses.

AIRC 2403 Commercial Air Conditioning 3-3-4

This course is designed to cover heat transfer and heat loss/gain calculations as they apply to commercial heating and air conditioning. Instruction includes psychometrics of conditioned air, duct design and layout, equipment selection and location, shop drawings, controls and control circuits for automatic conditioning of air. It covers installation, operation, troubleshooting and repair of light commercial air conditioning up to 10-ton capacity.

AIRC 2404 Troubleshooting Air Conditioning and Refrigeration Systems 3-3-4

This course provides the student with the fundamentals of electrical testing of air conditioning and refrigeration circuits, circuit analysis, and repair/replacement of circuit components. Emphasis will be placed on air conditioning electrical systems. An overview of single-family residential wiring including the construction of main and branch circuits is presented. Prerequisites: All AIRC 1400-series courses.

AIRC 2405 Heat Pumps I 3-3-4

This course will introduce the student to heat pumps including geothermal systems; heating, cooling, and defrost cycles; components; reversing valves; flow controls; accumulator piping; heat pump controls; system design; and ground loop heat exchanger. Prerequisites: All AIRC 1400-series courses.

AIRC 2407 Heat Pumps II 3-3-4

This course is a continuation of AIRC 2405, Heat Pumps I. It covers analysis of system operations, troubleshooting, service, and repair. Prerequisite: AIRC 2405.

AIRC 2409 Air Conditioning and Refrigeration Internship 1-18-4

This course consists of on-the-job Air Conditioning and Refrigeration training that utilizes the principles, knowledge, and skills gained in the classroom and laboratory. The student is required to work with a local contractor 20 hours per week.

➲*Not offered on Central Campus*

(ANTH) Anthropology

ANTH 2301 Physical Anthropology 3-0-3
Principles of physical anthropology, human evolution, race, heredity, the organic basis of culture, and cultural history through the Paleolithic stage.

ANTH 2346 General Anthropology 3-0-3
Study of human beings, their antecedents and related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics and ethnology.

ANTH 2351 Cultural Anthropology 3-0-3
Study of human behavior (nations and societies) the world over, comparing and describing the cultural patterns of westernized industrial nations; Asiatic people; the Middle East; and today, the cultures of emerging Third World nations. A study is also made of the relationship of Cultural Anthropology to the other social sciences (Psychology, Sociology, History, etc.).

(APPH) Applied Physics

(Not Offered in Texas)
APPH 1350 Applied Physics I 3-0-3
This course is designed for students in technical areas who must be able to apply certain basic principles of physics to their career field. The course considers only certain areas of physics; especially mechanics, heat, fluids, and the nature of matter.

APPH 1351 Applied Physics II 3-0-3
This is a continuation of Applied Physics I for students in technical areas who must be able to apply certain basic principles of physics to their career field. This course covers wave motion, light electricity and magnetism, applied electronics, and provides an introduction to nuclear energy. Prerequisite: APPH 1350.

(ARTS) Art

ARTS 1303 Art History I 3-0-3
This course is survey of the major and minor arts from prehistoric times to the 14th century.

ARTS 1304 Art History II 3-0-3
This course is a survey of the major and minor arts from the 14th century to the present. No prerequisite.

ARTS 1311 Design: 2-D 2-4-3
This course gives basic instruction in the elements and principles of design, with emphasis on the study of form and color theory. It is a study of design in two-dimensional formats.

ARTS 1312 Design: 3-D 2-4-3
This course gives basic instruction in the principles and elements of design as applicable to three-dimensional design problems. No prerequisite.

ARTS 1313 Foundations of Art 2-4-3
This course is an introduction to the creative media. Enhancing artistic awareness and sensitivity through the creative and imaginative use of art materials and tools is the focus of the course. Students will also be exposed to art history and culture through the exploration of a variety of art works with an emphasis on aesthetic judgment and growth. No prerequisite.

ARTS 1316 Drawing I 2-4-3
This course involves a study of the basic drawing skills including both abstraction and expressive drawing in charcoal, pencil, pen, wash, conte, and mixed media.

ARTS 1317 Drawing II 2-4-3
This course continues the development of skills, application of drawing media, and personal expression explored in Drawing I. Prerequisite: ARTS 1316.

ARTS 2311 Design: Computer-Aided Art 2-4-3
This course is designed primarily for the Commercial Art major, but can apply to Fine Art as well. The student will learn to use standard computer-aided techniques in creating and elaborating upon designs and in lettering production. Prerequisite: Computer Science elective and ARTS 1311.

ARTS 2313 Computer Illustration and Advertising Art I 2-4-3
This course is an in-depth study of current concerns and practices in the visual arts including contemporary media and techniques with heavy emphasis on computer-aided design, philosophy of aesthetics, and public accessibility.

ARTS 2314 Computer Illustration and Advertising Art II 2-4-3
This course is an advanced study of commercial art pre-press production. It combines principles covered in Computer Illustration and Advertising Art I. Prerequisite: ARTS 2313.

ARTS 2316 Oil Painting I 2-4-3
This course studies the techniques and materials used in oil-based painting. Drawing skills are recommended.

ARTS 2317 Oil Painting II 2-4-3
This course is a continuation of techniques explored in ARTS 2316 with emphasis on individual expression. Prerequisite: ARTS 2316.

ARTS 2323, 2324 Figure Drawing I & II 2-4-3
These are life drawing courses which emphasize structure and action of the human figure.

ARTS 2326 Sculpture I 2-4-3
This course is an introduction to sculpturing techniques including assemblage, carving, and lost wax casting.

ARTS 2327 Sculpture II 2-4-3
This course is a continuation of ARTS 2326 with emphasis on personal expression. Prerequisite: ARTS 2326.

ARTS 2333 Print Making 2-4-3
This introductory course covers the fundamentals and creative experimentation in etching, serigraphy, and other print-making media. Drawing skills are recommended.

ARTS 2336 Fiberarts I 2-4-3
This course involves the study of weaving, rug making, dyeing, and paper making. Emphasis will vary from one semester to another.

ARTS 2337 Fiberarts II 2-4-3
This course is a continuation of ARTS 2336. Emphasis will vary from one semester to another.

ARTS 2341 Jewelry and Art Metals I 2-4-3
An introduction to jewelry-making and metalworking techniques. Basic fabrication techniques are stressed.

ARTS 2342 Jewelry and Art Metals II 2-4-3
A continuation of jewelry-making and metalworking techniques. Lost wax casting and surface treatments are emphasized. Prerequisite: ARTS 2341.

ARTS 2346 Ceramics I 2-4-3
This course is an introduction to making pottery by hand-built methods. Glazing and decoration techniques are covered.

ARTS 2347 Ceramics II 2-4-3
This course is a continuation of pottery-making techniques. Prerequisite: ARTS 2346.

ARTS 2356 Photography I 2-4-3
An introduction to the basics of photography. Technical information will include camera operation, black and white camera techniques, knowledge of chemistry, and presentation skills. Much emphasis will also be placed on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics. Students will be asked to complete projects which address art, journalism, and commercial photography.

ARTS 2357 Photography II 2-4-3
Extends the student's knowledge of technique and guides them in developing a personal outlook toward a specific application of the photographic process. Prerequisite: ARTS 2356.

ARTS 2366 Watercolor Painting 2-4-3
This course covers various techniques of painting in watercolor. It stresses color and composition in application of the medium. Drawing skills are recommended.

ARTS 2367 Acrylic Painting 2-4-3
This course covers the properties of color, theory of color and form, and technical procedures of the medium. Drawing skills are recommended.

ARTS 2376 Problems in Contemporary Arts 2-3-3
This course is an examination of current issues and practices in the visual arts. Historical influences, modern aesthetics, contemporary media and techniques, and individual concerns will be covered in lectures, studio practice, and research outside the traditional classroom.

(ASCI) Aviation Science

ASCI 1200 Flight-Solo 2-1-2
Flight training to meet the requirements for solo flight. A minimum of 32 hours of instruction of which 13 are dual flight instruction, 0.5 is solo flight, and 18.5 are oral instruction and briefings. This course is the first of two flight courses necessary to obtain the Private Pilot Certificate. Prerequisite: ASCI 1403 or concurrent enrollment; FAA Medical Certificate of at least a Class II and FAA Student Pilot Certificate (must be obtained within two weeks of starting class).

ASCI 1201 Flight-Private 1-2-2
EXAMINING AUTHORITY FLIGHT ONLY - Flight training to finish meeting the requirements of Federal Aviation Regulations to obtain the Private Pilot Certificate. Instruction will consist of a minimum of 42 hours of which 17 are dual flight instruction, 15 are solo practice, 2 are in an approved ground trainer, and 8 are oral instruction and briefings. This course, in conjunction with ASCI 1200, will more than meet the requirements for the issuance of the Private Pilot Certificate. Prerequisite: ASCI 1200 and completion of ASCI 1403 prior to completion of this course. FAA Student Pilot Certificate with at least a Class II FAA Medical Certificate.

ASCI 1204 Flight-Intermediate 1-3-2
This is the first of two flight courses necessary to obtain the instrument rating on the certificate of a student who holds at least a Private Pilot Certificate with an airplane category. The flight training will consist of a minimum of 64 hours of instruction of which 13 are dual flight instruction in airplanes, 6 are instruction in an approved ground trainer, 30 are solo flight, and 15 are oral instruction and briefings. Prerequisites: Minimum of a Private Pilot Certificate with an Airplane category, 3 hours of instrument instruction, hold at least a Class II FAA Medical Certificate, and completion or concurrent enrollment in ASCI 1305.

ASCI 1301 Aircraft Science 3-0-3
This course serves as an introduction to the study of several basic sciences in the aeronautical field, as applied to their theoretical and practical use in aircraft construction and design.

ASCI 1305 Advanced Air Navigation 3-0-3
The Federal Aviation Regulations covering the privileges, limitations and operations of a commercial pilot, basic aerodynamics and the principles of flight which apply to airplanes. Inspection and certification requirements will be covered and operating limitations, high altitude operations, physiological considerations, weight and balance computations, significance of the use of airplane performance speeds, cruise control, the Airman's Information Manual will be emphasized. Prerequisite: ASCI 1403.

ASCI 1306 Meteorology 3-0-3
Aviation meteorological phenomena affecting aircraft flight, interpretation of the basic concepts of temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing and fog. Analysis and use of weather data for flight planning and safety.

ASCI 1403 Air Navigation 3-3-4
The principles of flight, basics of air traffic control, weather facts, navigational procedures and airplane operation pertinent to the private pilot. Upon successful completion of this course, the student has sufficient knowledge to pass the FAA written examination of the Private Pilot Certificate.

ASCI 2204 Flight-Instrument 1-3-2
This is the second of two flight courses necessary to obtain the instrument rating on the certificate of a student who holds at least a Private Pilot Certificate with an Airplane category. The flight training will consist of a minimum of 70 hours of instruction of which 23 are conducted in an airplane, 10 are in an approved ground trainer, 25 are solo cross-country, and 12 are oral instruction and briefings. Prerequisites: Minimum of a Private Pilot Certificate with an Airplane category; hold a Class II FAA Medical Certificate; a minimum of 95 hours of flight experience of which 25 were solo cross-country since the Private Pilot Certificate was issued; 20 hours of instrument instruction of which no more than 10 were in an approved ground trainer; have completed or will complete ASCI 2407 before the end of this course.

ASCI 2205 Flight-Commercial 1-3-2
This course will be used to prepare the student for the Commercial Pilot Certificate with an airplane category. The training will consist of a minimum of 64 hours of which 15 are dual flight instruction in a high-performance aircraft; 5 are dual flight instruction in a primary trainer; 15 are solo practice of which 5 are cross-country in a high performance airplane, 5 are solo practice at night, and 5 are local solo flight; and 29 hours of oral instruction and briefings. Prerequisites: Minimum of a Private Pilot Certificate with Airplane category and instrument rating; have at least 125 hours of flight time of which no more than 40 were in an approved ground trainer; hold a current Class II FAA Medical Certificate; have completed or be concurrently enrolled in ASCI 2300, Commercial Ground School. Approved ground school must be completed prior to finishing ASCI 2205.

ASCI 2206 Multi-Engine Flight 2-1-2
This course of flight training leads to the FAA Multi-Engine Pilot Rating. This course is designed to give the advanced pilot a greater depth of aircraft experience. A minimum of 35 hours of instruction is provided of which 15 are dual flight instruction, 5 are in the simulator, and 15 are oral instruction and briefings. Prerequisite: ASCI 2205 or a Commercial Pilot Certificate.

ASCI 2208 Instructor Rating 1-3-2
This flight course prepares the experienced pilot for the FAA Certified Flight Instructor Certificate for airplanes. Includes 25 hours of dual flight instruction and 39 hours of oral instruction and briefings. Prerequisite: Commercial Pilot Certificate.

ASCI 2209 Airline Transport Pilot 1-2-2

Airline Transport Pilot is the most comprehensive rating issued by the Federal Aviation Administration. Flight and ground training to qualify for the certificate is provided of which 25 hours are dual flight instruction, 2 are for the FAA Check Flight, and 21 are oral instruction and briefings. Prerequisites: First Class FAA Medical Certificate, Age 23, 1,500 hours of approved flight time, and Instrument Rating.

ASCI 2210 Commercial Transition Flight I 1-3-2

This is the first of two courses to transition Commercial Rotorcraft Helicopter Rated Pilots to Commercial Airplane, Single-Engine, Land Rated Pilots. The course covers 64 hours of instruction of which 20 are dual flight instruction, 2 are in the simulator, 25 are solo flight, and 17 are oral instruction and briefings. Prerequisite: FAA Commercial Rotorcraft Helicopter Rating, Class II FAA Medical Certificate, and ASCI 2300 or concurrent enrollment.

ASCI 2211 Commercial Transition Flight II 1-3-2

A continuation of ASCI 2210 to complete the requirements for a Commercial, Single-Engine, Land Aircraft Rating. The course consists of 64 hours of instruction of which 20 are dual flight instruction with 5 in the simulator and 5 in a complex aircraft, 25 are solo flight with 5 in a complex aircraft, and 19 are oral instruction and briefings. Prerequisite: ASCI 2210 and 2407 or concurrent enrollment.

ASCI 2212 Instrument Flight Instructor 1-2-2

A program of advanced flight training to prepare the experienced Instrument Pilot to pass the FAA requirements for the Instrument Flight Instructor Certificate for Airplane rating. A minimum of 48 hours of instruction is provided of which 20 are dual flight instruction, 2 are FAA Check Flight, and 26 are oral instruction and briefings. Prerequisite: Certified Flight Instructor Certificate and Instrument Rating.

ASCI 2213 Multi-Engine Flight Instructor 1-2-2

This course is designed to prepare an applicant for the FAA Multi-Engine Flight Instructor Flight Test. A minimum of 48 hours of instruction is provided of which 20 are dual flight instruction, 2 are FAA Check Flight, and 26 are oral instruction and briefings. Prerequisite: FAA Multi-Engine Rating and FAA Flight Instructor, Single-Engine, Land Rating.

ASCI 2300 Commercial Ground School 3-0-3

This course covers air traffic control procedures pertaining to Commercial Pilot, aviation weather and advanced navigational procedures. Advanced flight maneuvers, low altitude en route charts, approach plates, and Airman's Information Manual. Also, airplane performance factors on a high-performance aircraft with retractable gear and flaps and constant speed propeller. Prerequisite: ASCI 2407.

ASCI 2301 Aerodynamics 3-0-3

This course covers the physical properties of air, airflow, standard atmosphere, forces on solids moving through air, lift, drag, planeform, air foil selection, and performance factors.

ASCI 2303 Air Transportation 3-0-3

The development and present status of air transportation, federal legislation, characteristics and classification of air carrier, and the organization and functions of the FAA and the Civil Aeronautics Board are reviewed.

ASCI 2318 Propulsion Systems 3-0-3

Aircraft engine theory and principles of operation of various types of aircraft reciprocating engines. Consideration is also given to thermal, mechanical and volumetric efficiencies, superchargers, engine accessories, controls and instrumentation.

ASCI 2407 Instrument Ground School 3-3-4

Basic radio fundamentals used by the pilot. A description and practical use of various radio aids for safe aerial navigation including Very High Frequency Omni Direction Range (VOR), Instrument Landing System (ILS), Direction Finding (DF), and others. Charts and approach plates as adapted to radio navigation including the use of the Flight Information Manual and ATC procedures. Prerequisite: ASCI 1305.

(ATBR) Automotive Body Repair

See also Skills Center (TIAB)

ATBR 1403 Roughing and Alignment I ABDR 1441 3-3-4

This course is designed to provide the student with a fundamental working knowledge of the theory and application of damage analysis and reversal as it applies to minor body damage. Emphasis will be placed on damage TIAB classification and identification, proper tool selection and use for specific 1405 repairs, heat shrinking, metal finishing techniques, and the alignment of movable body panels. Prerequisites or Corequisites: INDU 1400, ATBR 1405 or ATBR 1407.

ATBR 1405 Auto Body Welding I 3-3-4

This course is designed to provide the student with a working knowledge and practical skill development in the use of oxyacetylene welding equipment as it relates to auto body repair procedures. Emphasis will be placed on safety, equipment construction and function, types and preparation of joints, and welding procedures on body steel. Prerequisite or Corequisite: INDU 1400.

ATBR 1407 Auto Body Fundamentals ABDR 1419 3-3-4

This course is designed to provide the student with basic skills in general body shop safety, hand and power tool use, measurement techniques, TIAB 1404 selection and use of repair materials, and nonmetal parts repair. Also covered in the course are details of both conventional and unitized body construction including parts nomenclature and methods of attachment. The student will also be introduced to general shop operation and to the methods of collision repair estimation. Prerequisite or Corequisite: INDU 1400.

ATBR 1408 Roughing and Alignment II ABDR 1492 3-3-4

This is an advanced course designed to provide the student with further practical skill development in the correction of minor body damage and is an introduction to the repair of body structural damage. Emphasis will be placed on proper analysis and correction through the use of measurement techniques and hydraulic repair equipment. Prerequisites: ATBR 1403, 1405, 1407 and 1409.

ATBR 1409 Auto Body Welding II ABDR 1491 TIAB 1403 3-3-4

This course is designed to provide the student with a working knowledge and practical skill development in the use of GMAW (MIG), resistance spot welder, and shielded metal arc welder as they relate to auto body repair. Emphasis will be placed on safety, equipment construction and function, joint preparation, and welding procedures on both mild and HSLA body steel. Prerequisite: ATBR 1405.

ATBR 1410 Auto Body Painting Fundamentals ABDR 1481 TIAB 1404 3-3-4

This course is designed to provide the student with a basic knowledge and skills required in the painting of body panels. Emphasis will be placed on the proper use and care of the spray gun, surface preparation for different repair materials, sanding, masking, cleaning, compounding, preparation of refinished material, and recognition/correction of paint problems. Prerequisites or Corequisites: INDU 1400 and ATBR 1407.

ATBR 1411 Automotive Glass DBDR 1492 (TIAB 1401) 3-3-4

This course is designed to provide the student with a knowledge of the types of glass and weather sealing devices and service, and various types of power-assist devices and minor electrical repairs. Prerequisite or Corequisite: INDU 1400.

Add
ATBR 1449 = (TIAB 2406)
ATBR 2402 = TIAB 2405

ATBR 2400 Major Vehicle Damage Repair 3-3-4
This course is a continuation of ATBR 2401 and 2406 and places emphasis on developing the skills involved in major vehicle damage repairs using the latest techniques and equipment including body sectioning and the use of recycled parts. Prerequisites: All first-year ATBR courses, ATBR 2401, and ATBR 2406.

ATBR 2401 Panel Repair and Replacement 3-3-4
This course places heavy emphasis on straightening and fitting panels and employs welding, dinging, bumping, and alignment procedures. The use of body fillers, contour finishing, and metal preparation are also included. Prerequisites: All first-year ATBR courses.

ATBR 2404 Advanced Auto Body Painting 3-3-4
This course is designed to increase the student's knowledge and skills in auto body refinishing. Emphasis will be placed on the techniques and materials used in the spot repair of both enamels and lacquers, the use of color coat/clear coat systems, tinting and blending of spot repairs, stripe and accent painting, and complete vehicle refinishing. Prerequisites: ATBR 1407 and 1410.

ATBR 2406 Frame Repair and Alignment 3-3-4
This course is designed to provide the student with a working knowledge of the types of body frames, misalignment, alignment straightening, repair, and the use of special equipment and measuring devices. Prerequisites: ATBR 1405, 1407, and 1408.

ATBR 2409 Auto Body Internship 1-18-4
This course consists of on-the-job Auto Body Repair training that uses the principles, knowledge and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College instructor/coordinator. Prerequisite: Satisfactory completion of all other ATBR courses or consent of the Department Chair.

(AUTO) Automotive Service And Repair
see also Skills Center (TIAM)

AUTO 1150 Auto Maintenance Procedures (Electrical and Body) 0.3-1-1
Designed to teach the student to perform maintenance and troubleshooting on the electrical systems and body maintenance.

AUTO 1151 Auto Maintenance Procedures (Brakes) 0.3-1-1
Provides the student with the knowledge and skills to maintain and troubleshoot the brake system as detailed in the service manual.

AUTO 1253 Operational Maintenance Course 0.5-2-2
Course is designed to teach vehicle operators to perform maintenance on and operate the M-809 series, 5-ton and unit generators.

AUTO 1254 Operators Training & Maintenance 2-2-2
This course is designed to teach proper operation and maintenance of vehicles; includes maintenance forms, safety and accident forms, Preventive Maintenance Checks and Service (PMCS), use of publications, and NSC Defensive Driving.

AUTO 1255 Motor Sergeant's Maintenance Management 1.5-1-2
Provides training in procedures and techniques of establishing, conducting, and evaluating standard maintenance programs for unit vehicles. Includes maintenance operations, organization management, controls, requirements, training, and records.

AUTO 1301 Automotive Systems 2-3-3
This course is designed to provide the student with the basics of the modern automobile. It includes the operating principles of two- and four-stroke cycle engines, the combustion process, exhaust emissions, and the different systems that make up today's modern automobile. Emphasis will be placed on system and component identification and function. Prerequisite or Corequisite: AUTO 1400 or consent of the Department Chair.

AUTO 1400 Shop Fundamentals 3-3-4
This course introduces the student to the Automotive Service and Repair career field. It includes basic shop organization, automotive terminology, OSHA and Hazardous Communications Act, safety, shop mathematics, measuring systems, fuels and lubricants, the use of publications, common automotive hardware, and cleaning methods. Emphasis will be placed on the proper and safe use and care of hand and power tools, cutting tools, precision measuring devices, diagnostic tools and equipment, electrical test equipment, and other shop equipment.

AUTO 1402 Basic Electrical and Test Equipment 3-3-4
This course will provide the student with a good understanding of basic electrical principles, circuits, and diagrams; wiring repairs; lighting systems; and electrical troubleshooting through the use of hands-on training. Emphasis will be placed on usage and interpretation of common test equipment. The student will also be able to test and diagnose the lead-acid storage battery. Prerequisite or Corequisite: AUTO 1301 and 1400 or consent of the Department Chair.

AUTO 1405 Automotive Air Conditioning 3-3-4
A course designed to provide an understanding of the principles, design, construction, installation, and service procedures involved in automotive air conditioning, with special emphasis on system recharging and service. Prerequisite or Corequisite: AUTO 1400, 1402, and 1411 or consent of the Department Chair.

AUTO 1406 Engine Tune-Up 2,4,4
This course is designed to provide the beginning student with basic automotive skills involved in performing minor engine tune-ups. Emphasis will be placed upon the procedures to diagnose, adjust, and replace electrical, carburetor, and ignition system components. Prerequisites: AUTO 1301 and 1402.

AUTO 1407 Brake Systems 3-3-4
A course designed to provide an understanding of the nomenclature, theory of operation, and service procedures involved in the brake system. The use of the brake drum lathe, bleeder, and other equipment necessary to effect brake repairs will be taught with emphasis on power brake and dual brake systems. Training will also include principles of anti-skid and heavy-duty brake systems. Prerequisite or Corequisite: AUTO 1400 or consent of the Department Chair.

AUTO 1408 Standard Transmissions & Transaxles 3-3-4
A course designed to provide an understanding of the function, construction, operation, and maintenance of manual shift transmissions, transaxles, clutches, drive lines, and differentials. Prerequisite or Corequisite: AUTO 1400 or consent of the Department Chair.

AUTO 1411 Automotive Computer Systems 3-3-4
This course is designed to provide the student with a basic understanding of computer systems used in the modern automobile. Emphasis will be placed on system and component identification, function, and operating principles. Prerequisite or Corequisite: AUTO 1402 or consent of the Department Chair.

AUTO 2250 Operational Maintenance 0.5-2-2
To familiarize the student with basic theories and principles of operational maintenance of military vehicles.

➲AUTO 2251 Power Generator Mechanics Course 1.5-4.5-2

This course is designed to teach wheeled-vehicle mechanics the skills necessary to perform organizational maintenance on 1.5 through 10 KW power generators.

➲AUTO 2402 Shop Organization & Management 3-3-4

A course designed to provide information and actual experiences in shop management, customer relations, warranty provisions, service salesmanship, organization and layout, general business practices and in the use of time, rate, and parts manual. This course places special emphasis on established business principles and preparation for employment. Prerequisite: Sophomore standing.

AUTO 2403 Automatic Transmissions and Transaxles 3-3-4

A study of the theory of operation, construction, and maintenance of automatic transmissions and transaxles including locking torque converters and automatic overdrive. This course emphasizes the diagnosis, repair, and overhaul techniques used in rebuilding transmissions and transaxles. Prerequisite: AUTO 1408 or consent of the Department Chair.

AUTO 2404 Ignition, Starting and Charging Systems 3-3-4

Provides a review of the basic electrical system. Course content includes the ignition system theory and service for the conventional, transistor, and computer-controlled systems. Starting motor and charging systems theory, testing, and service will also be included. Prerequisite: AUTO 1402 and 1411 or consent of the Department Chair.

AUTO 2405 Steering and Suspension Systems 3-3-4

This course is designed to provide the student with an understanding of the function, theory of operation, maintenance, diagnosis, and service procedures involved in the automotive steering and suspension systems. It includes wheels, tires, steering gears and linkages, wheel alignment factors, diagnosis, repair and alignment procedures on live automobiles. Prerequisite or Corequisite: AUTO 1400 or consent of the Department Chair.

AUTO 2406 Engine Diagnosis and Emission 3-3-4

A course designed to provide an understanding of engine troubleshooting procedures using conventional test equipment, engine oscilloscopes, exhaust gas analyzers, and computerized engine analyzers. Diagnosis, adjustment, and repair of engine emission controls is included. Prerequisite: AUTO 1301, 1402, 1411, 2404, and 2410 or consent of the Department Chair.

AUTO 2408 Advanced Engine Service 3-3-4

This course covers a brief review of basic engines. Hands-on work will involve valve train and cylinder head service including valve grinding and guide repair. Included in this course will be the procedures necessary for the replacement of an engine short-block assembly including necessary testing and adjustments. Prerequisite: AUTO 1301 or consent of the Department Chair.

AUTO 2409 Automotive Internship 1-18-4

This course consists of on-the-job automotive training that uses the principles, knowledge, and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College instructor/coordinator. Prerequisite: Satisfactory completion of all AUTO or TIAM courses or consent of the Department Chair.

AUTO 2410 Fuel Systems and Injection 3-3-4

A course designed to provide an understanding of the principles, design, and operation of automotive fuel systems. Carburetors, fuel pumps, fuel injection, and computer-controlled units will be covered. Hands-on work will include troubleshooting, repair and adjustment of these systems as well as emission control devices. Prerequisite: AUTO 1301, 1402, and 1411 or consent of the Department Chair.

➲*Not offered on Central Campus*

(AVMT) Aviation Maintenance Technology

(Not Offered in Texas)

AVMT 1201 Maintenance Publications - G 2-2-2

The basis of all maintenance is the proper use and interpretation of technical publications. This course deals with Federal Aviation Administration and manufacturers' publications. The student will be given instruction on the privileges and limitations of a mechanic according to FAR Part 65 and will also be given practical work with descriptions of aircraft work performed and the completion of required maintenance forms and records.

AVMT 1202 Weight and Balance - G 2-2-2

Since weight and balance of aircraft are critical areas in maintenance, the student will be instructed on the weighing and computation of weight and balance of an aircraft. This course will also include basic physics principles; basic ground operations; and servicing of aircraft including starting, moving, and securing aircraft and other service procedures.

AVMT 1203 Aircraft Drafting - G 2-2-2

Since the beginning of any aircraft originates on the drafting board, the technician must be able to use drawings, blueprints, diagrams, charts, and graphs. This course prepares the student to draw sketches and finished drawings of repairs and alterations. In addition, instruction will be given on fabrication and installation of rigid and flexible lines and fittings.

AVMT 1204 Airframe Materials and Corrosion Control - G 2-2-2

The course involves the proper use of cleaning and corrosion control materials that are used in aviation. Instruction will include the areas of identifying and selecting appropriate nondestructive testing methods; performing penetrant, chemical etching, and magnetic particle inspection; performing basic heat breaking processes; identifying and selecting aircraft hardware and materials; identifying and selecting cleaning materials; and actually performing aircraft cleaning and corrosion control.

AVMT 1305 Basic Aircraft Electricity - G 2-4-3

This course is designed to introduce the student to the theory and practical applications of electricity. Topics of instruction include measuring voltage, current, resistance, continuity, leakage, capacitance, inductance and special applications of aircraft electrical circuit problems.

AVMT 1306 Aircraft Finishes - A 2-4-3

This course covers the principles involved in service and repair of wood structures; selecting, testing, inspecting, repairing, and applying materials from fabric to fiberglass. In addition, painting, doping, and applying trim and letters to the aircraft airframe are included.

AVMT 1320 A&P Mechanic General Course 3-0-3

This course introduces an experienced mechanic to the very basics of aircraft maintenance. The course will include applying the principles of mathematics, physics, and electricity to aircraft maintenance; solving weight and balance problems; selecting and using specifications from FAA Regulations; and identifying and properly employing materials and hardware commonly used in aircraft maintenance. Prerequisites: 18 months aircraft maintenance experience and FAA evaluation certification that the student is qualified to take the course to obtain the FAA powerplants or Airframe rating.

AVMT 1402 Sheet Metal Structures - A 2-6-4

This course covers the theory and practical applications of aircraft sheet metal structures. Instructional topics include sheet metal layout, hand forming, machine forming and bending, and the use of conventional and special rivets and fasteners. Inspection techniques and procedures of bonded structures, plastics, honeycomb structures, laminated sections, doors, and aircraft interior furnishings are also covered in the course. Soldering, brazing, gas welding, and arc welding of all materials used in aircraft structures including magnesium, titanium, stainless steel and aluminum are included in this course. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2303 Airframe Inspection - A 2-4-3

The objective of this course is to prepare the student to perform uniform conformity and airworthiness inspections on both rotary and fixed-wing aircraft. This course also covers the alignment check of structures, assembling aircraft, balancing and rigging moveable surfaces, and the jacking of aircraft. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2304 Aircraft Fuel Systems - A 2-4-3

This course covers the theory and practical experiences, inspection, repair, and service of aircraft fuel systems that include fuel dump systems, fluid quantity and pressure indicators, and temperature indicators. Heating, cooling, and pressurization systems and oxygen equipment are also covered. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2305 Aircraft Instrument Systems - A 2-4-3

This course is designed to instruct the student in the repair, inspection, service, and installation of heading, speed, altitude, time, temperature, pressure, and position indicating systems; ice and rain control systems; and the maintenance of fire protection systems. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2306 Engine Electrical Systems - P 2-4-3

This course is designed to give instruction in the troubleshooting, repair, installation, and inspection of engine fluid rate of flow meters; temperature, pressure, and RPM indicators; fire detection and extinguishing systems; and the engine electrical systems that include wiring, controls, switches, indicators and protective devices. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2307 Engine Lubrication and Cooling Systems - P 2-4-3

This course includes the identification and selection of lubricants as well as the repair, inspection, and troubleshooting of the components. It also covers the theory and practical applications of the repair, inspection, troubleshooting and servicing of cooling exhaust systems. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2308 Aircraft Airframe Course 3-0-3

The Airframe course has been established to teach qualified aircraft mechanics the fundamentals of aircraft airframe maintenance. The course is sequenced to give the student instruction in all areas of aircraft structures and their components. Evaluation examinations will be administered periodically throughout the course. Prerequisite: 18 months aircraft maintenance experience and FAA evaluation certification that the student is qualified to take the course to obtain the FAA Airframe rating and AVMT 1201.

AVMT 2309 Aircraft Powerplants and Systems 3-0-3

The powerplants course has been established to teach qualified aircraft mechanics the fundamentals of aircraft powerplants maintenance. The course is sequenced to give the student instruction in all areas of powerplants and their components. Evaluation examinations will be administered periodically throughout the course. Prerequisite: 18 months aircraft maintenance experience and FAA evaluation certification that the student is qualified to take the course to obtain the FAA Powerplants rating and AVMT 1201.

AVMT 2402 Hydraulics & Pneumatics - A 2-6-4

This course includes the repair, inspection, and servicing of hydraulic and pneumatic power systems. Practical experiences include the inspection, servicing, and repair of landing gear retraction systems, shocks, struts, brakes, wheels, tires, and steering systems. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2403 Aircraft Electrical Systems - A 2-6-4

This course is designed to prepare the student to perform inspection, maintenance, and repair of aircraft electrical systems including wiring, controls, switches, and indicators involved with both alternating and direct current circuits. Also covered are the inspection and repair of the aircraft position and warning systems. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2404 Powerplants Maintenance Reciprocating Engines - P 2-6-4

This course is designed to prepare the student to maintain, overhaul, repair, and inspect reciprocating engines from small, opposed powerplants to large, radial engines. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2405 Engine Fuel Systems - P 2-8-4

This course covers the inspecting, repairing, servicing, and troubleshooting of fuel metering systems; fuel system components; engine, ice, and rain control systems; heat exchanger; superchargers; and overhauling carburetors. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2406 Aircraft Propellers - P 2-8-4

Propellers are an integral part of the majority of aircraft; therefore, a great deal of study is devoted to this area. This course covers the repair, inspection, service, and troubleshooting of propeller synchronizing and ice controls; propeller control systems; fixed pitch; constant speed; propeller feathering; and governing systems; removal and installation of propellers; balancing propellers; and identifying/selecting proper propeller lubricants. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

AVMT 2407 Powerplants Maintenance Turbine Engines - P 2-6-4

Designed to prepare the student to maintain, repair, rig, overhaul, and inspect turbine engines. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

(BARB) Barber-Stylist Science

BARB 1701 Introduction to Hair Design 4-12-7

This is an introductory course in the field of barber-styling. Emphasizing the fundamentals of haircutting and related barber skills, it provides the student with a general orientation of the barbering profession, to include implements, shaving, bacteriology, sanitization and sterilization, the anatomy and physiology of hair and body tissues, hair and scalp disorders, and professional ethics. This is a 256 contact hour course.

BARB 1702 Basic Barber-Styling 4-12-7

This course focuses on the basic development of techniques for cutting men's and boys' hair. It also introduces the student to the related skills of shampooing and rinsing, scalp and hair treatments, beards and mustaches, and cutting curly hair. This is a 256 contact hour course. Prerequisite: BARB 1701 or concurrent enrollment.

BARB 1703 Intermediate Barber-Styling I 4-12-7

This course continues the development of haircutting techniques for men and boys, and introduces the student to the basics of haircutting and styling for women. This is a 256 contact hour course. Prerequisite: BARB 1702 or concurrent enrollment.

BARB 1704 Intermediate Barber-Styling II 4-12-7
This course, while continuing to emphasize the haircutting and styling of both men's and women's hair, also covers the more technical aspects of cleansing, curling, dressing, shaping, straightening, waving and clipping. This is a 256 contact hour course. Prerequisite: BARB 1703 or concurrent enrollment.

BARB 2701 Advanced Barber-Styling 4-12-7
This course refines the student's barbering techniques in all areas of hair styling. It also teaches the related skills of massage, bleaching and dyeing, manicuring, and fitting hair pieces. This is a 256 contact hour course. Prerequisite: BARB 1704 or concurrent enrollment.

BARB 2702 Advanced Barber-Styling, Barber Law and Shop Management 4-12-7
This course enables maximum application of the skills developed in BARB 2701. It covers Texas barber law and places the student in a barbershop management role. This is a 256 contact hour course and it completes the 1500 contact hour program required by the Texas Barbers State Board. Prerequisite: BARB 2701 or concurrent enrollment.

BARB 2704 Introduction to Instructor Orientation 4-12-7
This course is an introduction to teaching barbering. It covers the methods and techniques used by the training instructor and the materials, equipment, and various contracts, applications, and examination forms used by the Texas State Board of Barber Examiners. This is a 256 contact hour course. Prerequisite: Certificate to practice barbering.

BARB 2705 Basic Barber Instructor 4-12-7
The student will learn the rules and regulations of the College, how to prepare lessons plans, how to plan class lectures and presentations, and how to prepare examinations. The student will observe class lectures presented by licensed instructors and will also assist in practical training. This is a 256 contact hour course. Prerequisite: BARB 2704.

BARB 2706 Intermediate Barber Instructor 4-12-7
The student will observe all class lectures, demonstrations, and practical exercises and will prepare for the first class lecture. The student is required to prepare a special barber notebook with daily lesson plans and also assist in practical training. This is a 256 contact hour course. Prerequisite: BARB 2705.

BARB 2707 Advanced Barber Instructor 4-12-7
During this course, the student shall conduct theory and practical classes and will prepare daily lesson plans and examinations on each lesson taught. The student will also assist in practical training. This is a 256 contact hour course. Prerequisite: BARB 2706.

(BIOL) Biology

➲**BIOL 1308 Biological Science** 3-0-3
A study of selected topics of biological science for the non-science major. Topics include the cell concept, systems of the human body, aging, and introduction to genetics, evolution, and ecology.

BIOL 1408 General Biology I 3-3-4
Fundamental principles of living organisms at the cellular level. Includes cell structure and function, photosynthesis/cellular respiration, mitosis/meiosis, DNA, Mendelian and modern genetics, bacterial structure and gene control, population genetics.

BIOL 1409 General Biology II 3-3-4
Aspects of systematics, survey of plant kingdom (structure/functioning/life cycles), survey of the animal kingdom, structure and functioning of animal systems, aspects of ecology.

BIOL 1411 General Botany 3-3-4
The study of structure and function of plant cells, tissues, and organs. An evolutionary survey and life histories of the following representative groups: algae, fungi, mosses, liverworts, ferns, and seed-producing organisms. Plant reproductive and functional interactions with their environment and with humans. Selected laboratory exercises will complement the lecture topics. Completion of BIOL 1408 is recommended.

BIOL 1413 General Zoology 3-3-4
A survey of important invertebrate and vertebrate groups of the animal kingdom emphasizing relevant biological concepts. Includes laboratory experiments and dissections; lifestyles, structures, and classification of protozoa, sponges, jellyfish, worms, molluscs, arthropods, echinoderms, and vertebrates. Completion of BIOL 1408 is recommended.

BIOL 1424 Plant Taxonomy 3-3-4
An introduction to the identification, classification, and evolutionary relationships of vascular plants with emphasis on flowering plants. The importance of herbaria, collection techniques, and construction and use of taxonomic keys will be included in both the lecture and laboratory. Prerequisite: BIOL 1411.

BIOL 2401 Human Anatomy 3-3-4
Principles of human anatomy designed for students interested in medical careers. Laboratory includes anatomical models and displays, audio-visual materials, microscopy, and specimen dissection in the lab. A one-semester course in Biology is a preferred prerequisite.

BIOL 2402 Human Physiology 3-3-4
Fundamental study of the chemical interrelationships of human systems. Digestion, respiration, excretion, muscular activities, reproduction, and metabolism are included. Basic physiological instruments and techniques are included in the lab. Prerequisite: BIOL 2401 and an introduction to chemistry.

BIOL 2413 Biological Entomology (AGRI 2313 Entomology) 3-3-4
Study of insects, including life cycle, morphology, physiology, ecology, taxonomy, population dynamics, genetics, and ecosystem relations. Includes instruction in the biological and chemical control of insects.

BIOL 2416 Human Genetics 3-3-4
The study of the physical basis of inheritance and the laws of heredity and variations. Genetic problems are emphasized. Human genetic dysfunctions and modern research in genetic control are discussed. Prerequisite: BIOL 1408 or consent of the Department Chair.

BIOL 2421 Microbiology 3-3-4
Fundamental principles of microbiology; includes study of morphology, physiology, and classification of microbes and their relationships with soil, food, water, disease, and immunology. Designed for nursing and all health-related majors. Prerequisite: Any college-level Biology course.

BIOL 2428 Vertebrate Zoology 3-3-4
Structure, development, physiology, and natural history of the vertebrate animals. Emphasis will be placed on North American forms. Field trips are required at minimal student expense. Labs include dissections. Prerequisites: BIOL 1408, 1409, 1413 or consent of the Department Chair.

➲*Not offered on Central Campus*

(BUSI) Business

BUSI 1301 Introduction to Business 3-0-3
Provides overall picture of business operations. Includes analysis of specialized fields within business organizations and identifies the role of business in modern society.

BUSI 1307 Personal Finance 3-0-3
Personal and family account budgets, budgetary controls, bank accounts, charge accounts, borrowing, investing, insurance, standards of living, renting, home ownership, wills, and trust plans.

➲BUSI 1372 Consumer Economics 3-0-3
A study of consumer goods and services as related to the home/family and the problems and pitfalls associated therewith. This includes a study of family purchasing, advertising, commodity information, sales approaches from a consumer viewpoint, and sources of advice and counseling. This course allows the supervisor to better advise subordinates on economic problems.

➲*Not offered on Central Campus*

(CDEC) Early Childhood Professions

CDEC 1195 Special Topics in Child Care (CHDV 2101) 1-0-1
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.

CDEC 1303 Family and the Community (CHDV 1327) 2-2-3
A study of the relationship between the child, the family, the community, and early childhood educator, including a study of parent education, family and community lifestyles, child abuse, and current issues. The student will examine research on parenting styles; discuss issues relating to families and communities; discuss literature relating to diverse lifestyle and multi-cultural influences; examine research on abuse and neglect as it occurs in the family. The student will identify effective parenting techniques; identify characteristics of functional and dysfunctional families; demonstrate the ability to communicate and interact with parents and families; recognize signs of abuse and neglect; describe ways to way effectively with abusive behaviors; and develop activities to enhance understanding of diverse lifestyle and multi-cultural influences. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include working with children with different cultures and backgrounds.

CDEC 1311 Introduction To Early Childhood Education (CHDV 1301) 2-2-3
An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues. The student will discuss the contributions of key historical and contemporary theorists to the field of early childhood education, explain the features of the developmentally appropriate program for young children, define development and define each of the four basic developmental areas, describe the types of early childhood programs, and analyze future trends and issues of the early childhood profession. The student will demonstrate an understanding of the characteristics and developmental stages of an early childhood professional. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include working in the lab center.

CDEC 1313 Curriculum Resources for Early Childhood Programs (CHDV 1303) 2-2-3
Fundamentals of curriculum design and implementation in developmentally appropriate programs for young children. The student will define and describe developmentally appropriate practices; describe the process of curriculum development beginning with goals, objectives and learning activities, and culminating in assessment; and develop guidelines for creating developmentally appropriate learning (indoor/outdoor) environments. The student will select, plan, and implement developmentally appropriate activities for young children; apply an understanding of the teacher's role in the early childhood classroom; and prepare a developmentally appropriate schedule including routines and transitions. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include developing and implementing curricula.

CDEC 1318 Nutrition, Health and Safety (CHDV 1324) 2-2-3
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 implication. Integration of these principles will be applied in a variety of settings. The student will demonstrate knowledge of the principles, nutrition assessment, activities, and regulatory requirements of nutrition; describe community health problems, universal health precautions, environmental and personal hygiene and legal implications regarding health; and evaluate the regulations, procedures, and environment regarding safety. The student will demonstrate skills in computation, record keeping, referrals, and resources. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include meal preparation and safety and health surveys.

CDEC 1319 Child Guidance (CHDV 1309) 2-2-3
An exploration of common behavior problems of young children in child care settings. Emphasis on positive guidance techniques for effective behavior management. Practical application through direct participation in child care setting. The student will summarize general theories related to child guidance and explain how guidance teaches young children autonomy and self-discipline, while promoting development of positive self-concept and prosocial behaviors. The student will apply appropriate guidance methods for specific situations relating to children's behaviors and demonstrate skills in supporting children to resolve conflicts. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunities to practice guidance techniques in early childhood settings.

CDEC 1354 Child Growth and Development (CHDV 1310) 2-2-3
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. The student will demonstrate knowledge of principles of growth and development; normal developmental stages in physical, cognitive, social, and emotional domains; major theories of development, i.e., behaviors, cognitive, language acquisitions, developmental; the impact of developmental processes on early childhood practices; types and techniques of objectives observation; the importance of play in development; and biological and environmental influences on growth and development. The student will demonstrate skills in the practical application of developmental principles and theories, objective observation techniques, and recognition of normal growth and developmental patterns. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include observation of children at various stages of development.

CDEC 1356 Emergent Literacy for Early Childhood (CHDV 1304) 2-2-3

An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based, integrated curriculum. The student will describe the role of the teacher in promoting emergent literacy, analyze various theories of language development, and sequence the stages of emergent literacy. The student will create print rich environment for young children and select and share appropriate literature with young children. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include using environmental and developmentally appropriate activity to support literacy learning.

CDEC 1357 Math and Science for Early Childhood (CHDV 2305) 2-2-3

An exploration of principles, methods, and materials for teaching young children math and science concepts through discovery and play. The student will relate the sequence of cognitive development to the acquisition of math and science concepts and describe the scientific process and its application to the early childhood classroom. The student will develop teacher strategies which promote thinking and problem-solving skills in young children, utilize observation and task assessment as a basis for planning discovery experiences for the individual child, and select and/or prepare developmentally appropriate materials to support the attainment of math and science concepts. Thirty hours of field experience in child-related settings are required beyond the normal class hours.

CDEC 1358 Creative Arts for Early Childhood (CHDV 1305) 2-2-3

An exploration of principles, methods, and materials for teaching young children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking. The student will describe the developmental sequences for the creative arts and describe how process-oriented experiences enhances creativity/divergent thinking. The student will demonstrate the ability to encourage divergent thinking within the classroom through open-ended questioning techniques and plan and implement developmentally appropriate activities for music, movement, visual arts, and dramatic play. Student will demonstrate knowledge of audio-visual equipment and how to construct simple training aids such as bulletin boards and mobile. Laboratory experiences include planning and implementing activities that promote creativity in young children.

CDEC 1359 Children with Special Needs (CHDV 2301) 2-2-3

A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, educational intervention, available resources, referral processes, and the advocacy role and legislative issues. The student will demonstrate knowledge of causes, incidence, and characteristics of exceptionalities related to cognitive, physical, social, and emotional domains of development; current terminology and practices for educational intervention; availability and accessibility of appropriate resources; accommodation in inclusive early childhood setting; legal mandates and their impact on the early childhood practices and environment; and the role of advocacy for children with special needs and their families. The s cognition of indicator of exceptionalities; for educational intervention and acc propriate resources and referral practices for interpretation of the impact of legal man ; and advocating for children will special urs of field experience in child-related setti l class hours. Laboratory experien ce skills with ex eptional children

CDEC 1371 Physical Development and Disorder in Children (CHDV 1306) 2-2-3

This course is designed for paraprofessionals working in integrated early childhood settings. Roles and responsibility of the paraprofessional, including IEP and ISFP lesson plan teaching strategies, and hands-on training in physical management and care skills of the child with special needs are emphasized. Instruction in basic sign language, and an overview of current learning technologies to assist the child with disabilities, is included. Emphasis is placed on methods and materials for promoting activities of daily living. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunities to practice skills with exceptional children.

CDEC 1372 Techniques for Child Guidance for the Special Child (CHDV 1307) 2-2-3

This course provides an examination of theoretical approaches to guidance strategies applicable to the integrated early childhood setting; emphasis is placed on strategies for facilitating emotional growth in individual children and social integration of all children in inclusive settings; includes activity planning to achieve IEP and ISFP goals for a variety of children with disabilities and children without disabilities. Features experiences in mastering observation techniques and assisting in assessment procedures; ethical problem solving; and teamwork skills in group management. Positive guidance techniques are emphasized. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunities to practice skills with exceptional children.

CDEC 1373 Management: Intergenerational Professions (CHDV 1328) 2-2-3

This course focuses on program goals, policies and procedures, and licensing standards for child and adult services. It includes types of settings and career opportunities related to child and adult services; appropriate workplace ethics; occupational health and safety practices; communicating effectively on the job, records maintenance; daily scheduling; and current issues and legislation relating to child care, elderly care, and adult dependent care. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunities to practice techniques in early childhood settings.

CDEC 1374 Preschool Age (CHDV 1408) 2-2-3

This course centers on developmentally appropriate practice during the play years (ages 3-5). It includes developing and designing interest centers and environments for discovery learning; scheduling and planning age appropriate activities; and writing daily and weekly activities and objectives. Staff team building and ethical problem solving are embedded in course objects. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunity to practice skills with preschool age children.

CDEC 1391 Special Topics in Family Day Care Homes (CHDV 2410) 2-2-3

This course addresses the unique curriculum planning needed in group home-based care centers and centers serving less than 10 children; includes strategies for developmentally appropriate proactive for mixed age groups, planning the environment, and ways to use mixed-age grouping to the children's advantage. Thirty hours of field experience in child related settings are required beyond the normal class hours. Laboratory experience includes working with young children.

CDEC 1393 Special Topics in Family Living and Parenthood (CHDV 2302) 2-2-3

Topics addresses 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 needs and business and industry trends. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunity to practice guidance techniques in early childhood settings.

CDEC 2321 The Infant and Toddler (CHDV 1406) 2-2-3

A study of appropriate infant and toddler (birth to 3 years) programs, including an overview of development, quality care giving routines, appropriate environment, materials and activities, and teaching/guidance techniques. The student will demonstrate a knowledge of principles of quality infant/toddler caregiving; elements of appropriate indoor and outdoor environments; developmentally appropriate materials, activities, and teaching/guidance techniques; and normal growth and development of children from birth to 3 years. Thirty hours of field experience in child-related settings are required beyond the normal class hours . Laboratory experiences include assessing and implementing infant and toddler activities.

CDEC 2326 Administration of Programs for Children I (CHDV 2303) 2-2-3

A practical application of management procedures for early child care and education programs, including a study of operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluating, and communication. The student will employ knowledge of programs, philosophies, curriculums, and budget basics; develop goals and objectives, written/oral communications, parent communication; and interpret and supervise regulations, policies, staffing, and evaluating. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include observing the operation of a child care agency.

CDEC 2328 Administration of Programs for Children II (CHDV 2304) 2-2-3

An in-depth study of the skills and techniques in managing early child 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. The student will demonstrate skills in fiscal planning and analysis; legal and ethical issues; personnel management and team building; advocacy and professionalism; parent education and partnership; and technical applications in programs. The student will utilize skills in speaking, writing, computation, and computer utilization. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include observation of the operation of child care programs.

CDEC 2341 The School Age Child (CHDV 2409) 2-2-3

A study of appropriate age (5 to 13 years) programs, including an overview of development, appropriate environments, materials and activities, and teaching/guidance techniques. The student will demonstrate knowledge of principles of quality school age programs; elements of appropriate indoor and outdoor environments; developmentally appropriate materials, activities, and teaching/guidance techniques; and normal growth and development of the school age child. The student will demonstrate skills in implementing principles of quality programming; designing appropriate indoor and outdoor environments; selecting appropriate materials and activities; practicing teaching/guidance techniques and activities for school age children; and applying growth and development principles to school age setting. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experience include planning and implementing school-age activities

CDEC 2371 Program and Planning Implementation (CHDV 2314) 2-2-3

This course is intended to motivate and inform care givers about interactions between children and the elderly in a general way. It includes guidelines for developing an Intergenerational program, goals and objectives, appropriate settings for activities, planning and implementing Intergenerational activities, and effective techniques in evaluating intergenerational programs.

CDEC 2384 Cooperative Education in Child Development 1-14-3

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college Child Development Center or 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.

No change

(CEEM) Emergency Medical Technician - Paramedic

CEEM 0102 Emergency Medical Technician

144 ~~124~~ Clock Hours

The EMT program is designed to provide training in skills and equipment necessary to help maintain basic life support. Instruction is given in basic Anatomy and Physiology, patient assessment, and the theory behind the procedures used in giving pre-hospital care to the sick and injured. Upon successful completion of the program, students are eligible to take the exam to be certified as an EMT by the Texas Department of Health and/or National Registry EMT.

CEEM 0103 Paramedic Phase I 128 Clock Hours

The course will review all material covered in the Emergency Medical Technician program and the student must show proficiency in all basic EMT skills. This course will cover laws governing EMT-P; medical terminology; overview of human anatomy and physiology; advanced patient assessment; pathophysiology of shock and pneumatic anti-shock garments (PASG); general and emergency pharmacology; and fluid therapy which includes IV insertion, techniques of administration of IV fluids, and IV drip-rate calculations; advanced airway management and ventilation, insertion of endotracheal and esophageal obturator airways, and intubation techniques for the adult and infant. This course will test the student's proficiency in the advanced skills of IV therapy, subcutaneous and intramuscular injections, IV piggyback medications, IV push medications, application of MAST pants, advanced airway insertion techniques to include ET and EOA. Prerequisite: CEEM 0102.

CEEM 0104 Paramedic Phase II 144 Clock Hours

This course will train the student in respiratory and cardiovascular medical emergencies. Content will include A & P of these systems; advanced assessment of the cardiac and/or respiratory patient; EKG monitoring; rhythm interpretation; recognition and management of cardiac dysrhythmia. This course will encompass the AHA Advanced Cardiac Life Support (ACLS) class. Students will be trained to perform cardioversion/defibrillation and adults/children and infants along with Megacode skills for all medical patients. Students must show proficiency in advanced patient assessment; endotracheal tube placement; ET medications; EKG rhythm recognition (static & dynamic) and treatment of cardiac dysrhythmia. Upon successful completion of this course, students are eligible to take the exam to be certified as an EMT-Intermediate by the Texas Department of Health and/or the National Registry EMT-Intermediate. Prerequisite: CEEM 0103.

CEEM 0105 Paramedic Phase III 144 Clock Hours

This course continues to train the EMT-P student in medical emergencies that include the endocrine, metabolic, and nervous systems, the acute abdomen, anaphylaxis, toxicology and substance abuse, infectious disease, and environmental emergencies. The student will also be trained in the kinetics of trauma to the head, neck, spine and body cavity. Course will cover assessment and management of musculoskeletal injuries, soft tissue trauma and burns, shock trauma, resuscitation and Megacode algorithms for the trauma arrest victim. This course will encompass the Basic Trauma Life Support (BTLS) advanced level course. Students will have skills lab practice to continue training in cardioversion/defibrillation, EKG recognition, Megacode skills for the medical and trauma patient, radio communication, and patient medical reports. Prerequisite: CEEM 0104.

CEEM 0106 Paramedic Phase IV **144 Clock Hours**

This course will cover assessment and treatment of geriatric, pediatric, and obstetric patients, and gynecological emergencies. The student will be trained in advanced life support techniques for the pediatric and neonate patients. This course will encompass the Pediatric Pre-hospital Provider Course (PPPC). This course will also cover behavioral and psychiatric emergencies. Students will have skills lab practice to continue training in advanced assessment of adult and pediatric patients; Megacode skills in medical and trauma management for all age groups (geriatric, pediatric and other adults) will also be stressed. Prerequisite: CEEM 0105.

CEEM 0107 Paramedic Phase V **176 Clock Hours**

This course will focus on the development of skills already learned. The student will spend the majority of the time in clinical and field experience. Students must show proficiency in Megacode skills as a team leader in a medical, trauma and pediatric scenario. Students must show proficiency in all EMT-Basic and paramedic skills as mandated by the Texas Department of Health and National Registry. Upon successful completion of this course students are eligible to take the exam to be certified as an EMT-Paramedic by the Texas Department of Health and/or the National Registry EMT-Paramedic.

(CENA) Nurse Aide

CENA 0101 Nurse Aide in Long-Term Care Facilities **80 Clock Hours**

Prepares individuals with knowledge, skills, and abilities essential for the provision of basic care to residents in long-term care facilities.

(CEPO) Peace Office Training

CEPO 0107 Basic Peace Officer Training **592 Clock Hours**

This course provides the training for entry-level peace officers as required by the Texas Commission on Law Enforcement Officer Standards and Education. Admittance is restricted to personnel sponsored by a police agency only.

CEPO 0108 Basic Certification for Corrections Officers **160 Clock Hours**

This course will certify students for employment with the Institutional Division of the Texas Department of Criminal Justice. The pre-service course outline provided by the Correctional Training Department of the Texas Department of Criminal Justice will be followed.

CEPO 0120 Basic Reserve Peace Officer Training **230 Clock Hours**

Phase I of the training for entry-level peace officers as required by the Texas Commission on Law Enforcement Officer Standards and Education (TCLEOSE). Major topics of study include U.S. and Texas Constitutions and Bill of Rights; Texas Penal Code and Code of Criminal Procedure; defensive tactics and use of force; professionalism and ethics; traffic law enforcement; firearms; family violence; and emergency medical aid.

CEPO 0121 Intermediate Reserve Peace Officer Training **198 Clock Hours**

Phase II of the training for entry-level peace officers as required by TCLEOSE. Major topics of study include arrest, search and seizure; patrol procedures; accident investigation; Texas Family Code; interpersonal communications and report writing; civil process and liability; and emergency communications.

CEPO 0122 Advanced Reserve Peace Officer Training **164 Clock Hours**

Phase III of the training for entry-level peace officers as required by TCLEOSE. Major topics of study include criminal investigation; dangerous drugs/controlled substances; police driving; and multiculturalism and human relations.

(CHEM) Chemistry

CHEM 1406 Introduction to General Chemistry **3-3-4**

This course is designed primarily to satisfy the requirements of nursing students seeking a B.S. Degree or background for physiology. The course covers the fundamentals of general and descriptive chemistry with applications from medicine, modern living, agriculture, etc. It is also suitable for non-science majors who need a laboratory science credit. It also serves as background for those who have no chemical background.

CHEM 1407 Physiological Chemistry **3-3-4**

A study of organic and physiological chemistry for nursing students interested in the processes of life. Basic principles, nomenclature, principal reactions and methods of synthesis, and the major classes of physiologically important compounds are studied. Prerequisite: CHEM 1406.

CHEM 1411 General Chemistry I **3-3-4**

The first of two courses for science-related majors, this course covers the basics of atomic and molecular structure, bonding, states of matter, solutions, and some descriptive chemistry. Emphasis is placed on solutions of chemical problems. Prerequisite: MATH 1314 or consent of the Department Chair.

CHEM 1412 General Chemistry II **3-4-4**

The second of two courses for science-related majors, this course covers equilibrium processes, acid-base concepts, elementary thermodynamics and kinetics, electrochemistry, nuclear chemistry, and descriptive chemistry of some families of elements. Prerequisite: CHEM 1411.

CHEM 2423, 2425 Organic Chemistry I & II **3-4-4**

A mechanistic approach is used to provide a thorough foundation in organic chemistry. The student is introduced to planning a synthesis in lecture. The laboratory introduces students to basic techniques, synthesis of compounds and instrumental analysis. Designed for science majors and minors. Prerequisites for CHEM 2423: CHEM 1411 and 1412 or the consent of the Department Chair. Prerequisite for CHEM 2425: CHEM 2423.

(CMET) Computer Electronics Technology

CMET 1400 Electronics and Computer Skills **3-3-4**

A study of modern electronic construction techniques, including the use of hand tools and fabrication equipment. The course includes high-reliability soldering, the production of printed circuit boards, cable and harness making, wire wrapping techniques, and other related skills.

CMET 1401 Digital Circuits **3-3-4**

A study of the basic gates and gating networks used in digital circuits and an intensive study of Boolean Algebra, as well as the theory and operation of flip-flops, registers, and counter circuits. The course also covers numbering systems, arithmetical circuitry, and elements of control circuits.

CMET 1402 Computer Systems **3-3-4**

An introductory course covering the setup, operation, and basic preventive maintenance of the personal computer system. This course will include an introduction to some of the basic software packages useful to the first-time computer owner.

CPMT 2437

CMET 1403 Computer Systems and Operational Programming 3-3-4

The study of the theory of the operation of several computer systems, to include instructions, an introduction to their logic diagrams, circuit schematics, programming as a troubleshooting tool, and operational characteristics.

CMET 1404 Fundamentals of Robotics 3-3-4

An introduction to terminology, theories, and technology involving all types of robotics and tendons, both general and industrial oriented. Prerequisites: ELTE 1401, CMET 1401. Corequisite: ELTE 1403.

CMET 1405 Local Area Networks CPMT 1449 3-3-4

This course covers system design, configuration, operation, management, and troubleshooting of local and wide area networks.

CMET 1409 CRT Systems CETT 2445 3-3-4

A study of the vertical and horizontal scanning circuits, video amplifiers, and other related circuits encountered in the most common video display systems. The course includes theory of circuit operation and practical laboratory exercises in troubleshooting. Prerequisite: ELTE 1403.

BIOM 1205

CMET 2200 Thru Hole Assembly-Advanced 1-3-2

An advanced course offered at a PACE certified training center by a PACE certified instructor, in the art of assembly, rework, and repair of printed circuit boards in thru-hole technologies. The course covers the assembly, removal, and replacement of all types of pc-board-mounted electronic devices. Successful completion results in the student being certified by PACE in Advanced Thru-Hole Assembly and Repair.

CMET 2201 Surface Mount Assembly-Advanced 1-3-2

An advanced course offered at a PACE certified training center by a PACE certified instructor, in the art of assembly, rework, and repair of printed circuit boards in surface mount technologies. The course covers the assembly, removal, and replacement of all types of pc-board-mounted electronic devices. Successful completion results in the student being certified by PACE in Advanced Surface Mount Assembly and Repair.

CMET 2400 Assembly, Repair and Rework 3-3-4

An advanced course offered at a PACE certified training center by a PACE certified instructor, in the art of assembly, rework, and repair of printed circuit boards in thru-hole and surface mount technologies. The course covers the assembly, removal, and replacement of all types of pc-board-mounted electronic devices. Successful completion results in the student being certified by PACE in both Advanced Thru-Hole and Advanced Surface Mount Assembly and Repair. Prerequisite: CMET 1400 or consent of the Department Chair.

CMET 2402 Computer Circuit Analysis CPMT 1445 3-3-4

A comprehensive study of the clock and pulse generation circuit, waveshaping circuits, trigger and control circuits, and synchronization and counting circuits, as well as other circuits used in modern-day computers. Prerequisites: CMET 1401 and 1403.

CMET 2404 Computer System Diagnosis and Maintenance CPMT 2445 3-3-4

The operation, preventive maintenance procedures, and troubleshooting of modern-day computer equipment. The study of advanced diagnostic programming including finding, documenting, and repairing computer malfunctions. The course gives the student the much needed practical experience that can only be gained in a live computer atmosphere. Prerequisite: CMET 2402 or equivalent.

CMET 2405 Tendon Control and Implementation 3-3-4

A study in the use of microprocessors to control both fluidics and pneumatic systems used in robotics and tendon-type systems, as well as the study of AC and DC motors and motor control for movement and positioning. Prerequisite: CMET 1404.

CMET 2406 Robotics Implementation 3-3-4

A study in data acquisition, handling, and conversion for use in movement, detection, and voice synthesis in advanced robotics systems. Prerequisite: CMET 2405.

CMET 2408 Digital Communications EECT 1476 3-3-4

This course is designed to allow the student to become proficient in all aspects of digital communications. It will begin with a concentrated investigation of digital modulation and digital transmission. The most common modulation schemes used in modern systems--FSK, PSK, and Quadrature Amplitude Modulation (Eight and Sixteen)--will be covered in depth. Also included is a study of the numerous data communications concepts including transmission methods, circuits, topologies, error control mechanisms, and data formats. A study of digital transmissions techniques including PCM, MPA sampling, encoding, and compounding; time-division multiplexing, adaptive delta modulation PCM, and differential PCM are also covered. The North American Digital Hierarchy for digital transmissions is outlined including line encoding schemes, error detection/correction methods, and synchronization techniques. Prerequisites: CMET 1401 and ELTE 1403.

CMET 2410 Advanced Consumer Servicing 3-3-4

This course includes the maintenance, alignment, and servicing of VCRs, camcorders, hi-fi stereo sound systems and equipment. Prerequisite: CMET 1409.

CMET 2411 Theory of Interface Devices 3-3-4

A study of the microprocessor and its interface with external memory, enhancements, and devices that allow the processor to be a complete computer system. The course will also include the operation of these peripheral devices. Prerequisites: CMET 1403 and ELTE 1403.

(COMM) Communications

see also Degree Plan Journalism

COMM 1307 Communications Media 3-0-3

Instruction in mass media of the modern world. A survey of all mass media, their purposes, and their methods of operation.

COMM 2305 Editing, Layout and Design and Headline Writing 3-2-3

Enables students to develop an understanding of the newsroom organization and the entire news/editorial process. Students perform copy editing for errors of fact, interpretation, and grammar. Emphasis is on developing a regard for accuracy and fairness in the editing and design process. Prerequisite: COMM 2311. Working on the staff of the school newspaper is a requirement for this course.

COMM 2311 News Gathering and Reporting I 3-2-3

Instruction in the fundamental news gathering and writing techniques, interviewing techniques, and discussion of news sources and values. Typing required. Working on the staff of the school newspaper is a requirement for this course.

COMM 2315 News Gathering and Reporting II 3-2-3

Emphasizes advanced reporting techniques and styles, such as writing interpretive and specialized news stories, features, and opinion pieces. Lectures in specialized areas by professional reporters. Prerequisite: COMM 2311. Working on the staff of the school newspaper is a requirement for this course.

no change

(COSC) Computer Science

COSC 1100 Special Topics 0-3-1
Recent developments and topics of current interest. May be repeated when topics vary.

COSC 1300 Computer Information Processing 2-1-3
An up-to-date survey of computer hardware and software systems and developments that will provide the basis for further advancements in information processing. Provides a comprehensive overview of the computer--what it is, what it can and cannot do, how it operates, and how it may be instructed to solve problems. Covers terminology and examines the application of computers in a broad range of organizational settings and social environments. An overview of BASIC programming is provided. Basic use of computers for non-computer majors.

COSC 1400 Computer Science Fundamentals 3-3-4
Provides the student with fundamental skills needed in designing computer programs. Focus will be on problem analysis and developing algorithms for the step-by-step solution to problems. Students will learn to use an on-line editor to enter programs via a terminal in a hands-on environment. A high-level language will be used for programming and debugging.

COSC 1401 Computer Operations 3-3-4
Provides the student with knowledge of duties and responsibilities of a computer operator. Training is provided to develop the student's ability to work in a computer center.

COSC 1402 Advanced Operations Lab 1-12-4
This course consists of supervised work in a computer center. The students learn to operate the computer and peripheral equipment. Prerequisite: COSC 1401. Corequisite: COSC 2403 and consent of the Department Chair.

COSC 1403 Introduction to Computer Science and Programming 3-3-4
Introductory programming course for Computer Science majors. Problem solving, algorithm development, pseudocode, and flowcharting. In-depth coverage of a high-level language through programming assignments.

COSC 1404 COBOL Programming 3-3-4
Provides the student with skills and fundamentals in solving business data processing problems using COBOL. The student becomes effective in COBOL programming techniques involving sequential files, single- and double-dimension table handling, and control breaks. Prerequisite: COSC 1403.

COSC 1405 Computer Concepts and Analysis 3-3-4
Provides the essential foundation for Computer Science majors in computer concepts, terminology, and business computer systems. Students will be introduced to word processor and spreadsheet software.

COSC 1406 Computer Organization and Architecture 3-3-4
A study of hardware and software characteristics of digital computers. Designed to give the student an understanding of how the fundamental principles by which computers work affect and govern programming techniques. Topics include data representation, machine instruction types, fetch and execution cycles, interrupt schemes, metaprograms, I/O handling, and assembler concepts. Prerequisites: COSC 1403 or MISC 1451 or COSC 1401.

COSC 1407 RPG/400 Programming 3-3-4
Report Program Generator (RPG)--a problem-oriented language involving fixed program logic, file description, input calculation, and output for practical business oriented problems. Prerequisite: COSC 1403.

COSC 1408 AS/400 Concepts and Operations 3-3-4
An introduction to the concepts and operations of AS/400 hardware and software. Prerequisite: 8 semester hours in Computer Science courses.

COSC 1409 Computer Operations Internship 1-18-4
This course consists of on-the-job computer operations training that utilizes the principles, knowledge and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College coordinator. Prerequisite: 12 semester hours in Computer Science courses, including COSC 1401, and consent of the Department Chair.

COSC 2110 Topics in Computer Science Laboratory 0-3-1
Laboratory for COSC 2310 when topic has a required laboratory.

COSC 2310 Topics in Computer Science 3-0-3
Study of recent developments and topics of current interest in computer science. Prerequisite: 12 semester hours in Computer Science courses or the consent of the Department Chair.

COSC 2401 Advanced COBOL 3-3-4
Offers the student of COBOL programming an in-depth study of the theory, programming techniques, and programming efficiencies that will be required of the commercial COBOL programmer. File design and the special features of ANSI COBOL language are thoroughly covered. Emphasis is placed on multi-dimensional table handling, searching and sorting techniques, and VSAM (Indexed) file manipulation. Structured design and programming will be stressed. Programming assignments will require detailed knowledge of necessary Job Control Language (JCL) for program execution. Prerequisites: COSC 1404 and 2403.

COSC 2402 Systems in the MIS Environment 3-3-4
This course examines advanced systems including database, distributed processing, teleprocessing, local area networks, management information systems and decision support systems. Emphasis will be placed on database management systems through the development of a database project. Prerequisite: 12 semester hours in Computer Science courses.

COSC 2403 JCL/Machine Language Programming 3-3-4
An in-depth coverage of Job Control Language and/or command language as used in an MVS/ESA environment. Use of utilities for data set maintenance. Assembly and machine language concepts. Emphasis on abend resolution and dump reading. Prerequisites: COSC 1404 and 1406 or COSC 1400, 1401 and concurrent enrollment in COSC 1406.

COSC 2406 Database Programming 3-3-4
A study of a relational database management system. Topics include the creation of users, tables, table definition, sharing of data, SQL, data manipulation, report generation, and data definitions. Prerequisite: 12 semester hours of Computer Science courses to include a minimum of one programming class and one microcomputer application class (MISC 1420, MISC 1430, MISC 1440 or MISC 1450).

COSC 2408 CICS Programming 3-3-4
An introduction to programming for the teleprocessing environment under CICS. Applications will be written and tested on-line. Prerequisite: COSC 1404.

COSC 2409 Field Projects 1-9-4
This course consists of practical applications in the field of computer science. It is designed to fit the career objectives of the student. Prerequisite: Consent of the Department Chair.

COSC 2410 Systems Analysis and Design 3-3-4
Study of structured systems development using a Computer-Aided Systems Engineering (CASE) tool. Emphasis on tools and techniques of systems analysis and design for producing logical methodologies for dealing with complexity in the development of information systems. Prerequisite: 8 semester hours of Computer Science programming.

COSC 2490 Computer Resource Management 3-3-4
This course covers the procurement, use and evaluation of computer resources including hardware, software, and people. Topics include capacity planning, upgrades, downsizing, choosing the correct hardware and software, compatibility, connectivity, and vendor vs. in-house support. Prerequisite: MISC 1461.

COSC 2491 Network Management 3-3-4
An in-depth study of LAN software designed to prepare individuals for the responsibility of being a LAN system manager. Students will learn to create workable directories, create scripts for a working environment, design menus for novice users, select applications, and set up network printing and backups. Prerequisite: MISC 1461.

COSC 2492 Network Installation, Service and Support 3-3-4
A study of LAN hardware management. Students will set up various types of file servers and work stations; configure and install network boards; install multiple cabling systems; and be able to isolate, diagnose, and troubleshoot LANs. Students will gain practical experience configuring and installing LANs. Prerequisite: COSC 2491.

COSC 2493 Network Architectures, Standards and Protocols 3-3-4
A practical introduction to the major industry networking and data communications standards and protocols. This hands-on course will guide students through the installation, maintenance, error detection, and internals of communications protocols. Connectivity among a wide variety of computer platforms will be stressed. Prerequisite or Corequisite: COSC 2491.

COSC 2494 Computer Science Internship 1-18-4
This course consists of on-the-job computer training that utilizes the principles, knowledge and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College coordinator. Prerequisites: 32 semester hours in Computer Science courses and consent of the Department Chair.

(COSM) Cosmetology

COSM 1701 Orientation and Introduction to Cosmetology 4-12-7
This is an introductory course in the field of cosmetology. The course includes an orientation to cosmetology and the development of related skills, knowledge, and attitudes necessary for a cosmetologist. Manicures, shampoos, basic bacteriology, and pH are covered. The course also covers methods of haircutting, permanent waving, blowdrying, and using the curling iron. This is a 256 contact hour course.

COSM 1702 Basic Cosmetology 4-12-7
A continuation of COSM 1701. The course covers basic principles involved in the use of pincurls and rollers and procedures used in performing fingerwaves and sets. The course also introduces the student to customer relations. This is a 256 contact hour course. Prerequisite: COSM 1701 or concurrent enrollment.

COSM 1703 Intermediate Cosmetology, Manicuring and Hair Removal 4-12-7
A continuation of COSM 1702. The course covers intermediate permanent waving, intermediate manicuring, black hair care, and the study of skin cells and nail structure. The course also covers eyebrow arching, lash and eyebrow tinting, eye tabbing, and hair removal. This is a 256 contact hour course. Prerequisite: COSM 1702 or concurrent enrollment.

COSM 1704 Intermediate Cosmetology and Skin Care 4-12-7
This course covers the theory, techniques and procedures involved in facial treatments. This course also covers color analysis, makeup and pedicures. The students practice the intermediate manipulative skills required for hairstyling, applying masks and makeup. This is a 256 contact hour course. Prerequisite: COSM 1703 or concurrent enrollment.

COSM 2705 Advanced Cosmetology 4-12-7
A continuation of COSM 1704. This course will cover hair coloring and advanced techniques involved in permanent waving, styling, and haircutting. This is a 256 contact hour course. Prerequisite: COSM 1704 or concurrent enrollment.

COSM 2706 Preparation for the State Board and Advanced Cosmetology 4-12-7
A continuation of COSM 2705. This course will stress rules, regulations and preparation for the Texas Cosmetology Commission Licensing examination. This is a 256 contact hour course and it completes the 1500 contract hour program required by Texas Cosmetology Commission. Prerequisite: COSM 2705 or concurrent enrollment.

(CRIJ) Criminal Justice

CRIJ 1201 Defensive Tactics CJSA 1351 1-2-2
This course is designed to provide the student with defensive and protective philosophies to better protect the public and criminal justice personnel against illegal force. Self-defense techniques, safe arrest procedures, citizen contact, and proper prisoner transportation techniques, along with humane methods of handling disturbed persons, will be presented. The legal and humane use of limited force will be stressed at all times.

CRIJ 1301 Introduction to Criminal Justice CJSA 1322 3-0-3
History and philosophy of criminal justice and ethical considerations. Crime defined, its nature and impact. Introduction and career orientation to the multifaceted agencies involved in the administration of criminal justice: law enforcement, courts, prosecution and defense, probation and parole, and corrections.

CRIJ 1302 Criminal Investigation I CJSA 1342 3-0-3
Investigative theory, collection, and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences, and case and trial preparation.

CRIJ 1303 Legal Aspects of Law Enforcement CJSA 2300 3-0-3
Police authority, responsibilities, constitutional constraints, law of arrest, search and seizure, police liability, and examples of case law that currently affect police decisions will be reviewed.

CRIJ 1304 The Courts and Criminal Procedures CJSA 1313 3-0-3
The judiciary in the criminal justice system, structure of the American court system, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence and sentencing.

CRIJ 1305 Traffic Law CJLE 1333 3-0-3
Study of laws pertaining to the control and enforcement of vehicle traffic in the context of Texas traffic laws. Provides knowledge of traffic court procedures and testimony. Study of the professional approach in dealing with traffic law violators, and the officer's role in accident prevention and investigation.

CJCR 1307

CRIJ 1306 Correctional Systems and Practices 3-0-3
Corrections in the criminal justice system, organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatment and rehabilitation, current and future issues.

CRIJ 1307 Crime in America CJSA 1312 **3-0-3**
American crime problems in historical perspective, social and public policy factors affecting crime; impact and crime trends, social characteristics of specific crimes, and crime prevention.

CJSA 1327

CRIJ 1308 Fundamentals of Criminal Law 3-0-3
A study of the nature of criminal law, philosophical and historical development, major definitions and concepts, classifications of crime, elements of crime, penalties of crime using Texas statutes as illustrations, and criminal responsibility.

CJSA 1359

CRIJ 1309 Police Systems and Practices 3-0-3
Analyses of the police profession, organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues facing police agencies.

CRIJ 1310 Criminal Investigation II 3-0-3
Modern methods and skills required for criminal investigation including discovery methods, developing and lifting latent fingerprints, criminal scene sketches, the use of plaster and silicone rubber for reproducing evidence at the crime scene, use of modern investigation aids, and techniques of criminal interviews. Prerequisite: CRIJ 1302.

CRIJ 1311 Basic Polygraph Techniques 3-0-3
Designed to orient law enforcement students on the basics of polygraph techniques as they apply to case research and preparation, pretest procedures, polygraph usage in criminal investigations, legality concerning polygraph, and avenues of a polygraphic career. Prerequisite: CRIJ 1302, 1303, or 1304.

CJSA 1302

CRIJ 1312 Commissioned Security Officer Course 3-0-3
This course is designed to have the student meet the requirements specifically identified in the state of Texas Commissioned Security Officer Training Manual and the provisions of the Private Investigators and Private Security Agencies Act, Article 4413 (29bb) V.A.C.S. as amended.

CJCR 2324

CRIJ 1314 Community Resources in Corrections 3-0-3
An introductory study of the role of the community in corrections, community programs for adults and juveniles, administration of community programs, legal issues, and future trends in community treatment.

CRIJ 2101 Emergency Medical Aid 1-1-1
This course focuses on the first aid fundamentals that will be helpful to patrol officers in the event of a first aid emergency situation. Procedures recommended by the American Red Cross will be used as guidelines for this course.

CRIJ 2201 Firearms CJLE 1211 **1-2-2**
This course is designed to introduce the student to the skills and techniques of firearms used in the protection of the public and criminal justice personnel. Students will fire various weapons under precision and police combat conditions. The importance of safe weapons handling and the danger of not adopting a mature attitude towards firearms will be stressed at all times. The intelligent, legal, and moral use of police firearms will be emphasized at all stages of teaching and firing.

CJCR 1304

CRIJ 2301 Probation and Parole 3-0-3
Development, organization, operation, and results of systems of probation and parole as substitutes for incarceration. Role of probation and parole officers and their function within the entire criminal justice system are examined.

CJSA 1393

CRIJ 2303 Criminal Justice Seminar 3-0-3
A problems course dealing with current criminal justice trends, issues, and literature. Prerequisite: Consent of the Department Chair. This course may be repeated for credit when course topics deal with different problems and issues.

CJSA 1317

CRIJ 2304 Juvenile Procedures 3-0-3
The organization, functions, and jurisdiction of juvenile agencies; processing and detention of juveniles; case disposition; juvenile statutes; and court procedures.

CRIJ 2306 Traffic Planning and Administration 3-0-3
This course consists of the application of traffic problems from the administrative point of view including traffic engineering, education, and enforcement at the supervisory level.

CRIJ 2307 Penology (Jail Operation and Management) CJCR 1400 **3-0-3**
A survey of the basic concepts of penal and correctional rationale as employed by criminal justice administrators. An overview of the operation and management principles of the institutional setting will be examined in depth.

CRIJ 2308 Patrol Administration 3-0-3
Discussion of the administration of surveys, special problems arising while the officer is on patrol, improvement in patrol methods, observation of persons and things, preventive techniques, methods of handling complaints, and the development of contacts.

CRIJ 2310 Correctional Control & Administration 3-0-3
The course prepares the student to perform supervisory functions related to control of prisoners and contraband, segregation and accountability of prisoners, procedures required at correctional facilities, emergency measures, prisoner privileges, and the records and reports of the detention center.

CRIJ 2311 Advanced Security Officer Training 3-0-3
This course is designed to provide the student with an increased working knowledge of security principles and procedures. The student will become familiar with each phase of security. Emphasis will be placed on the security problems as seen through the eyes of a security supervisor.

CJSA 2488

CRIJ 2409 Criminal Justice Internship 1-18-4
This course consists of on-the-job criminal justice training that utilizes the principles, knowledge, and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College instructor/coordinator.

CJLE 2421

CRIJ 2433 Texas Peace Officer Laws 3-4-4
A study of laws that are directly related to police field work in Texas. Included are traffic law enforcement; intoxicated drivers; Penal Code offenses and elements of crimes against the person, the family, and property; public order and decency; and public health, safety, and morals. Use of force, Family Code, Alcoholic Beverage Code, civil law process, and liability are covered. Prerequisite: Completion of the Transfer Curriculum for Criminal Justice or consent of the Department Chair. (See Peace Officer Certificate of Completion, page)

CSLE 2420

CRIJ 2434 Texas Peace Officer Procedures 3-4-4
A study of the techniques and procedures used by police officers on patrol. Includes controlled substance identification, recognizing and handling abnormal persons, traffic collision investigation, note-taking and report writing, vehicle operation, traffic direction, crowd control, and jail operations. Prerequisite: CRIJ 2433, Texas Peace Officer Laws, or may be taken concurrently.

CJLE 2522

CRIJ 2435 Texas Peace Officer Skills 2-6-4
Demonstration and practice of the skills expected of a police officer. Includes patrol, traffic stops, use of force, mechanics of arrest, firearms safety, and emergency medical care. Prerequisite: CRIJ 2434, Texas Peace Officer Procedures, or may be taken concurrently.

Add
CJSA 1348
2331
2302
1308
2323
2332
1318

CJCR 2325
1391
2466

CSLE 1358
2486
1345

SLPS 2468

(DANC) Dance

DANC 2304 Dance Appreciation 3-0-3
This course provides a survey of primitive, classical, and contemporary dance and its relationship with cultural developments and other art forms.

(DFTG) Drafting and Design

DFTG 1391 Architectural Blueprint Reading 2-2-3
The fundamentals of blueprint reading for the construction trades. This course includes familiarization with standard terms, sizes, estimations, and commercial practice.

DFTG 1405 Technical Drafting (DRDS 1405) 3-3-4
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.

DFTG 1409 Basic Computer-Aided Drafting (DRDS 1410) 3-3-4
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. Prerequisites: Second-semester Freshman standing in the Drafting Program and consent of the Department Chair.

DFTG 1417 Architectural Drafting - Residential (DRDS 2402) 3-3-4
Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for a residential structure with emphasis on light frame construction methods. All drawing assignments will be computer generated. Prerequisite: Sophomore standing in the Drafting Program.

DFTG 1444 Pipe Drafting (DRDS 2401) 3-3-4
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. All drawing assignments will be computer generated. Prerequisite: Sophomore standing in the Drafting Program.

DFTG 1448 Topographical (DRDS 2405) 3-3-4
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. All drawing assignments will be computer generated. Prerequisite: Second semester Sophomore standing in the Drafting Program.

DFTG 1452 Intermediate Computer-Aided Drafting (DRDS 2411) 3-3-4
A continuation of practices and techniques used in basic computer-aided drafting emphasizing batched files, scripted files, customized program menus, and extracted attributes. Introduced to three-dimensional drafting. Prerequisite: DFTG 1409 and consent of the Department Chair.

DFTG 1456 Descriptive Geometry (DRDS 1406) 3-3-4
Examination of the graphical solution to problems involving points, lines, and planes in space. Prerequisite: ENGR 1304 or DFTG 1405.

DFTG 1458 Electrical/Electronics Drafting (DRDS 2403) 3-3-4
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. All drawing assignments will be computer generated. Prerequisite: Sophomore standing in the Drafting Program.

DFTG 1471 Industrial Practice (DRDS 2406) 3-3-4
This course is designed to give specialized practice to the student in his major field of interest. All work done in this class will typify actual industrial projects. The student will also complete an employment resume, cover letter, and portfolio. All projects will be completed with the use of Computer-Aided Drafting (AutoCAD). Prerequisites: Second semester sophomore standing in the Drafting Program.

DFTG 2402 Machine Drawing (DRDS 1403) 3-3-4
Production of detail and assembly drawings of machines, threads, gears, cams, tolerances and limit dimensioning, surface finishes, and precision drawings. Prerequisites: ENGR 1304 or DFTG 1405, ENGR 1305 or DFTG 1456, or concurrent enrollment.

DFTG 2410 Structural Drafting (DRDS 1404) 3-3-4
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 American Institute of Steel Construction, including units on concrete detailing conforming to American Concrete Institute standards. Prerequisite: ENGR 1304 or DFTG 1405, or concurrent enrollment.

DFTG 2412 Technical Illustration (DRDS 1402) 3-3-4
Topics include pictorial drawing including isometrics, obliquies, perspectives, charts, and graphs, shading, transfer lettering, and use of different media including pencil and ink. Prerequisite: ENGR 1304, DFTG 1405, or concurrent enrollment.

(DIEM) Diesel Mechanics
see also Skills Center (TIDM)

DIEM 1301 Diesel Engine Fundamentals 2-3-3
This course is designed to provide the student with a working knowledge of the fundamentals of the diesel engines. The development, uses, advantages/ disadvantages, design, components, operating principles 2, and 4-stroke cycle), diesel fuels, and the combustion process and exhaust emissions will be covered. Emphasis will be placed on operating principles and component function. The student will perform preoperational services, start and stop a diesel engine, and identify engine components and systems. Prerequisite or Corequisite: INDU 1400.

DIEM 1404 Standard Power Trains 3-3-4
This course is designed to provide the student with a working knowledge of standard power trains. Theory of gears and torque, operating principles, troubleshooting and service of clutches, standard transmissions and transfer cases, drive lines, differential carriers and axles will be covered. Emphasis will be placed on operating principles, components and service. The student will disassemble, clean, inspect, and reassemble clutches and transmissions. Prerequisite or Corequisite: INDU 1400.

DIEM 1405 Diesel Engine Auxiliary Systems 3-3-4
This course is designed to provide the student with a working knowledge of diesel engine air induction and exhaust systems, cooling systems and lubrication systems. System design, operating principles, components, test equipment, and service will be covered. Emphasis will be placed on turbo chargers, blowers, troubleshooting, component removal and replacement, test equipment and systems testing. The student will troubleshoot, test, remove, repair, and replace components of auxiliary systems. Prerequisite or Corequisite: INDU 1400 and DIEM 1301.

DIEM 1406 Diesel Starting & Charging Systems 3-3-4
This course is designed to provide the student with a working knowledge of diesel engine starting and charging systems. Principles of electricity, system design, operating principles, components, test equipment, and service will be covered. Emphasis is placed on basic electricity, troubleshooting, component removal and replacement, and systems testing. The student will troubleshoot, test, remove, repair, and replace components of starting and charging systems. Prerequisite or Corequisite: INDU 1400, DIEM 1301 and DIEM 1405.

DIEM 2400 Hydraulic Systems Fundamentals and Service 3-3-4
This course is designed to provide the student with a working knowledge of hydraulics. Hydraulic principles, pumps, valves, circuits, fluids, cylinders, and troubleshooting will be covered. Emphasis will be placed on hydraulic principles, basic control systems, and troubleshooting. The student will disassemble, clean, inspect, and reassemble hydraulic pumps, valves, and cylinders. The student will use hydraulic trainers to perform numerous practical exercises dealing with hydraulic principles, control systems, and troubleshooting. Prerequisite or Corequisite: INDU 1400.

DIEM 2403 Diesel Engine Overhaul 3-3-4
This course is designed to provide the student with a working knowledge of diesel engine overhaul procedures. Engine disassembly, cleaning component inspection and measurements, special tools, reassembly, basic tune-up and run-in will be covered. Emphasis will be placed on component inspection and measurement and basic tune-up and run-in. The student will overhaul a diesel engine. Prerequisite: All DIEM courses or consent of the Department Chair.

DIEM 2404 Automatic Power Trains 3-3-4
This course is designed to provide the student with a working knowledge of automatic power trains. Operating principles, troubleshooting and service or torque converters, transmissions, retarders and hydrostatic drives will be covered. Emphasis will be placed on torque converter and transmission service. The student will disassemble, clean, inspect, test, and reassemble an automatic transmission. Prerequisites: DIEM 2400 and DIEM 1404 or AUTO 1408.

DIEM 2405 Advanced Diesel Engine Service 3-3-4
This course is designed to provide the student with a working knowledge of diesel engine service procedures. Troubleshooting and diagnostics test equipment, fuel injection pump and service tune-up, governors, fuel pump and injector timing, and valve adjustment will be covered. Emphasis will be placed on tune-up, governor and rack adjustment, valve timing, and fuel system service. The student will perform tune-ups on various diesel engines, remove and install fuel injection pumps and injectors, and adjust governors. New service and product update topics may be presented in this course. Prerequisites: DIEM 1301, 1405, 1406, 2406, and 2407.

DIEM 2406 Diesel Fuel Injection Systems 3-3-4
This course is designed to provide the student with a working knowledge of diesel engine fuel systems. System designs, operating principles, troubleshooting and test equipment will be covered. Emphasis will be placed on test equipment and fuel system service. The student will diagnose and repair fuel system problems. Prerequisite: DIEM 1301.

DIEM 2407 Diesel Engine Cylinder Head Service 3-3-4
This course is designed to provide the student with a working knowledge of diesel engine cylinder head service. Design, component testing, measurements, test equipment and service equipment will be covered. Emphasis will be placed on valve, seat, and guide service and injector tube replacement. The student will remove, clean, service, and reinstall a cylinder head. Prerequisites: DIEM 1301, 1405, and 2406.

DIEM 2409 Diesel Internship 1-18-4
This course consists of on-the-job diesel mechanics training that utilizes the principles, knowledge, and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College instructor/coordinator. Prerequisite: Satisfactory completion of all DIEM or TIDM courses or consent of the Department Chair.

(DRAM) Drama

DRAM 1310 Introduction to Theater 3-3-3
This course surveys all phases of theater including history, dramatic works, stage techniques, and their relation to fine arts.

DRAM 1320 Theater Practicum 2-4-3
This course will be used as a laboratory for the exploration, development and synthesis of all the elements of theater. This course would supplement other theater courses that concentrate on theories, information, and techniques by providing for the integration and implementation of those ideas and skills. Practical acting and production are provided through the preparation and public performance of one or more plays. Requires instructor approval.

DRAM 1351 Acting 3-3-3
The development of basic skills and techniques of acting including increased sensory awareness, ensemble performing, script analysis, and mechanics of acting. Prerequisite: DRAM 1310 or instructor approval.

DRAM 2336 Voice for the Theater 3-0-3
Application of the performer's use of the voice as a creative instrument of effective communication. Encourages an awareness of the need for vocal profiency and employs techniques designed to improve the perfomer's speaking abilities.

DRAM 2366 Motion Picture Art 3-0-3
This course focuses on the development of motion picture; analyzing visual, aural, dramatic and narrative aspects of films. A survey of historical growth and the sociological effect of film as an art is included.

(DS--) Developmental Studies

The credit received from these courses cannot be applied towards degree completion nor will it result in transferable credit.

DSCO 0300 Developmental Communication 1-2-3
A course offered in a laboratory setting to improve reading comprehension/ rate and word recognition. Specific areas of study include syllabication, phonetic analysis, context clues, word elements, sequence, setting, main ideas, drawing conclusions, and making inferences.

DSED 0100 College Orientation for International Students 1-0-1
This 16-hour course, designed primarily for students on F-1 visas, covers fundamentals of attending school in the United States and, specifically, at CTC. Getting a driver's license, obeying U.S. laws, safety, hazardous weather, taboo language, and immigration requirements are some of the topics covered. This course is mandatory for all first-semester international students.

DSED 0300 College Study Skills 3-0-3
This course is designed to provide an opportunity for students to develop, select, and use strategies necessary in becoming prepared and successful in school and life. Emphases are placed on the transference of high-level study skills to practical classroom situations and include the areas of time management, effective listening and note taking, concentration, learning through media, reading, retention of information, taking examinations,. creativity, and leadership.

DSED 0302 College Study Skills for Foreign Students 3-0-3
This elective for DSLA students at Levels 2-3 prepares students for the Test of English as a Foreign Language (TOEFL), the test required for entry into most college-level institutions. Advanced reading, listening, grammar, test-taking, and research techniques are taught.

DSLA 0318, 0319 English for Foreign Students I and II (ESL) 3-2-3

(Previously numbered ENGL 0303 and 0304)
These courses offer an integrated approach to speaking, listening, reading, and writing. Though primarily conversational in nature, grammatical concepts, reading, and writing are covered. These courses may be substituted for Listening I and Speaking I.

DSLA 0310 Reading and Vocabulary I (ESL) 3-2-3

This course is designed for beginning non-native speakers who need to develop vocabulary and basic reading skills such as identifying the main idea, using context clues, and locating details.

DSLA 0314 Writing I (ESL) 3-2-3

This course, designed for intermediate non-native speakers, is a continuation of Grammar I. It covers grammatical structures, beginning with clauses in complex sentences, and the simple process paragraph.

DSLA 0315 Grammar I (ESL) 3-1-3

This course is for beginning-intermediate non-native speakers. It covers basic elements of English sentence structure and linguistic problem areas such as countable/uncountable nouns, articles, prepositions, verb phrases, and word order.

DSLA 0316 Listening Comprehension I (ESL) 3-2-3

This course, for beginning non-native speakers, develops aural comprehension of simple conversations, short radio announcements, brief stories, and American language reductions such as "won't cha" and "would ja."

DSLA 0317 Speaking I (ESL) 3-1-3

This course, for beginning non-native speakers, moves students from language recognition to oral production through the use of dictation and conversational dialogues.

DSLA 0320 Reading and Vocabulary II (ESL) 3-2-3

This course, for intermediate non-native speakers, provides instruction in vocabulary, reading comprehension, structural analysis, and organizational patterns.

DSLA 0321 Writing II (ESL) 3-2-3

This course is a continuation of Grammar I and Writing I. Students continue their study of grammar while learning to write narrative, comparison/contrast, and persuasive paragraphs.

DSLA 0322 Academic Listening and Speaking II (ESL) 3-2-3

In this course, designed for intermediate non-native speakers, students develop beginning note-taking and speaking skills to prepare them for academic environments.

DSLA 0330 Reading and Vocabulary III (ESL) 3-2-3

This course, a continuation of DSLA 0320, provides further study in vocabulary, comprehension skills, and organizational patterns as they apply to reading and writing. Prerequisite: DSLA 0320.

DSLA 0332 Academic Listening and Speaking III (ESL) 3-2-3

In this course for advanced non-native speakers, students improve note taking, and oral reporting skills to prepare for college-level courses.

➲DSMA 0101 Basic Developmental Mathematics 1-1.5-1

This course helps students prepare to pursue college-level academic work. It uses varied instructional techniques to identify deficiencies and provide a review of fundamental operations in mathematics.

➲DSMA 0102 Developmental Mathematics Lab 0-3-1

This course provides a setting for students to develop and expand mathematical problem solving skills in a structured environment under the guidance of an instructor.

DSMA 0300 Developmental Mathematics I 5-1-3

This developmental course includes adding, subtracting, multiplying, and dividing fractions, decimals, and integers; order of operations; percentages; line, bar, and pie graphs; pictographs; areas of plane figures; exponents; and an introduction to signed numbers and algebra. A laboratory is required.

DSMA 0301 Developmental Mathematics II 5-1-3

Designed for students who need a review of fundamental algebraic operations. Topics include operations on real numbers, polynomials, linear equations, linear inequalities, factoring, graphing, and selected stated problems. A laboratory is required. (Previously numbered MATH 1300). Prerequisite: DSMA 0300 or appropriate test scores.

➲DSMA 0302 Fundamentals of Mathematics I 3-0-3

This course includes operations with common fractions, decimals and positive integers; order of operations; prime factorization; greatest common factors; least common multiples; percentages; and basic equations. An introduction to consumer and business applications, statistical graphing, and basic geometry is also included.

DSMA 0303 Developmental Mathematics IV 5-1-3

Topics include operations with rational expressions, linear equations, systems of linear equations, radical expressions, complex numbers, quadratics, and functions. A laboratory is required. Prerequisite: DSMA 0301 or appropriate test scores.

➲DSMA 0304 Fundamentals of Mathematics II 3-0-3

This course includes operations with real numbers, variable expressions, simple equations, polynomials, algebraic applications, factoring polynomials, and an introduction to graphs and linear equations. Prerequisite: DSMA 0302 or appropriate test scores.

➲DSMA 0306 Intermediate Algebra I 3-0-3

Topics include a review of factoring, rational and radical expressions, complex numbers, radical equations, quadratics and the study of the parabola. Prerequisite: DSMA 0304 or appropriate test scores.

➲DSMA 0307 Intermediate Algebra II 3-0-3

Topics include the straight line, systems of equations and inequalities, determinants, functions and relations, inverses and composite functions, and an introduction to exponential and logarithmic functions. Prerequisite: DSMA 0306.

➲DSMA 0308 Pre-College Math 3-0-3

This developmental course includes arithmetic operations, basic algebraic concepts and notations, geometry, and real and complex number systems. The course also covers relations and functions; inequalities; factoring; polynomials; rational expressions; and quadratics. It also provides an introduction to complex numbers; exponential and logarithmic function; determinants, matrices, sequences, and series.

➲DSMA 0312 Fundamentals of Mathematics I 3-1-3

This course includes operations with common fractions, decimals and positive integers; order of operations; prime factorization; greatest common factors; least common multiples; percentages; and basic equations. An introduction to consumer and business applications, statistical graphing, and basic geometry is also included. A laboratory is required.

➲DSMA 0314 Fundamentals of Mathematics II 3-1-3

This course includes operations with real numbers, variable expressions, simple equations, polynomials, algebraic applications, factoring polynomials, and an introduction to graphs and linear equations. A laboratory is required. Prerequisite: DSMA 0312 or appropriate test scores.

➲DSMA 0316 Intermediate Algebra I 3-1-3
Topics include a review of factoring, rational expression, radical expressions, complex numbers, radical equations, quadratics and the study of the parabola. A laboratory is required. Prerequisite: DSMA 0314 or appropriate test scores.

➲DSMA 0317 Intermediate Algebra II 3-1-3
Topics include the straight line, systems of equations and inequalities, determinants, functions and relations, inverses and composite functions, and an introduction to exponential and logarithmic functions. A laboratory is required. Prerequisite: DSMA 0316.

➲DSRE 0101 Developmental Reading Laboratory 0-1-1
This course helps prepare for college-level academic work using varied instructional techniques to help students improve their proficiency in reading comprehension/rate, word recognition, and vocabulary development.

➲DSRE 0111 Basic Reading I 1-0-1
This course improves reading skills, vocabulary, and reading comprehension/rate.

DSRE 0300 Developmental Reading I 2-2-3
Designed for students who have difficulty reading college texts; specifically those who scored below 50% on the Pre-TASP reading section. Emphasizes word attack skills, vocabulary development, comprehension, fluency, and study and test-taking skills.

DSRE 0301 Developmental Reading II 2-2-3
Designed for students who have difficulty reading college texts; specifically those who scored between 50-69% on the Pre-TASP reading section or pass DSRE 0300. Emphasizes vocabulary development, comprehension, fluency, and study and test-taking skills.

➲DSRE 0302 Fundamentals of Reading I 3-0-3
Designed to aid students in acquiring basic skills needed for reading college-level materials. Emphasizes word attack skills, vocabulary development, comprehension, fluency, and study and test-taking skills. (Includes all of the objectives of DSRE 0300 without the additional laboratory reinforcement.)

➲DSRE 0303 Fundamentals of Reading II 3-0-3
Designed to aid students in developing and reinforcing the basic skills needed for reading college-level materials. Emphasis will be on vocabulary development, literal and critical comprehension skills, fluency, and study and test-taking skills. (Includes all of the objectives of DSRE 0301 without the additional laboratory reinforcement.)

➲DSSP 0300 Developmental Speech 1-2-3
An introductory course emphasizing the structure and different techniques of presentation as well as principles and methods of discussion. Designed to identify strengths/deficiencies and develop and improve interpersonal skills and the student's ability to communicate through effective speech.

➲DSWR 0100 Developmental Writing Laboratory 0-1-1
This course helps prepare for college-level academic work using varied instructional techniques to help students improve their proficiency in basic composition skills such as idea generation, organization, style, use of standard English, and revision.

➲DSWR 0111 Basic Writing I 1-0-1
This course covers basic composition skills such as idea generation, organization, style, use of standard English, and revision.

➲DSWR 0112 Basic Writing II 1-0-1
This course is a continuation of DSWR 0111 and emphasizes the correct use of grammar, organization, and style.

DSWR 0301 Developmental Writing I 3-1-3
A study of basic composition designed to aid the student in acquiring the writing skills needed for college-level writing. Includes an intensive study of basic composition skills. Designed for students who scored below 50% on the Pre-TASP writing section. Emphasizes paragraph writing, with attention given to grammar problems as they occur in the context of the paragraph. Intended for native English speakers or for those students who have scored 550 or above on the Test of English as a Foreign Language (TOEFL).

DSWR 0302 Developmental Writing II 3-1-3
A study of basic composition designed to aid the student in acquiring the writing skills needed for college-level writing. Designed for students who scored between 50-69% on the Pre-TASP writing section or passed DSWR 0301. Emphasizes essay writing, with attention given to grammar problems as they occur in the context of the essay. Intended for native English speakers or for those students who scored 550 or above on the Test of English as a Foreign Language (TOEFL).

➲DSWR 0303 Fundamentals of Writing I 3-0-3
Fundamentals of Writing I is a course in basic writing skills at the sentence and paragraph levels. The course includes instruction in basic grammar, sentence structure, punctuation, and other necessary skills leading to the proper construction of a paragraph.

➲DSWR 0304 Fundamentals of Writing II 3-0-3
This course is a continuation of DSWR 0303 and emphasizes composition skills at the paragraph and essay levels. The course includes a study of sentence-level grammar and punctuation and presents the organizational skills needed to write a basic essay.

➲ *Not offered on Central Campus*

(ECON) Economics

ECON 1303 Consumer Economics 3-0-3
A study of consumer goods and services as related to the home/family and the problems and pitfalls associated therewith. This includes a study of family purchasing, advertising, commodity information, sales approaches from a consumer viewpoint, and sources of advice and counseling. This course allows the supervisor to better advise subordinates on economic problems.

ECON 2301 Macroeconomics 3-0-3
Introduction to economic analysis, price-level changes, the creation of money, the Federal Reserve System and monetary policy, the national accounts, the consumption function, taxation, fiscal policy, public debts, the theory of economic growth and population problems, and foreign economic policy.

ECON 2302 Microeconomics 3-0-3
Determination of relative prices, consumer demand analysis, the competitive firm, agricultural policy, the monopolistic firm, imperfect competition, business organization and government regulation, determinants of demand, the economic view of taxation and public expenditure, regional economics, international trade and finance.

(ELTE) Communications Electronics Technology

ELTE 1303 Assembly Methods CETT 1421 1-5-3
A study of modern assembly methods and practices used in industry including the design, layout, and construction of electronic apparatus.

ELTE 1401 Electrical Circuits I CETT 1403 3-3-4
The first of a two-course study of electrical circuitry. This course includes a study of the elementary principles of electricity. It covers DC topics such as elementary physics, Ohm's Law, series and parallel resistive networks, and power. It also includes the study and use of analog and digital multimeters.

ELTE 1402 Electrical Circuits II 3-3-4
This is the second course in the study of electrical circuitry, and includes inductive and capacitive, reactance, waveform types and voltage measurements. This course includes AC circuit topics such as impedance calculation, resonant circuits, transformers, and an in-depth study of the use of the triggered-sweep oscilloscope. Prerequisite: ELTE 1401.

ELTE 1403 Solid-State Electronics 3-3-4
A study of the active electronic devices (i.e., diodes, transistors, etc.) and their more common circuit applications. This course covers circuit design methods of simple power supplies, amplifiers, and switching circuits. This is a technical course requiring a working knowledge of simple algebra. Prerequisite or Corequisite: ELTE 1402.

ELTE 1404 Communications Circuits I 3-3-4
A study of basic circuits used throughout industry today. Prerequisite or Corequisite: ELTE 1403.

ELTE 1406 Mobile Security Systems 3-3-4
A study of various types of electronic security systems, related sensors, and control devices used in 12V systems. Emphasis will be placed on installation, testing, and final performance evaluation.

ELTE 1407 Home Entertainment Systems 3-3-4
A study of the basic operating principles, installation techniques, and preventative maintenance of stereo systems, CD players, video cassette recorders, audio cassette decks, and equalizers.

ELTE 2103 Individualized Research 1-0-1
This course allows the student to prepare the backup and research that is necessary in order for the student to complete ELTE 2303. Prerequisites: A third-semester student and consent of the Department Chair.

ELTE 2301 Broadcast Equipment Maintenance 1-6-3
The operation, preventive maintenance procedures, and troubleshooting of modern-day radio and television broadcast equipment. The course gives the student much needed practical experience that can only be gained in a live-station atmosphere. Prerequisites: ELTE 1404, 2407, and consent of the Department Chair.

ELTE 2303 Special Intensive Study 0-9-3
An intensive study in the design, theory of operation, and construction techniques used in a project which holds special interest to the student and is in the field of his/her major. A student obtaining a second or third degree, must repeat the course with emphasis and project related to the discipline in which the degree is to be awarded. The student must be eligible for graduation at the end of the semester in which this course is taken. Prerequisites: ELTE 2103, a fourth-semester student, and consent of the Department Chair.

ELTE 2401 Personal Mobile Communications Systems 3-3-4
This course covers the installation, operation, and final performance testing of cellular telephones, mobile telephones, and CB/marine radios.

ELTE 2402 Advanced Test Equipment 3-3-4
Includes the use and normal user calibration techniques for all phases of electronic test equipment from the most simplest to the most advanced. Prerequisite: ELTE 1403.

ELTE 2403 Home Security Systems 3-3-4
A study of various types of electronic security systems, related sensors, and control devices used in modern homes, duplexes, and complex-style apartments.

ELTE 2404 CATV, MATV and CCTV Systems 3-3-4
A study of large-scale TV cable systems, small-scale master antenna systems, and closed-circuit surveillance systems. It includes the design, selection, configuration, installation, and troubleshooting.

ELTE 2405 Satellite Systems 3-3-4
This course provides the student with the knowledge of operation and theory of satellite receiving systems. The detailed theory covers such areas as transmission uplinking, downlinking, overall systems block diagram antennas and motor controllers, single- and double-conversion systems, receiver theory; operation of general troubleshooting procedures, L.N.A. and down converters. Emphasis is also placed on antenna installation and alignment procedures. The student will be responsible for setting up a complete system from antenna alignment to receiver hookup to a television set. Prerequisites: ELTE 1403 and 1404.

ELTE 2406 Integrated Devices 3-3-4
An advanced study of the many types of integrated circuits (ICs) in use today. The course will include digital, linear, and LED-type devices. Course will also include application and application design. Prerequisites: ELTE 1403 and CMET 1401.

ELTE 2407 Communications Circuits II 3-3-4
A study of communications circuits necessary for the successful acquisition of the FCC First Class license. Prerequisites: ELTE 1403 and 1404.

ELTE 2408 Industrial Electronic Control Circuits 3-3-4
A study of special-purpose electronic control circuits and systems as applied by industry today. This course will include theory and operation, maintenance, diagnostic troubleshooting, and repair of these special-purpose circuits. Prerequisite: ELTE 1403.

ELTE 2409 Electronic Systems Troubleshooting 3-3-4
This course includes theoretical and practical laboratory assignments in the study of techniques used in signal tracing and logical circuit diagnosis of different types of analog electronic systems. Prerequisite: CMET 1409.

ELTE 2410 Radio Systems 3-3-4
An in-depth study of the circuitry, both discrete and integrated, used in today's AM and FM tuner amps, including both two- and four-channel multiplexing. Prerequisite: ELTE 1403.

ELTE 2411 Electronics Internship I 1-18-4
This course consists of on-the-job electronic training that utilizes the principles, skills, and knowledge gained in the theoretical setting of the classroom. The student is employed at an approved work site under the supervision of a College Electronics instructor/coordinator. Prerequisites: CMET 1400, CMET 1401, ELTE 1401, ELTE 1402, and ELTE 1403.

ELTE 2412 Circuits and Systems-Troubleshooting and Repair 3-3-4
This course is an in-depth study of current troubleshooting and maintenance techniques for linear (analog) and digital electronics equipment including transducers, switching components, motors and generators (servo systems), control circuits, and special power supplies. Prerequisites: CMET 1409 and consent of the Department Chair.

ELTE 2421 Electronics Internship II 1-18-4
This course is a continuation of ELTE 2411. Prerequisites: ELTE 2411 and CMET 1409.

(EMET) Emergency Medical Technician

(Not Offered in Texas)

EMET 1101 Basic Life Support and Emergency Care 1.5-0-1

Basic instruction in emergency first aid, including CPR training. Students successfully completing the course receive CPR/BLS certification.

EMET 1102 Cardiopulmonary Resuscitation 1-0-1

Recognition and management of acute cardiorespiratory emergencies and upper airway obstructions using basic life support techniques from either the American Heart Association or the American Red Cross.

EMET 1103 EMT Cardiac Pathophysiology and ECG Interpretation 1-0-1

The anatomy and physiology of the cardiovascular and respiratory systems. Includes pathophysiology of heart disease, ECG theory, and interpretation of dysrhythmia. § Prerequisite: EMET 1402 or other medical training.

EMET 1104 Introduction to Basic Science for the Paramedic 1-0-1

Prepares the student to take the basic science portion of EMET 2304. Reviews human gross anatomy and physiology of various human systems; human cellular anatomy and function; human homeostasis; physiology of the heart, lungs, and blood vessels; acid-base balance; and blood as a tissue.

EMET 1105 EMT Pre-hospital Care of Poisoning 1-0-1

Pre-hospital treatment for victims of alcohol and drug overdose, poisonous bites of reptiles, spiders, and bees. Antidotes, adsorbents, anaphylactic shock, tissue response, epidemiology, indications and contraindications for emetics.

EMET 1106 EMT Pre-hospital Care of Trauma 1-0-1

Pre-hospital assessment and management of trauma. Includes pathophysiology of soft tissue injuries; fractures; intrathoracic, abdominal, and head injuries; and the healing mechanisms of tissue systems. § Prerequisite: EMET 1402 or other medical training.

EMET 1107 Shock: Concepts and Treatment (MAST and IV Infusion) 1-0-1

Pathologic and clinical levels of the shock syndrome. Theory and applications of shock management, intravenous transfusions and infusions and Military Anti-Shock Trousers (MAST). Includes indications and contraindications. § Prerequisite: EMET 1402 or other medical training.

EMET 1108 Laboratory Techniques and IV Therapy 1-0-1

Uses of and indications for IV therapy. Types of solution and equipment needed; techniques for starting IVS and for venipuncture. § Prerequisite: EMET 1402 or other medical training.

EMET 1109 Basic Auto Extrication 1-0-1

Emphasizes spinal immobilization, lifting, and moving techniques of the motor vehicle accident patient. Discusses the pathophysiology of spinal and head injuries, facial trauma, and airway management. § Prerequisite: EMET 1402 or other medical training.

EMET 1110 Emergency Airway Management 1-0-1

Anatomy of upper and lower respiratory airways, cervical spine and spinal cord control. Indications and use of adjunct airways, esophageal obturator airway, esophageal gastric-tube airway, endotracheal intubation techniques, and oxygen delivery devices. § Prerequisite: EMET 1402 or other medical training.

EMET 1111 EMT Medical and Environmental Emergencies 1-0-1

The pathophysiology, diagnosis, and pre-hospital management of common environmental and medical emergencies including burn, diabetic, cerebrovascular accidents, drowning, heart attack, hypothermia, heat stroke, smoke inhalation, abdominal, and thoracic emergencies. § Prerequisite: EMET 1402 or other medical training.

EMET 1112 EMT Obstetrical and Pediatric Emergencies 1-0-1

Stages of fetal development, labor, and delivery for normal and abnormal pregnancies. Management of emergency delivery and postpartum stages. Basic life support techniques for the pediatric patient including other medical emergencies.

EMET 1113 EMT Patient Psychology 1-0-1

Prepares prospective EMT personnel to deal with patients' emotions as they affect the EMT's ability to treat physical injuries.

EMET 1114 EMT Triage 1-0-1

Methods of prioritizing and handling multiple-trauma victims. Emphasis on proper primary and secondary patient surveys, civilian and military emergency medical triage, CPR, shock management, hemorrhage control and use of life support equipment. § Prerequisite: EMET 1402 or other medical training.

EMET 1115 AIDS and Infectious Diseases for Emergency Responder 1-0-1

The study of infectious diseases with emphasis on pathophysiology transmission modes (routes) and preventive measures used in the control of those diseases most likely to be encountered by and which represent a serious health threat to EMS personnel, namely: Infectious Hepatitis, Acquired Immune Deficiency Syndrome (AIDS), Meningitis, Tuberculosis, and Herpetic Whitlow. § Prerequisite: EMET 1402 or other rescue training.

EMET 1116 Crisis Intervention & Management 1.5-0-1

Focus on general techniques for management of individuals in crisis including intervention models, general intervention techniques, and interventions for selected specific responses.

EMET 1117 Crisis Intervention: Drug/Alcohol Overdoses 1-0-1

Management techniques and emergency treatment of individuals who have overdosed on drugs or alcohol.

EMET 1118 Crisis Intervention: Victims of Violence 1-0-1

Management techniques and emergency treatment of victims of violence.

EMET 1119 Crisis Intervention: Rape 1-0-1

Management techniques and emergency treatment of rape victims.

EMET 1120 Crisis Intervention: Spouse Abuse 1-0-1

Management techniques and emergency treatment of victims of spouse abuse.

EMET 1121 Crisis Intervention: Child Abuse 1-0-1

Management techniques and emergency treatment of victims of child abuse.

EMET 1122 Crisis Intervention: Eating and Food-Related Emergencies 1-0-1

Management techniques and emergency treatment of individuals requiring assistance related to eating and/or food.

EMET 1123 Crisis Intervention: Military Field Training Injuries/Disorders 1-0-1

A military-specific course covering management techniques and emergency treatment of common injuries/ disorders occurring during military field training exercises.

EMET 1124 Sports Injuries 1.5-0-1

Consideration of acute injury and illness caused by recreational physical exercise.

EMET 1125 EMT Crisis Intervention: Abuse, Rape and Suicide 1-0-1

The psychological aspects of child and spouse abuse, rape and suicide. Includes epidemiology, pre-hospital care, and crisis intervention techniques.

EMET 1200 Emergency Medical Technician-Basic Refresher Course 2-1-2

Reviews the knowledge and skills necessary for recognition and proper treatment of patients requiring emergency care. This course conforms to the Department of Transportation guidelines for EMT Refresher training. This course is required by the National Registry every two years to maintain certification at the EMT-Basic level. Prerequisite: Current or recently lapsed (less than 2 years) National Registry EMT-Basic Certification.

EMET 1202 Combat Lifesaver Course 2-1-2

Trains combat soldiers to supplement military medics in a variety of lifesaving tasks and related medical care.

EMET 1303 First Responder 2-2-3

This course prepares the first responder, or medically untrained, to be proficient in not only providing basic life support to victims of emergencies, but also in taking any actions necessary to minimize the patient's discomfort and prevent further injury. This course has been designed to meet the specifications of the Department of Transportation's First Responder Training Course.

EMET 1304 Drug and Alcohol Abuse 3-0-3

This course discusses the physiological and psychological effects of drug and alcohol abuse on the individual, the family, and on society. Students learn the symptoms of drug and alcohol abuse and how to recognize them in individuals. The course discusses the problems causing abuse and how to understand and help the user. The course also includes discussion of the organizations available for treatment of the user, their effectiveness, and an evaluation of alternate treatment programs.

EMET 1305 Emergency Medical Seminar 3-0-3

This course is designed to keep the Emergency Medical Technician abreast of new developments, trends, current major issues, legal professional concerns, and other important factors that have an impact upon the emergency medical field. This course may be repeated for credit.

EMET 1402 Emergency Medical Technician-Ambulance 3-4-4

This course exposes the student to the didactic and practical experiences outlined in the 1994 Department of Transportation's NHTSA curriculum. All of the skills and knowledge elements necessary to deal with the broad spectrum of illness or injury in the pre-hospital phase of care are included. Upon successful completion of the program, students are eligible to take the exam to be certified as an EMT by the National Registry of EMT's.

EMET 2101 Introduction to Paramedic 1-0-1

This course provides an overview of the paramedic's role in both civilian and military environments, the paramedic's function, legal responsibilities, and career opportunities. Prerequisite: EMET 1402.

EMET 2301 Disaster Planning 3-0-3

This course is designed to help administrators prepare emergency operation plans and train existing personnel to cope with a disaster if it should strike. The course provides valuable information on how to plan and prepare efficient responses to earthquakes, floods, fires, nuclear attacks, and other emergency situations. It includes elements of disaster preparation, organization of emergency operations plans, training of personnel, the emergency operations center, and coordination with other organizations.

EMET 2302 Emergency Medical Center Management 3-0-3

This course provides the student with an understanding of management theories and functions as they relate to the operations of an emergency medical center. Prerequisite: MGMT 1305.

EMET 2303 Psychology of Emergencies 3-0-3

This course covers communicating with families involved in emergencies and the EMT's role in counseling. It also considers personality structures, defense mechanisms, and the developmental stages of man.

EMET 2304 Introduction to Paramedic Medicine 3-0-3

Emphasizes the role of the paramedic; pharmacology and fluid/electrolyte balance; in-depth coverage of anatomy and physiology, respiratory and cardiovascular systems, and recognition and treatment of respiratory and cardiac problems including dysrhythmia. Lecture and demonstration Prerequisite: EMET 1502.

§ Other acceptable medical training is that which is received through military medical basic training programs or civilian medical programs which goes beyond first aid.

no change

(EMPT) Emergency Medical Technology (Paramedic)

EMPT 1403 Paramedic Technology Phase I 2-6-4

The course will review all material covered in the Emergency Medical Technician program and the student must show proficiency in all basic EMT skills. This course will cover laws governing EMT-P; medical terminology; overview of human anatomy and physiology; advanced patient assessment; pathophysiology of shock and pneumatic anti-shock garments (PASG); general and emergency pharmacology; and fluid therapy which includes IV insertion, techniques of administration of IV fluids, and IV drip-rate calculations; advanced airway management and ventilation, insertion of endotracheal and esophageal obturator airways, and intubation techniques for the adult and infant. This course will test the student's proficiency in the advanced skills of IV therapy, subcutaneous and intramuscular injections, IV piggyback medications, IV push medications, application of MAST pants, advanced airway insertion techniques to include ET and EOA. Prerequisites: EMPT 1502, BIOL 2401, and MATH 1324, 1342, 1314 or higher.

EMPT 1502 Emergency Medical Technician 3-6-5

The EMT program is designed to provide training in skills and equipment necessary to help maintain basic life support. Instruction is given in basic Anatomy and Physiology, patient assessment, and the theory behind the procedures used in giving pre-hospital care to the sick and injured. Upon successful completion of the program, students are eligible to take the exam to be certified as an EMT by the Texas Department of Health and/or National Registry EMT.

EMPT 1504 Paramedic Technology Phase II 3-6-5

This course will train the student in respiratory and cardiovascular medical emergencies. Content will include A & P of these systems; advanced assessment of the cardiac and/or respiratory patient; EKG monitoring; rhythm interpretation; recognition and management of cardiac dysrhythmia. This course will encompass the AHA Advanced Cardiac Life Support (ACLS) class. Students will be trained to perform cardioversion/defibrillation and adults/children and infants along with Megacode skills for all medical patients. Students must show proficiency in advanced patient assessment; endotracheal tube placement; ET medications; EKG rhythm recognition (static & dynamic) and treatment of cardiac dysrhythmias. Upon successful completion of this course, students are eligible to take the exam to be certified as an EMT-Intermediate by the Texas Department of Health and/or the National Registry EMT-Intermediate. Prerequisite: EMPT 1403

EMPT 1505 Paramedic Technology Phase III 3-6-5

This course continues to train the EMT-P student in medical emergencies that include the endocrine, metabolic, and nervous systems, the acute abdomen, anaphylaxis, toxicology and substance abuse, infectious disease, and environmental emergencies. The student will also be trained in the kinetics of trauma to the head, neck, spine and body cavity. Course will cover assessment and management of musculoskeletal injuries, soft tissue trauma and burns, shock trauma, resuscitation and Megacode algorithms for the trauma arrest victim. This course will encompass the Basic Trauma Life Support (BTLS) advanced level course. Students will have skills lab practice to continue training in cardioversion/defibrillation, EKG recognition, Megacode skills for the medical and trauma patient, radio communication, and patient medical reports. Prerequisite: EMPT 1504

EMPT 1506 Paramedic Technology Phase IV 3-6-5

This course will cover assessment and treatment of geriatric, pediatric, and obstetric patients, and gynecological emergencies. The student will be trained in advanced life support techniques for the pediatric and neonate patients. This course will encompass the Pediatric Pre-hospital Provider Course (PPPC). This course will also cover behavioral and psychiatric emergencies. Students will have skills lab practice to continue training in advanced assessment of adult and pediatric patients; Megacode skills in medical and trauma management for all age groups (geriatric, pediatric and other adults) will also be stressed. Prerequisite: EMPT 1505.

EMPT 1507 Paramedic Technology Phase V 2-9-5

This course will focus on the development of skills already learned. The student will spend the majority of the time in clinical and field experience. Students must show proficiency in Megacode skills as a team leader in a medical, trauma and pediatric scenario. Students must show proficiency in all EMT Basic, and paramedic skills as mandated by the Texas Department of Health and National Registry. Upon successful completion of this course, students are eligible to take the exam to be certified as an EMT-Paramedic by the Texas Department of Health and/or the National Registry EMT-Paramedic.

(ENGL) English

ENGL 1301 Composition and Rhetoric I 3-0-3

A study of the principles and techniques of written compositions including sentence structure, paragraph development, and paper organization. Also stresses the development of critical thinking as it applies to the textual analysis of expository prose.

ENGL 1302 Composition and Rhetoric II 3-0-3

A continuation of ENGL 1301, emphasizing in more depth the principles and techniques of written compositions. Focus of compositions is on the development of critical thinking as it relates to the textual analysis of literary genres: the short story, poetry, drama, and the novel. Formal research paper is required. Prerequisite: Completion of ENGL 1301 with a grade of "C" or above, or equivalent.

ENGL 1312 Communications Skills 3-0-3

Instruction in grammar and diction, writing expository papers, writing effective business correspondence and reports, and oral presentations.

ENGL 1313 College Reading 2-1-3

Designed for students wishing to improve their analytical reading and critical thinking abilities. Development of inferential and interpretive comprehension skills as well as higher-level skills in analysis, synthesis, and evaluation are stressed. Prerequisite: College-level reading skills.

ENGL 2311 Technical Writing 3-0-3

Study of technical, scientific, and business writing including reports, proposals, and other papers. The course also includes presentation of oral reports. Prerequisite: ENGL 1301 or ENGL 1312.

ENGL 2322 English Literature I 3-0-3

A survey of English literature from Beowulf through the 18th century. Prerequisites: ENGL 1301 and 1302, or equivalent.

ENGL 2323 English Literature II 3-0-3

A survey of English literature beginning with the pre-Romantic periods through the early 20th century. Prerequisites: ENGL 1301 and 1302, or equivalent.

ENGL 2327 American Literature I 3-0-3

A survey of the major American writers from the Colonial period to Whitman. Prerequisites: ENGL 1301 and 1302, or equivalent.

ENGL 2328 American Literature II 3-0-3

Survey of major American writers from Whitman to the present. Prerequisites: ENGL 1301 and 1302, or equivalent.

ENGL 2332 World Literature I 3-0-3

A survey of masterpieces of western world literature from Homer through the Renaissance. Prerequisites: ENGL 1301 and 1302, or equivalent.

ENGL 2333 World Literature II 3-0-3

A survey of masterpieces of western world literature from the Renaissance to the twentieth century. Prerequisites: ENGL 1301 and 1302, or equivalent.

(ENGR) Engineering (Civil and General)

ENGR 1101 Introduction to Engineering 1-0-1

Introduction to all engineering fields and the opportunities within the scope of professional work.

ENGR 1304 Engineering Graphics 2-4-3

Freehand and instrument drawing, dimensioning, fastening, pictorial methods, charts and graphs, projections drawing, geometry of graphical construction. Required for beginning engineering students.

ENGR 1305 Descriptive Geometry 2-4-3

Involves point, line, and plane relationships; auxiliary views; intersections; and flat-pattern development. Emphasis is placed on practical solutions to realistic engineering problems relating to aerospace, mining, and geology. Prerequisite: ENGR 1304.

(FPRT) Fire Protection Technology

(Not Offered in Texas)

FPRT 1301 Fundamentals of Fire Protection 3-0-3
History and philosophy of fire protection; review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection; current legislative developments and career orientation; recruitment and training for fire departments; position classification and pay plans; employee organizations; a discussion of current related problems and review of expanding future fire protection problems.

FPRT 1302 Fire Prevention 3-0-3
The objectives and views of inspection, fundamental principles, methods, techniques, and procedures of fire prevention administration. Fire prevention organization, public cooperation and image, recognition of fire hazards, insurance problems and legal aspects, development and implementation of systematic and deliberate inspection program. Survey of local, state, and national codes pertaining to fire prevention and related technology; relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to fire hazards.

FPRT 1303 Fire Protection Systems 3-0-3
Study of the required standards for water supply, special hazards protection systems, automatic sprinklers and special extinguishing systems, automatic signaling and detection systems, rating organizations and underwriting agencies.

FPRT 1304 Fire Administration I 3-0-3
An in-depth study of the organization and management as related to a fire department including budgeting, maintenance of records and reports, and management of fire department officers. Personnel administration and distribution of equipment and personnel and other related topics, including relationship of various government agencies to fire protection areas. Fire service leadership as viewed from the Company Officer's position.

FPRT 1305 Fire Administration II 3-0-3
Study to include insurance rates and rating, preparation of budgets, administration and organization of training in the fire department; city water requirements, fire alarm and communication systems; importance of public relations, report writing and record keeping; measurement of results, use of records to improve procedures, and other related topics; legal aspects relating to fire prevention and fire protection with stress on municipal and state agencies; design and construction of fire department buildings.

FPRT 1307 Fire Service Chemistry I 3-0-3
An introductory study to inorganic and organic chemistry, with emphasis on the metric system, the periodic chart, water, oxygen, hydrogen, carbon, hydrocarbons, carbohydrates, and polymers.

FPRT 1308 Fire Service Chemistry II 3-0-3
A continuation of FPRT 1307. Prerequisite: FPRT 1307.

FPRT 2301 Industrial Fire Protection I 3-0-3
Specific concerns and safeguards related to business and industrial organization. A study of Industrial Fire Brigade organization and development, plat layout, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organizations. Study of elementary industrial fire hazards in manufacturing plats. Prerequisite: FPRT 1301.

FPRT 2302 Industrial Fire Protection II 3-0-3
Development of fire and safety organizations in industry; relationship between private and public fire protection organizations; current trends; deficiencies and possible solutions for industrial fire problems, role of insurance and other special organizations, an in-depth study of specific industrial processes, equipment, facilities and work practices to understand the potential hazards and techniques used to detect and control such hazards. Field trips to selected plants and demonstrations of new techniques, equipment and innovations. Prerequisite: FPRT 2301.

FPRT 2303 Hazardous Materials I 3-0-3
Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, and handling of hazardous materials (i.e., flammable liquids, combustible solids, and gases). Emphasis on emergency situations and most favorable methods of handling fire lighting and control. Prerequisite: FPRT 2301.

FPRT 2304 Legal Aspects of Fire Protection 3-0-3
A study of legal rights and duties, liability concerns and responsibilities of the fire department while carrying out its duties. Introduction and basic concepts of civil and criminal law, the Texas and Federal judicial structure, and city's liability for acts of the fire department and fire prevention bureaus. An in-depth study of various cases concerning firefighters, fire departments and municipalities.

FPRT 2305 Building Codes and Construction 3-0-3
Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies, exposures, and related data focused on fire protection concerns; reviews of related statutory and suggested guidelines, both local and national in scope. Review of Model Building Codes and Life Safety Codes.

FPRT 2306 Fire and Arson Investigation 3-0-3
A study of the detection of arson, investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussions of law, decisions and opinions; kinds of arsonists, interrogation procedures, cooperation and coordination between firefighters and arson investigators and other related topics. Prerequisite: FPRT 2305.

FPRT 2308 Hazardous Materials II 3-0-3
Hazardous materials covering storage, handling laws, standards, and firefighting techniques associated with chemicals, gases, flammable liquids, corrosives, poisons, explosives, rocket propellants and exotic fuel, and radioactive materials. The formation of toxic fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids, and solids related to free-burning fire and explosion phenomena. Familiarization with radiological instruments, human exposure to radiation, decontamination procedures, common uses of radioactive materials and operational procedures. Prerequisite: FPRT 2303.

FPRT 2309 Fire Safety Education 3-0-3
A survey of physical, chemical, and electrical hazards and their relationship to loss of property and/or life. Study of codes, laws, problems, and cases. Detailed examinations and study of the physical and psychological variables related to the occurrence of casualties. Safe storage, transportation and handling techniques are stressed to eliminate or control potential risks.

FPRT 2310 Marine Fire Protection 3-0-3
This course covers the specific fire protection concerns of the maritime industry. It provides an in-depth study of the causes of fires, fire prevention, special firefighting techniques, special equipment and fire safety as they relate to watercraft.

FPRT 2314 Fire Service Hydraulics 3-0-3
This course covers the fundamental concepts needed to solve a broad range of fire protection hydraulic problems. It includes the measurements of water from flowing orifices; the characteristics of water flow through conduits; the pressure, volume and frictional characteristics of mobile and stationary fire pumps; the trajectory and patterns of fire streams; and the relationship between fixed and mobile fire suppression equipment.

FPRT 1331

FPRT 2404 Firefighting Tactics and Strategy 4-0-4
Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment, and apparatus. Emphasis to be placed on pre-planning, study of conflagration problems, fire ground organization, problem solving related to fire ground decision making and attack tactics and strategy. Use of manual aid and large-scale command problems. Prerequisite: Completion, or registration therein, of all other required FPRT courses.

(FREN) French

FREN 1411 Beginning French I 4-2-4
This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

FREN 1412 Beginning French II 3-0-3
Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: FREN 1411.

FREN 2311 Intermediate French I 3-0-3
This course includes grammar review, composition, and reading of French masterpieces, with conversation based on material read. Prerequisite: FREN 1411 and 1412 or two years of French in an accredited high school.

FREN 2312 Intermediate French II 3-0-3
This course continues reading of French masterpieces; drill on syntax as needed for reading, composition, and conversation. Prerequisite: FREN 2311.

(FRMG) Farm and Ranch Management

FRMG 1302 Range Management/Forage and Pasture Crops 2-4-3
Range management for the southwestern part of the United States. Physical features affecting range conditions, problems in range management, administration and management of range lands, identification of major gases, legumes, and forage and pasture crops.

FRMG 1304 Animal Health 2-4-3
Students will study the basics of internal and external parasites, principle diseases of livestock, and identification and control of diseases and pests.

FRMG 1306 Elementary Horsemanship 2-4-3
This course includes theoretical and laboratory instruction in the proper grooming, saddling, bridling, and mounting of the horse. Proper body posture and hand positions of the rider are also covered. Additional topics of instruction include the anatomy of the horse and riding in western saddles.

FRMG 1307 Intermediate Horsemanship 2-4-3
This course is a continuation of FRMG 1306 and includes the development of the balanced seat, hands and posture at the natural gaits of the western stock horse. Additional topics of instruction include the use of cavalletti, jumping, methods of transportation and care of horses while in transit. Prerequisite: FRMG 1306 or consent of the Department Chair.

FRMG 2303 Feeds and Feeding 2-4-3
Chemical composition of feeds, nutrients, requirements of farm animals, utilization of feeds, formulating and balancing rations.

FRMG 2304 Horse Production 2-4-3
This course includes theoretical and laboratory instruction in the history, evolution, breeding, and functions of the horse. Basic principles of equine nutrition, reproduction, inheritance, disease and parasite prevention and control, skeletal and muscular form and functions of the horse are also covered. Additional topics of instruction include the proper care and handling of horses for work and for pleasure.

FRMG 2305 Advanced Equitation 2-4-3
This course includes theoretical and laboratory instruction in stock seat equitation, western riding techniques, the judged arena and time events in horsemanship. Prerequisite: FRMG 1307 or consent of the Department Chair.

FRMG 2306 Livestock Marketing 2-4-3
Areas of livestock production and consumption, problems of producers and consumers, study of the agencies concerned with processing and distribution of meat and by-products, slaughtering of livestock, future marketing, use of farm and ranch records and accounts.

FRMG 2403 Agriculture Internship 1-18-4
This course consists of on-the-job agriculture production training that utilizes the principles, knowledge, and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College instructor/coordinator.

(GEOG) Geography

GEOG 1300 Introduction to Geography 3-0-3
This is an introductory-level course that combines physical and cultural geography using a regional approach. The course examines the physical environment of the earth and explains maps, covers man's adaptation to environmental extremes, and explores man's use of his environment ranging from adaptation within a tribal culture to the highly modernized urban world.

GEOG 1301 Elements of Physical Geography 3-0-3
A course which examines the physical characteristics of the Earth's environment using maps as a tool for expressing location and interrelationships. Principle discussion topics are the atmosphere and oceans, weather, climate, environments of earth materials and vegetation, land forms and their development.

GEOG 1302 Cultural Geography 3-0-3
A survey of human geography and the ways mankind adapts and reacts to his environment. Culture is defined and its various aspects are described and compared. Important topics to be discussed are population, health, livelihoods, communities, urbanization, organizational interaction (including economics and politics), present and future global problems.

GEOG 1303 World Regional Geography 3-0-3
The study of major developing and developed regions of the world stressing their similarities and differences and their physical and cultural interrelationships. An additional emphasis is the diversity of ideas and practices to be found in those regions.

(GEOL) Geology

GEOL 1301 Earth Science 3-0-3
A course designed for Education majors. This course covers the nature of the Earth as revealed by geology, astronomy, meteorology, and other related physical sciences.

GEOL 1305 Environmental Geology 3-0-3
An interdisciplinary course which includes an overview of Earth materials and processes, which then goes on to focus upon specific geologic problems and possible solutions. A major emphasis of this course is that of the relationship of geology with other academic and practical matters and studies.

GEOL 1403 Physical Geology 3-3-4
An introductory course about the materials and processes of the Earth. Topics included are: minerals, rocks, plate tectonics, weathering, running water, ground water, glaciers, deserts, and others. The study of local rocks and minerals and the opportunity for field observation and collection are provided.

GEOL 1404 Historical Geology 3-3-4
The course involves a study of the record of life forms that have developed throughout geological time. It also covers the development of the Earth from its cosmic beginning to current land forms. Principles of stratigraphy, paleontology, geologic time, plate tectonics, and hypotheses of the Earth's origin are studied in the course. Field work, including the study of local fossil fauna, is an integral part of the course.

➲*Not offered on Central Campus*

(GERM) German

GERM 1411 Beginning German I 4-2-4
This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

GERM 1412 Beginning German II 4-2-4
Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: GERM 1411.

GERM 2311 Intermediate German I 3-0-3
This course includes grammar review, composition and practice in conversation, with readings in contemporary German writings. Includes short stories and some longer works, providing a conversational basis. Prerequisite: GERM 1411 and 1412, or two years of German in an accredited high school.

GERM 2312 Intermediate German II 3-0-3
This course continues reading in contemporary German writings; drill on syntax as needed for reading, composition, and conversation. Prerequisite: GERM 2311.

(GOVT) Government

GOVT 2301 State and Federal Government I 3-0-3
An introductory, survey course on various United States, Texas, and local government topics. This course includes study of the U.S. and Texas constitutions, federalism, local governments, national elections (state and local), civil liberties, and interest groups.

GOVT 2302 State and Federal Government II 3-0-3
An introductory, survey course on various United States, Texas, and local government topics. This course includes studying institutions of national and Texas governments including the executive, legislative, and judicial branches; the bureaucracy; and the public policy including defense and foreign relations as examples.

GOVT 2304 Introduction to Political Science 3-0-3
This course is designed to introduce the student to the general area of political science and to provide knowledge and understanding of political fundamentals, public law, political dynamics, public policy, theory and organization of the modern state, and international relations.

(GRPH) Graphics and Printing see also Skills Center (TIPT)

GRPH 1405 Introduction to Graphic Arts and Printing (OPRT 1401) (TIPT 1401) 3-3-4
An introduction to various phases of the 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. An introduction to printing equipment and relationship of each piece of equipment to the total plant operation and shop safety, including job planning and career data.

GRPH 1409 Press Operations (OPRT 1403) (TIPT 1403) 3-3-4
Basic theory and techniques in the operation of the small (duplicator) offset press, including the "offset principle," feeding all types of stock, image position, sheet delivery, and the maintaining of correct image density. Prerequisite or Corequisite: GRPH 1405 or consent of the Department Chair.

GRPH 1419 Binding and Finishing Operations (OPRT 1404) (TIPT 1408) 3-3-4
An overview of bindery and finishing equipment and techniques. Emphasis on parts and operation. Demonstration of sorting, folding, cutting, labeling, wrapping, packaging, and binding methods. Prerequisite or Corequisite: GRPH 1405 or consent of the Department Chair.

GRPH 1422 Electronic Publishing I (OPRT 1405) (TIPT 1402) 3-3-4
An introduction to computer layout and design using major components of electronic publishing including text, graphics, and page layout and design using a computer. Introduction to the basic concepts and terminology associated with typography and page layout. Prerequisite: GRPH 1405 and 1491 or consent of the Department Chair.

GRPH 1471 Basic Camera (OPRT 1402) 3-3-4
Basic camera operations and darkroom procedures including percentage size calculations, simple line shots, and film processing by the tray method. Basic techniques in the precise layout of simple line negative, halftones, and combinations. Selection of proper plates for specific jobs and the exposing and developing of plates. Prerequisite or Corequisite: GRPH 1405 or consent of the Department Chair.

GRPH 1474 Preventive Maintenance (OPRT 1408) (TIPT 1407) 3-3-4
This course covers preventive maintenance of the offset printing press. It also includes bindery operations such as paper characteristics and identification proper paper jogging and padding procedures, figuring paper cuts, and paper cutter operations. A thorough study of the adjustments, preventive maintenance and simple repair on darkroom, composing room, press room, and bindery equipment. Prerequisite: GRPH 1405 or GRPH 1409 or consent of the Department Chair.

GRPH 2436 Prepress Techniques (OPRT 2401) (TIPT 1404) 3-3-4
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. Prerequisite: GRPH 1491 or consent of the Department Chair.

GRPH 2438 Press Operation II (OPRT 2402) (TIPT 1405) 3-3-4
Maintenance and operation of 22-inch or larger offset presses, and production of process-color-jobs with hairline registration. Focus on interpretation of color bars for the printing process. Prerequisite: GRPH 1409 or consent of the Department Chair.

GRPH 2488 Internship-Graphics and Printing Equipment Operator (OPRT 2409) 1-18-4
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 achieve 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. Prerequisite: Consent of the Department Chair.

(HIST) History

HIST 1301 History of the United States to 1877 3-0-3
English colonization, the Revolution, adoption of the Constitution, growth of nationalism, cotton and the slavery problem, civil war, and reconstruction.

HIST 1302 History of the United States from 1877 3-0-3
New social and industrial problems, rise of the progressive movement, United States' emergence as a world power, World War I, reaction and the New Deal, World War II, and contemporary America.

HIST 2301 Texas History 3-0-3
A survey of Texas from the Spanish exploration to the present.

HIST 2311 Survey of Western Civilization I 3-0-3
An introductory survey course from the rise of Near Eastern civilization to the conclusion of the French Revolution. Special emphasis is placed on the period 1500-1815. Topics covered include Ancient Times, the Middle Ages, the Renaissance, Reformation, establishment of West-European leadership, Transformation of Eastern Europe, the Enlightenment, Scientific Revolution, and the French Revolution.

HIST 2312 Survey of Western Civilization II 3-0-3
An introductory survey course from 1815 to the present with particular emphasis upon the 20th century. Topics covered include the international impact of the French Revolution, Reaction vs. Progress, the Industrial Revolution, the Revolutions of 1848, the Rise of Large Nation-States, European Imperialism, European Civilization 1870-1914, World War I and the Russian Revolution, Totalitarianism and World War II, and the Contemporary World.

HIST 2381 African-American History 3-0-3
The purpose of this course is to familiarize students with the general study of African-American history from the early days of West Africa to American slavery and freedom and ending with the modern civil-rights movement of the 1950s and 1960s.

(HMCA) Hospitality Management

HMCA 1202 Sanitation and Safety 2-0-2
This course includes a study of personal cleanliness; sanitary practices in food preparation; cause, investigation, and control of illness caused by food contamination; food storage and refrigeration; sanitation of dishes, equipment, and kitchens; cleansing materials, garbage and refuse disposal; safety precautions and accident prevention. Upon completion of this course, the student will have sufficient knowledge to pass the Educational Institute of National Restaurant Association (NRA) certification examination. Student must pass certification exam to receive a passing grade.

HMCA 1207 Menu Planning 2-0-2
Basic factors of planning menus including variety and nutrition, techniques of preparing attractive menus while maintaining budgetary control, and types of menus for various public and private institutions.

HMCA 1303 Food Purchasing 3-0-3
Applied theory of food and beverage purchasing; factors affecting selections, standards, quality, and prices; techniques of receiving, storing, and issuing supplies, foods, and materials; applied theory of cost control, pricing and portions. An optional NRA certification exam is offered.

HMCA 1304 Hospitality Industry Law 3-0-3
A study of the nature and scope of business law with emphasis on the hospitality industry. Licensing, civil rights, owner responsibility for safety and property loss of guests, rights of the owner, and history of contemporary hospitality law will be discussed.

HMCA 1305 Convention and Groups 3-0-3
Organization and planning for meetings and conventions including budget, and site selection, menu and program planning and marketing the event.

HMCA 1308 Front Office Procedures 3-0-3
This course includes lodging organization and services, front office salesmanship, cashiering, night auditing, accounting for guest charges, procedures and forms for accounting controls. Completion of computer simulations is required.

HMCA 1309 Introduction to Hospitality Industry and Quality Customer Service 3-0-3
Introduction to HMCA is a survey course designed to provide general information about the career fields within the hospitality industry. The course also offers a program in Quality Customer Service. An optional NRA certification exam is offered.

HMCA 1331 Fundamentals of Food Theory-Part A 1-8-3
Lab fee, uniforms, and professional tools are required. Basic menu items such as soup and sauces are prepared. Other areas of concentration are beverage service, table service, plate and table presentation, accountability of food stores. Prerequisite: HMCA 1202 or concurrent enrollment.

HMCA 1332 Fundamentals of Food Theory-Part B 1-8-3
Lab fee, uniforms, and professional tools are required. Basic menu items such as soup and sauces are prepared. Other areas of concentration are beverage service, table service, plate and table presentation, and accountability of food stores. Prerequisite: HMCA 1202 or concurrent enrollment.

HMCA 1333 Culinary Principles-Part A 1-8-3
Lab fee, uniforms and professional tools are required. Elements of the course include: quantity food preparation, assorted cuisine and baking. Prerequisite: HMCA 1601.

HMCA 1334 Culinary Principles-Part B 1-8-3
Lab fee, uniforms and professional tools are required. Elements of the course include: quantity food preparation, assorted cuisine and baking. Prerequisite: HMCA 1601.

HMCA 1601 Fundamentals of Food Theory 1-19-6
Lab fee, uniforms, and professional tools are required. Basic menu items such as soup and sauces are prepared. Other areas of concentration are beverage service, table service, plate and table presentation, and accountability of food stores. Prerequisite: HMCA 1202 or concurrent enrollment.

HMCA 1606 Culinary Principles 1-19-6
Lab fee, uniforms and professional tools are required. Elements of the course include: quantity food preparation, assorted cuisines and baking. Prerequisite: HMCA 1601.

HMCA 2164 Capstone Option HMCA 1-0-1
A capstone course requiring an individual project and comprehensive exam.

HMCA 2262 Sugar Art 1-3-2
Lab fee, uniforms, and professional tools are required. A course in practical instruction skill development in sugar work, Marzipan, chocolate, holiday confections and advanced cake decoration.

HRMB 2371

HMCA 2301 Management Practice HMCA 1-15-3
Lab fee and uniform are required. This course is designed as a real-time management lab where students will be expected to form a management team and operate an operational area for a semester. Team work and organizational skills are necessary. Scheduled for an average of 20 hours per week, the student assumes a leadership role with an emphasis on supervisory techniques. Hours include mornings, nights, some weekends and holidays. Department approval is required.

HMCA 2302 Hospitality Industry Computer System 2-4-3

This course provides an overview of information needs of lodging properties and food service establishments; addresses essential aspects of computer systems, such as hardware and generic applications; focuses on computer-based property management systems for both front- and back-office functions; and focuses on computer-based restaurant management systems for both service- and management-oriented functions. Lab fee required.

HMCA 2303 Restaurant/Institutional Management Practicum (Field Experience) 1-20-3

Lab fee. Scheduled for an average 20 of hours per week in an industry internship for the semester. Hours include weekends, mornings, nights, and holidays. Department approval is required.

HMCA 2304 Nutrition for HMCA Professionals 3-0-3

A study of dietary needs; the role of proteins, fats, carbohydrates, minerals, and vitamins; factors to be considered in proper selection and preparation of foods for maximum nutritional value. An optional NRA certification exam is offered.

HMCA 2305 Facility Design, Layout and Security 3-0-3

Fundamentals of equipment layout for optimum production and operational efficiency. This course will include procedures to design and decorate remodeling projects.

HMCA 2306 Hospitality Accounting I 3-0-3

Provides the background in hospitality accounting including business transactions, use of accounting records, journalizing, posting, and analysis of financial statements.

HMCA 2307 Tourism Management 3-0-3

The course includes information on travel accommodations, products, procedures, available transportation industries, ticketing, and tour packages.

HMCA 2308 Hospitality Industry Sales Promotion 3-0-3

A course designed to develop an understanding of what must be done to mesh production and consumption in the United States. The business activities that direct the flow of goods and services from the producer to the ultimate consumer are analyzed. Coordination of personal selling, advertising, produce design, market research, and customer relations/services are the individual ingredients of sales promotion, and each is examined in detail. Advertising is studied as the force that creates prospects, converts these prospects into customers, and keeps customers returning and buying. An optional NRA certification exam is offered.

HMCA 2309 Lodging and Tourism Practicum (Field Experience) 1-20-3

Lab fee. Scheduled for an average 20 hours per week in an industry internship for the semester. Hours include weekends, mornings, nights and holidays. Department approval required.

HMCA 2310 Property Management 3-0-3

A study of housekeeping and guest sensitive areas of property management is conducted. Property maintenance is considered as it applies to guest impression to the overall operation.

HMCA 2311 Culinary Arts Practicum (Field Experience) 1-20-3

Lab fee. Scheduled for an average 20 hours per week in an industry internship for the semester. Hours include weekends mornings, nights, and holidays. Department approval required.

HMCA 2335 Culinary Arts-Part A 1-8-3

Lab fee, uniforms, and professional tools are required. The course will concentrate on: buffets, exhibition work, Garde Manage and baking.

HMCA 2336 Culinary Arts-Part B 1-8-3

Lab fee, uniforms, and professional tools are required. The course will concentrate on: buffets, exhibition work, Garde Manage and baking.

HMCA 2350 Hospitality Advertising 3-0-3

Sales promotion, interior decor, types and uniformity of service, food and beverage display, menu and room styling.

HMCA 2351 Cafeteria Management 3-0-3

This course points out the specific differences between an industrial cafeteria and a conventional restaurant and explains how to cope with the unusual problems of industrial and institutional feeding. Prerequisite: HMCA 1601.

HMCA 2352 Catering 2-3-3

Lab fee, uniforms, and professional tools are required. Presentation of food and beverages from menus typically used in catering operations.

HMCA 2353 Advanced Buffet Catering 2-3-3

Lab fee, uniforms, and professional tools are required. Presentation of food and beverages from menus typically used in complex catering operations.

HMCA 2354 Recreational Services 2-4-3

This course includes the study of the needs of guest recreation and entertainment, available space for these activities, cost of operation and maintenance, layout and design, and direct and indirect benefits.

HMCA 2355 Diet Manager Practicum (Field Experience) 1-10-3

Lab fee, uniforms, and professional tools are required. Field experience in diet therapy under the supervision of a registered dietician.

HMCA 2356 Advanced Baking 1-6-3

Lab fee, uniforms, and professional tools are required. A course designed to add to commercial baking skills of the student.

HMCA 2357 Hospitality Accounting II 2-3-3

A course that covering financial statements and accounting practices of partnership and corporate entries. Computer simulation laboratory will utilize industry based software. Prerequisite: HMCA 2306.

HMCA 2358 Dietary Food Service Operations 3-0-3

Looks at food service operations through dietary and clinical needs of the patients.

HMCA 2359 Diet Therapy 3-0-3

A practical "how-to" course tailored to the unique needs of current and future dietary managers.

HMCA 2360 Cake and Pastry Decorating 1-6-3

Lab fee, uniforms, and professional tools are required. A course of practical instruction and skill development in birthday, wedding, and special-occasion cakes as well as pastry decoration.

HMCA 2361 Catering - Baking 1-6-3

Lab fee, uniforms, and professional tools are required. A practical study in manufacturing pastry and baking products on a commercial basis.

HMCA 2363 Capstone Option HMCA 3-0-3

A capstone course requiring an individual project and comprehensive exam.

HMCA 2365 Current Topics HMCA 3-0-3

A course on current industry topics.

HMCA 2612 Advanced Culinary Arts 1-19-6

Lab fee, uniforms, and professional tools are required. The course will concentrate on buffets, exhibition work, Garde Manage and baking. Prerequisite: HMCA 1606.

(HUMA) Humanities

HUMA 1315 Introduction to Fine Arts 3-0-3
This is an introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual arts, within the context of Fine and Applied Arts.

(INDU) Industrial Fundamentals

INDU 1400 Industrial Fundamentals 3-3-4
Required introductory course for students in most of the Industrial Technology curriculums. The course includes common hand and power tools, precision measuring devices, electrical test equipment, thread repair, special tools, soldering, bearings and seals, use of publications, basic shop math, and industrial trades safety. This course is a prerequisite or corequisite for all Industrial Technology AAS Degree curriculums except Air Conditioning and Automotive Service and Repair.

(JAPN) Japanese

➲JAPN 1311 Elementary Japanese I 3-0-3
Introduction to Japanese with emphasis on conversation, grammar, and the written forms. There will also be readings of simple texts dealing with Japanese life and culture.

➲JAPN 1312 Elementary Japanese II 3-0-3
Continuation of Japanese conversation, grammar and the written forms. Emphasis is on reading texts dealing with Japanese life and culture. Prerequisite: JAPN 1311.

➲JAPN 1370 Introduction to Japanese 3-0-3
This course provides students with conversational and academic skills in basic "survival" Japanese by presenting the language in a practical, contextual setting. Grammar is reinforced by example with emphasis on understanding the structure and mastery of the structure in conversation.

JAPN 1411 Beginning Japanese I 4-2-4
This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

JAPN 1412 Beginning Japanese II 4-2-4
Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: JAPN 1411.

JAPN 2311 Intermediate Japanese 3-0-3
Review and application of skills in listening, comprehension, and speaking; introduction to advanced grammar patterns; and acquisition of additional Japanese characters.

➲*Not offered on Central Campus*

Journalism

See (COMM) Communications

Kinesiology

See (PHED) Physical Education

(LANG) Foreign Language

See (FREN), (GERM), (JAPN), (SPAN), OR (TAGA)

(LAWE) Law Enforcement

(Not Offered in Texas)

LAWE 1201 Defensive Tactics 1-2-2
This course is designed to provide the student with defensive and protective philosophies to better protect the public and criminal justice personnel against illegal force. Self-defense techniques, safe arrest procedures, citizen contact, and proper prisoner transportation techniques, along with humane methods of handling disturbed persons, will be presented. The legal and humane use of limited force will be stressed at all times.

LAWE 1301 Introduction to Criminal Justice 3-0-3
History and philosophy of criminal justice and ethical considerations. Crime defined, its nature and impact. Introduction and career orientation to the multifaceted agencies involved in the administration of criminal justice: law enforcement, courts, prosecution and defense, probation and parole, and corrections.

LAWE 1302 Criminal Investigation I 3-0-3
Investigative theory, collection and preservation of evidence, sources of information, interview and interrogation, uses of forensic sciences, and case and trial preparation.

LAWE 1303 Legal Aspects of Law Enforcement 3-0-3
Police authority, responsibilities, constitutional constraints, law of arrest, search and seizure, police liability, and examples of case law that currently affect police decisions will be reviewed.

LAWE 1304 The Courts and Criminal Procedures 3-0-3
The judiciary in the criminal justice system, structure of the American court system, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence and sentencing.

LAWE 1306 Correctional Systems and Practices 3-0-3
Corrections in the criminal justice system, organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatment and rehabilitation, current and future issues.

LAWE 1307 Crime in America 3-0-3
American crime problems in historical perspective, social and public policy factors affecting crime; impact and crime trends, social characteristics of specific crimes, and crime prevention.

LAWE 1308 Fundamentals of Criminal Law 3-0-3
A study of the nature of criminal law, philosophical and historical development; major definition and concepts; classifications, elements, and penalties of crime using Texas statutes as illustrations, and criminal responsibility.

LAWE 1309 Police Systems and Practices 3-0-3
Analyses of the police profession, organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues facing police agencies.

LAWE 1310 Criminal Investigation II 3-0-3
Modern methods and skills required for criminal investigation including discovery methods, developing and lifting latent fingerprints, criminal scene sketches, the use of plaster and silicone rubber for reproducing evidence at the crime scene, use of modern investigation aids, and techniques of interviews and interrogations. Prerequisite: LAWE 1302.

LAWE 1312 Commissioned Security Officer Course CJSA 1302 **2.5-0.5-3**

This course is designed to have the student meet the requirements specifically identified in the state of Texas Commissioned Security Officer Training Manual and the provisions of the Private Investigators and Private Security Agencies Act, Article 4413 (29bb) V.A.C.S. as amended.

LAWE 1315 Street Survival **3-0-3**

This course stresses the preparation, planning and appropriate reactions to hazardous situations for on-duty police officers. Students will gain awareness of the conditions which lead to personal injury and death. Instruction will be given to improve the student's tactical procedures and safeguards while performing police work.

LAWE 2101 Emergency Medical Aid **1-1-1**

This course focuses on the first aid fundamentals that will be helpful to patrol officers in the event of a first aid emergency situation. Procedures recommended by the American Red Cross will be used as guidelines for this course.

LAWE 2201 Firearms CJLE 1211 **1-2-2**

This course is designed to introduce the student to the skills and techniques of firearms used in the protection of the public and criminal justice personnel. Students will fire various weapons under precision and police combat conditions. The importance of safe weapons handling and the danger of not adopting a mature attitude towards firearms will be stressed at all times. The intelligent, legal, and moral use of police firearms will be emphasized at all stages of teaching and firing.

LAWE 2301 Probation and Parole CJCR 1304 **3-0-3**

Development, organization, operation, and results of systems of probation and parole as substitutes for incarceration. Role of probation and parole officers and their function within the entire criminal justice system are examined.

LAWE 2303 Criminal Justice Seminar CJSA 1393 **3-0-3**

A problems course dealing with current criminal justice trends, issues, and literature. Prerequisite: Consent of the Department Chair. This course may be repeated for credit when course topics deal with different problems and issues.

LAWE 2304 Juvenile Procedures CJSA 1317 **3-0-3**

The organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; case disposition; juvenile statutes; and court procedures.

LAWE 2306 Traffic Planning and Administration **3-0-3**

This course consists of the application of traffic problems from the administrative point of view including traffic engineering, education, and enforcement at the supervisory level.

LAWE 2308 Patrol Administration ? **3-0-3**

Discussion of the administration of surveys, special problems arising while the officer is on patrol, improvement in patrol methods, observation of persons and things, preventive techniques, methods of handling complaints, and the development of contacts.

LAWE 2310 Correctional Control and Administration ? **3-0-3**

The course prepares the student to perform supervisory functions related to control of prisoners and contraband, segregation and accountability of prisoners, procedures required at correctional facilities, emergency measures, prisoner privileges, and the records and reports of the detention center.

LAWE 2312 Homicide Investigation **3-0-3**

This course emphasizes the investigative process and teamwork required in analyzing the homicide crime scene. It addresses the roles of the various forensic disciplines in relation to the investigator as well as the functions of the crime laboratory. Additionally, students will learn how to analyze wounds and injuries in drawing conclusions about the cause of death.

CJLE 2345

LAWE 2313 Illegal and Controlled Substances **3-0-3**

This course presents an in-depth approach to the medical and legal aspects of illegal and controlled substances. Students will learn how to identify dangerous drugs by their distinct characteristics and explain their effects on the human body. Most importantly, students will learn the theories and principles of drug law enforcement which will prepare them to bring a drug case successfully to prosecution.

LAWE 2314 Organized Crime **3-0-3**

This course provides the student with information on the growth and development of organized crime and its affect on the majority of crimes committed in the U.S. today. Students will also learn about the different facets of organized crime and will analyze how federal and state authorities are fighting it.

LAWE 2315 Interviewing and Interrogation Techniques **3-0-3**

This course provides the student with an understanding of the communication process and the techniques for improving listening skills. This knowledge has a direct application for the police officer who must conduct interviews/ interrogations on the job.

LAWE 2319 Anti-Terrorism **3-0-3**

This course explores the origins, philosophies, and current trends in worldwide terrorism and hostage-taking incidents. Role playing exercises allow students to utilize all the course material in "hands-on" hostage negotiation situations.

LAWE 2350 First Responder **3-0-3**

This course covers health knowledge regarding individual and group welfare. It is concerned with the principles and practices of first aid treatment of the sick and injured by the non-medically-trained individual. Emphasis is given to the preventive aspects as well as care following an injury or illness.

(LEGA) Paralegal/Legal Assistant

LGLA

LEGA 1302 Legal Office Ethics and Management **3-0-3** 2307

This course will provide an overview of the ethical considerations applicable to the legal assistant; office organization, specialized bookkeeping, and accounting for attorneys' fees and billing procedures, scheduling and calendaring, personnel management, proofreading, investigations management and file preparation, management and organization procedures for specialized areas of law, special considerations with respect to attorney's trust account, preparation of law office forms, checklist and files, and disbursement on behalf of clients.

LEGA 1304 Principles of Family Law 1355 **3-0-3**

The legal aspects of divorce and annulment, separation, custody, habeas corpus, support, alimony, tax consulting, out-of-state divorces and jurisdiction service will be discussed. Students will draft separation and custody agreements, as well as the other documents involved in divorce proceedings.

LEGA 1305 Law of Real Property and Real Estate Transactions 2309 **3-0-3**

Study of the law of real property and in-depth survey of the more common types of real estate transactions and conveyances such as deeds of trust; drafting problems involving projects related to the subject matter; study of the system for recording of and searching for public documents.

LEGA 1306 Criminal Law 2313 **3-0-3**

A study of criminal law and procedure for the legal assistant who may work in a prosecutor's office, a public defender's office, or a criminal defense firm. Includes essential elements of crime, criminal liability, criminal responsibility and capacity to commit a crime, defenses, and criminal punishment. This course will also instruct the student on how to investigate, prove-up and litigate criminal cases.

LEGA 1307 Civil Litigation 1345 **3-0-3**
This course is an overview of civil litigation in both state and federal court with particular emphasis on the areas in which a legal assistant can assist the trial attorney. Particular attention is paid to preparation for litigation (interviewing client and witnesses, reviewing public information), discovery proceedings (interrogatories, requests for admissions, depositions and document production) pre-trial proceedings (motions to dismiss, motions for summary judgment, pre-trial orders), and trial (witnesses and exhibits). Attention is also devoted to practical techniques required to cope with protracted or complex litigation, including organization of pleadings, documents and depositions; preparation of summaries, chronologies and indices; and maintaining complex files in an orderly manner. Mention is made of the legal theories involved in complex litigation (e.g., products liability, civil rights, securities and antitrust). Principal emphasis is on procedural techniques rather than substantive areas of law. Prerequisite: LEGA 1401.

LEGA 1308 Consumer Protection & Bankruptcy 1343 **3-0-3**
A study of consumer law for the paralegal, business person, and consumer, of legislation and legal rights surrounding the purchase of consumer goods and services bought primarily for personal, family, or household purposes including the Consumer Credit Protection Act, the Uniform Consumer Credit Code, and the Fair Debt Collection Practices Act, as well as a survey of federal and state Deceptive Trade Practices Acts and automobile "lemon" laws. Students will also learn the appropriate federal, state, and local administrative bodies to contact in case of consumer problems and some of the procedures involved. This course will also give an in-depth study of both debtor and creditor rights in debt relief and bankruptcy. Prerequisite: LEGA 1401.

LEGA 1309 Military Law I 1321 **3-0-3**
An introduction to the military legal system for junior military legal clerks as well as civilian practitioners who deal with the military. Topics covered include the military Judge Advocate General's Corps organization and structure, the structure and operation of field offices, Staff Judge Advocates, Post Judge Advocates, and Command Judge Advocates. An introduction to the Uniform Code of Military Justice and appropriate miliary regulations covering military law subjects is included. This course will also serve as an introduction to the practice of military justice, claims, legal assistance, administrative law, and civil law as practiced in a typical Staff Judge Advocate'sOffice.

LEGA 1401 Introduction to Paralegalism 1407 **4-0-4**
This course provides a general introduction to the law with emphasis on the role of the legal assistant. To give a Legal Assistant student the necessary legal background, topics to be covered include the American system of law (constitutional law, statutory law, criminal law and tort law); court systems; terminology and court procedures. General concepts of law are introduced for students with no specific prior legal knowledge. This serves as the introductory course for the Legal Assistant program.

LEGA 1403 Military Law II 2321 **4-0-4**
A more in-depth look at the operation and management of the military's Judge Advocate General's Corps. Detailed coverage of military justice, claims, legal assistance, administrative law, and civil law, with detailed review of the Uniform Code of Military Justice and appropriate military and federal regulations. Preparation of legal documents used in the military adds a practical aspect to the material, which will include charge sheets, claims forms, and administrative and disciplinary appeals. Prerequisite: LEGA 1309.

LEGA 2101 Special Topics in Legal Assistance 1391 **1-0-1**
A problems course dealing with recent developments and topics of current interest in the Legal Assistance field. The course may be repeated when topics vary.

LEGA 2301 Tort and Personal Injury 2303 **3-0-3**
A study of the fundamental principles of evidence and of the law of torts and insurance, including special research assignments related to the subject matter; consideration of the techniques of investigation involved in the lawyer's handling of tort and insurance claims and workmen's compensation; a study of the various forms of pleadings involved in commencing such claims in court actions. This course will also cover how to use cameras, tape recorders, video equipment and other investigative equipment to document cases and gather evidence. Prerequisite: LEGA 1401. Corequisite: LEGA 2406.

LEGA 2302 Contract Law and the Uniform Commercial Code 1351 **3-0-3**
A study of the law of personal property, contracts, including those special forms related to the law of sales and credit transactions, special drafting problems of various instruments and legal research projects; and a survey of the Uniform Commercial Code and its effect on the course subject matter. Prerequisite: LEGA 1401.

LEGA 2303 Business Organizations 2311 **3-0-3**
A study of the formation and operation of corporations, partnerships, limited partnerships, business trusts and other business vehicles, including a survey of the fundamental principles of law applicable to each; special research projects related to the subject matter. Prerequisite: LEGA 2302.

LEGA 2307 Juvenile Law 1357 **3-0-3**
A systematic introduction to juvenile law and the comparative difference between the criminal and juvenile justice systems. The course will cover both state and federal legislation, substantive and procedural laws, and related issues within the public education disciplinary system. Coordinating agencies for the effective handling of minors as well as directions of the future will also be covered. Prerequisite: LEGA 1306.

LEGA 2308 Legal Assistant Seminar 1391 **3-0-3**
A problems course dealing with recent developments and current issues in the law and the Legal Assistance field. Topics of interest may cover: Law of the Workplace, Constitutional Law, and Environmental Law. The course may be repeated when topics vary.

LEGA 2401 Techniques of Legal Practice 2433 **3-3-4**
This course emphasizes the techniques of legal writing and coordinates with other Legal Assistant courses to provide specialized training in the actual preparation of legal documents on a case method. Questions of statutes of limitation, clients, interviews and interview forms, complaints, interrogatories, depositions, answers, motions, orders to show cause, third-party practice, orders, medical records, judgments, pre-trials, settlements, and releases are some of the topics discussed. Prerequisites: LEGA 1307, 1401, and 2306.

LEGA 2404 Legal Assistant Internship 2488 **1-18-4**
This course consists of on-the-job training in the legal field. It utilizes the principles, skills, and knowledge gained in the classroom. The student works at an approved work site under the supervision of a College coordinator. Prerequisite: Sophomore standing and consent of the Department Chair.

LEGA 2405 Wills, Trust and Probate 1353 **3-3-4**
This course presents the basics of wills, trust and probate with which a Legal Assistant will have to deal. The forms and principles of law for wills and trusts are covered. The organization and jurisdiction of the State Probate Court are studied. The administration of estates under State Probate Law is analyzed and estate and inheritance taxes are reviewed. Prerequisites: LEGA 1307 and 1401.

add LGLA 1417 1401

LEGA 2406 Techniques of Legal Research 3-3-4
This course focuses on the importance of legal research as part of a legal assistant's responsibilities. It explores principles of legal research, kinds of law books, components of a law book, citations, reading and finding constitutional law, regulations, cases, law and statutory law. Students will learn how to use the various legal research tools such as indices, digests, Shepards, and treatises. An in-depth research and writing assignment provides a hands-on application of the studies. Prerequisite: LEGA 1401. Corequisite: LEGA 1307.

(MATH) Mathematics

MATH 1314 College Algebra 3-0-3
Topics include theory of equations, exponential and logarithmic functions, systems of linear equations, matrices and determinants, arithmetic and geometric sequences, binomial theorem, permutations and combinations. This course is recommended for students intending to enroll in advanced mathematics courses. Prerequisite: DSMA 0303 or equivalent, or acceptable placement test score.

MATH 1316 Trigonometry 3-0-3
Wrapping, circular, and trigonometric functions; polar coordinates; identities; applications to oblique and right triangles; inverse functions; and trigonometric equations. Prerequisite: DSMA 0303 or equivalent

MATH 1324 Finite Mathematics I 3-0-3
Topics include linear systems, matrices, linear programming, set theory, counting theory, probability, statistics. Prerequisite: DSMA 0303 or equivalent.

MATH 1342 Elementary Statistics 3-0-3
Collection and tabulation of data, bar charts, graphs, sampling, averages, dispersion, correlation, index numbers, normal curve, probability, inferential statistics, applications. Prerequisite: DSMA 0303 or equivalent

MATH 1348 Analytic Geometry 3-0-3
An algebraic treatment of straight lines, circles, parabolas, hyperbolas, ellipses. Transformation of coordinates, curve sketching, polar coordinates. Prerequisite: MATH 1316 or equivalent and MATH 1314.

➲**MATH 1376 Finite Mathematics II** 3-0-3
A continuation of Finite Mathematics I. Introduction to statistics, graphing, vectors, matrices, and linear programming. Prerequisite: MATH 1324.

➲**MATH 2320 Differential Equations** 3-0-3
Fourier series, linear differential equations, Laplace transforms, and series solution, all with applications. Prerequisite: MATH 2315

MATH 2413 Calculus I (Fall) 3-1-4
A first course in differential and integral calculus. Topics include rectangular coordinates and functions, limits, continuity, derivatives, the Mean Value Theorem, integrals, the Fundamental Theorem of Calculus, and applications of integrals. This course meets four hours per week -- three in lecture and one in lab activities to include the use of computers, graphing calculators, and/or problem solving discussions. Prerequisite: MATH 1348 or equivalent, or concurrent enrollment in MATH 1348

MATH 2414 Calculus II (Spring) 3-1-4
A second course in differential and integral calculus. Topics include derivatives and integrals of transcendental functions, techniques of integration, improper integrals, infinite series, parametric equations, and polar coordinates. This course meets four hours per week--- three in lecture and one in lab activities to include the use of computers, graphing calculators, and/or problem solving discussions. Prerequisite: MATH 2413 or equivalent.

MATH 2415 Calculus III (Summer) 3-1-4
A third course in differential and integral calculus. Topics include vectors and curves in the plane, solid analytic geometry, and vectors in space, functions of several variables, multiple integration, and vector analysis. This course meets four hours per week--three in lecture and one in lab activities to include the use computers, graphing calculators, and/or problem solving discussions. Prerequisite: MATH 2414 or equivalent.

➲*Not offered on Central Campus*

(MELT) Medical Laboratory Technician

MELT 1402 Hematology 3-3-4
That branch of medical laboratory science involving the morphology of blood and blood-forming tissues. Included will be studies of normal and abnormal hematological states and coagulation studies. Prerequisite: MELT 1601.

MELT 1601 Introduction to Medical Laboratory Techniques 4-6-6
This course will be a general introduction to Medical Laboratory Technology. It will include instrumentation, urinalysis, phlebotomy, immunology, and clinical chemistry.

MELT 2401 Clinical Practice II 1-15-4
This course will cover the following discipline areas: hematology, coagulation, clinical chemistry, clinical microbiology, immunology, immunohematology and urinalysis. Upon completion of this course, the student will be able to collect and process biological specimens for analysis; perform analytical tests on body fluids, cells and products; recognize factors that affect procedures and results and take appropriate actions within predetermined limits when corrections are indicated; monitor quality control within predetermined limits; perform preventive and corrective maintenance of equipment instruments or refer to appropriate sources for repairs; demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health professionals, and with the public; and apply basic scientific principles of technique to clinical procedures in all areas of the laboratory field. Prerequisite: MELT 2502.

MELT 2402 Medical Microbiology I 3-3-4
This course includes the morphology and relationship of pathogenic organisms in the human body. Primary emphasis will be placed on identification and isolation. Prerequisite: MELT 1601.

MELT 2403 Immunology and Immunohematology 3-3-4
The science that deals with blood group antigens and antibodies. Included will be exercises involved in the detection of foreign antibodies in the patient. Blood grouping and Rh factor, cross matching blood for transfusions and illnesses associated with blood incompatibilities such as hemolytic diseases of the newborn. Suppression of antibody production with the use of products for preventive therapy will be studied. Prerequisite: MELT 1402.

MELT 2404 Medical Microbiology II 3-3-4
This course will be a general introduction to parasitology, mycology and virology. Primary emphasis will be placed on identification. Prerequisite: MELT 1601.

MELT 2405 Clinical Chemistry 3-3-4
Designed to study blood chemistry covering vital organs of the body and their effect on the blood chemistry. Deals with chemical analysis of body fluids. Prerequisites: CHEM 1411, CHEM 1412, MELT 1601, MATH 1314.

MELT 2406 Clinical Practice III 1-15-4

This course will cover the following discipline areas: hematology, coagulation, clinical chemistry, clinical microbiology, immunology, immunohematology and urinalysis. Upon completion of this course, the student will be able to collect and process biological specimens for analysis; perform analytical tests on body fluids, cells and products; recognize factors that affect procedures and results and take appropriate actions within predetermined limits when corrections are indicated; monitor quality control within predetermined limits; perform preventive and corrective maintenance of equipment instruments or refer to appropriate sources for repairs; demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health professionals, and with the public; and apply basic scientific principles of technique to clinical procedures in all areas of the laboratory field. Prerequisite: MELT 2401.

MELT 2502 Clinical Practice I 1-19-5

This course will cover the following discipline areas: hematology, coagulation, clinical chemistry, clinical microbiology, immunology, immunohematology and urinalysis. Upon completion of this course, the student will be able to collect and process biological specimens for analysis; perform analytical tests on body fluids, cells and products; recognize factors that affect procedures and results and take appropriate actions within predetermined limits when corrections are indicated; monitor quality control within predetermined limits; perform preventive and corrective maintenance of equipment instruments or refer to appropriate sources for repairs; demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health professionals, and with the public; and apply basic scientific principles of technique to clinical procedures in all areas of the laboratory field. Prerequisites: MELT 1402, MELT 1601, BIOL 2402, and CHEM 1412.

(MGMT) Management

MGMT 1111 Leadership Development I (MGMK 1101) 1-1-1

The purpose of this course is to develop an awareness of respect for education in marketing and distribution which will contribute to occupational competence, and to promote understanding and appreciation for the responsibility of citizenship in our competitive free enterprise system. It is intended for students who are preparing themselves for careers in middle management, sales, advertising, finance, retailing, wholesaling, insurance, real estate, fashion merchandising, food service management, hotel/motel management, and other marketing-oriented occupations. Students will be expected to participate in a student vocational leadership organization, Junior Collegiate Distributive Education Clubs of America (DECA). Consent of the Department Chair is required for admission.

MGMT 1112 Leadership Development II (MGMK 1102) 1-1-1

This course is a continuation of MGMT 1111. Prerequisite: MGMT 1111 and consent of the Department Chair.

MGMT 1113 Leadership Development III (MGMK 1103) 1-1-1

This course is a continuation of MGMT 1112. Prerequisite: MGMT 1112 and consent of the Department Chair.

➲MGMT 1158 Training Manager's Workshop 1.5-0-1

This course is designed for battalion and company commanders and S-3s for their training management duties and stresses training status, goals, priorities, resources and short- and long- term plans.

➲MGMT 1171 Personnel Counseling Seminar 1-0-1

This course covers the major theories of counseling and the use of basic influence and attending skills.

➲MGMT 1204 Setting Objectives and Goals 2-1-2

This course is designed to provide managers with the processes involved in defining objectives, determining desired goals, and analyzing performance training to enhance achievement of those goals and objectives.

➲MGMT 1205 Analysis of Training Requirements 2-1-2

This course is designed to provide managers with techniques for determining organizational and personnel training requirements; stresses the definition and assurance of needs that are compatible with available resources.

➲MGMT 1206 Professional Resource Management 2-0-2

This course is designed to provide managers with the capability to assist subordinates in the screening, selection, evaluation, and application of employee training programs.

➲MGMT 1301 Organization and Management 3-0-3

Organizational structure can have considerable impact on the manner in which an organization functions. Students study the complex variables over which managers can exercise control to determine proper structure. While surveying management topics such as planning, decision-making, organizing, staffing and controlling, this course deals with how the organization must be structured to fit its environment and operation.

➲MGMT 1302 Safety (OSHA) 3-0-3

A study of safety as it relates to the military, industrial, and business communities. Special emphasis will be given the requirements of the Occupational Safety and Health Act as it affects management and employees.

➲MGMT 1303 Fundamentals of Industrial Management 3-0-3

Application of the system's approach of the unification of all areas from human factors to environmental factors are covered, along with the manner and methods through which work can be simplified, yet made more meaningful and satisfying.

MGMT 1304 Work Organization 3-0-3

This course is designed to provide a general introduction and orientation to principles of job analysis, performance evaluation, job evaluation and salary administration, and how these affect the work situation. Work measurement and work standard techniques are studied, as well as flow process and work distribution methods, quantity and quality control planning and the current impact of governmental guidelines upon such procedures.

MGMT 1305 Introduction to Management 3-0-3

This course is designed to give the student a knowledge and understanding of management theories and functions which are essential to the person planning a career in business or industry.

MGMT 1306 Human Relations 3-0-3

This fundamental management course examines topics such as morale, motivation, communications, leadership, and change as they relate to managerial decision making.

MGMT 1307 Insurance 3-0-3

Introduction to theory and practice of insurance, including life, fire, automobile, and personal and business risk.

MGMT 1308 Small Business Management (MGMK 1308) 3-0-3

Methods and applications of financial management in a small business. Primary emphasis on internal controls and sales accountability. Secondary emphasis on budgeting, forecasting, effective sales/labor ratios, licensing requirements.

➲MGMT 1309 Income Tax 3-0-3

Income tax legislation; present income tax laws and regulations; treasury decisions, court decisions and departmental rulings; income tax problems and returns.

MGMT 1311 Retail Management (MGMK 1311) 3-0-3
This course is for persons intending to develop careers in retailing or marketing as well as for those seeking an introduction to the field of retailing. It contains an overview of retailing--from the development and growth of retailing to an analysis of the consumer. The impact of innovation and competition on retail institutions is studied, as well as the influence of fashion, computers, and consumerism in the industry. Other subjects include types of ownership, types of merchandise sold, the human and physical sides of store management, merchandising, selling, advertising, sales promotion, profit and pricing techniques.

➲MGMT 1381 Management of Performance-Oriented Training 3-0-3
A course designed to provide a performance-oriented approach of managing training in which the manager learns to establish performance-oriented objectives, tests, and follow-up evaluations.

➲MGMT 1382 Briefing Techniques, Aids and Devices 3-0-3
A course designed to provide the manager with the capability of employing proper briefing methods and to develop the skills required to produce briefing aids including charts, graphs, posters, slides, filmstrips, transparencies, opaques, and other media.

➲MGMT 1383 Evaluation of Instruction and Training 3-0-3
A course designed to provide the manager with the rationale, methods, and procedures for evaluation the effectiveness and efficiency of instruction training. Emphasis will be directed toward evaluating performance-oriented training and developing the suggestions for improvement which can be provided to management.

➲MGMT 1384 Setting Objectives and Goals 3-0-3
A course designed to provide managers with the processes involved in defining objectives, determining desired goals, and analyzing performance training to enhance achievement of goals and objectives.

➲MGMT 1385 Analysis of Training Requirements 3-0-3
Designed to provide managers with techniques for determining organizational and personnel training requirements. Defining needs and ensuring compatibility with available resources will be stressed.

➲MGMT 1386 Professional Resource Management 3-0-3
A course designed to provide managers with the capability to assist subordinates in the screening, selection, evaluation, and application of employee training programs.

➲MGMT 1387 Professional Development of the Manager 3-0-3
A course designed to equip leaders with skills necessary to provide assistance to subordinates in problem solving. Emphasis will be placed on effective, active and passive performance by leaders to correct mistakes or reinforce good performance causing more motivated individuals.

➲MGMT 1388 The Training System Management 3-0-3
A course designed to provide managers with methods required to plan, organize, staff, influence, and control training. The main purpose will be develop a plan and employ limited resources to accomplish systems objectives.

➲MGMT 1389 Managerial Theories 3-0-3
A course designed to provide examination of managerial theories to include management functions, decision-making skills, problem-solving techniques, and performance standard oriented approaches to management.

MGMT 1401 Management and Marketing Internship I (MGMK 1401) 1-18-4
This course consists of on-the-job management training that utilizes the principles, skills and knowledge gained in the theoretical setting of the classroom. The student is employed at an approved work site under the supervision of a College coordinator. Prerequisite: Consent of the Department Chair.

MGMT 1402 Management and Marketing Internship II (MGMK 1402) 1-18-4
This is a continuation of Management and Marketing Internship I. Prerequisite: MGMT 1401 and consent of the Department Chair.

➲MGMT 2101 Stress Management 1-0-1
This course identifies the factors causing stress, shows how to interpret the signs of stress and explains the basic fundamentals involved in the management of personal and organizational stress. The instruction covers the most common causes of stress in the work place and prescriptive measures that can be taken by the manager to obtain high performance and low stress levels within the organizational setting.

➲MGMT 2102 Management Seminar 1-0-1
A course that deals with trends, issues, advancements and literature in the management field.

➲MGMT 2103 Time Management 1-0-1
This course enables the student to understand the role time plays in one's personal and professional life and to perceive time as the one element that cannot be created in greater quantities. Instruction includes a study of the constraints that time places over individual lives and the techniques that managers and workers can employ to accommodate their goals.

➲MGMT 2104 Income Tax 1-0-1
This seminar is designed as a practical, hands-on approach to the basic fundamentals of income tax preparation for the individual to complete the Form 1040, 1040A, or the 1040EZ. Information for all aspects of this preparation will be provided in a general manner and will not delve into specific minutia of income tax law. The instructor will be able to answer most of the tax questions asked by the students. However, it must be realized that the instructor is not a tax attorney or an accountant. For specific legal advice concerning a complex tax questions, the student will be encouraged to seek professional assistance.

➲MGMT 2105 Briefing Techniques, Aids and Devices 1-0-1
A course designed to provide students with a review of instructional techniques, selection of contents of instruction, preparation of lesson plans and instructional devices or aids to provide a good learning environment.

➲MGMT 2150 Trainer's Workshop (TW) 1.5-0-1

➲MGMT 2151 Platoon Trainer's Workshop 1.5-0-1

➲MGMT 2152 Training Supervisor's Workshop 1.5-0-1

➲MGMT 2161 Unit and Organizational Supply 2.5-0-1
To provide the students with the skills and knowledge to accomplish the duties required of unit and organizational supply personnel.

➲MGMT 2162 Personal Finance Management 1.3-0-1
Develops an understanding of the personal business activities and actions that affect personal and family accounts, budgets, budgetary controls, bank accounts, charge accounts, borrowing, buying, and investing.

➲MGMT 2164 Army Personnel 1-0-1
This course is designed to provide the student with the knowledge of fundamental personnel management concepts used in industry, the Army, and U.S. Civil Service.

➲MGMT 2172 Introduction to Management Theory 1-0-1
This course will help to increase the student's ability to relate to and manage personnel. Instruction is provided in management theories, functions and roles. Leadership abilities, motivation methods, and time management will be emphasized.

➲MGMT 2173 Leadership Communication In Management 1-0-1
This course will provide communications skills and counseling and stress management techniques to enhance the student's ability to manage personnel effectively.

➲MGMT 2174 Supervisory Management 1-0-1
This course is designed to update the student's supervisory education and to prepare him/her for more complex problems whether they are economic, technical, professional, scientific or educational.

➲MGMT 2255 Platoon Trainer's Workshop 2-0-2

➲MGMT 2256 Training Supervisor's Workshop 2-0-2
Provides training management for the medium-sized organization (battalion) including long- and short-range plans, LRC, and ARTEP standards.

➲MGMT 2257 Trainer's Workshop (TW) 2.3-0-2

➲MGMT 2258 Training Manager's Workshop 2-0-2
Provides training management information for battalion-sized units including long- and short-range goals, training assets, money and allocations, and ARTEP standards.

➲MGMT 2259 Platoon Trainer's Workshop 2.3-0-2
Provides management of training instruction at the platoon level including long- and short-range planning and ARTEP-integrated training for small groups.

➲MGMT 2261 Leadership and Communications Seminar 2-0-2
Upon completion of this course, the student will be better able to communicate with and supervise personnel. The student will have an increased interpersonal awareness, interact better in group situations, organize work and manage time better, and be able to reduce stress.

➲MGMT 2300 Credit and Collections 3-1-3
This course covers the elements of mercantile and consumer credit organization of a credit department, sources of credit information, collection tolls and procedures.

MGMT 2301 Marketing Principles MRKG 1311 **3-0-3**
This is an introductory course to the practices and principles of contemporary marketing. Instruction includes marketing planning and information; buyer behavior and market segmentation; product/service, pricing, distribution, and promotional strategies; and marketing in special settings. Instructional methods include lectures, discussions, and case study analysis.

MGMT 2302 Human Resource Management HRM 2301 **3-0-3**
The dynamic role of management as it relates to people, with emphasis on the management aspects important to the line executive or supervisor. Human resource functions and procedures are viewed in the light of management objectives while human resource management is treated as an active and dynamic process which is motivated by basic human drives.

➲MGMT 2303 Law and Legal Assistance 3-0-3
Nature and scope of the law, court systems, law of contracts, principal and agent as relates to the military. Explanation of bailments, carriers, mortgages, securities, negotiable instruments, banks and banking, wills and estates. The procedures of obtaining and acquiring legal assistance for both military and civilian cases in or out of the continental limits of the United States of America are addressed. Emphasis is placed on the knowledge required by the supervisor to counsel subordinates in the areas of law and legal assistance.

➲MGMT 2304 Labor-Management Relations 3-0-3
Labor relations aspects of personnel management are emphasized; selection and placement, discipline and morale, promotions, lay-offs, job evaluation, incentive systems, profit sharing, and the influence of collective bargaining and legislation on personnel policies. Methods used by organized labor and employers in industrial conflicts.

MGMT 2305 Business Law I BUSL 2305 **3-0-3**
This course deals with the nature and scope of the law, court systems, law of contracts, principal and agent, and business organizations including partnerships and corporations. Texas community property laws are also covered.

MGMT 2306 Business Law II SAB ECON 2301 **3-0-3**
Additional studies in law of business, dealing with bailments, carriers, mortgages, suretyship, negotiable instruments, banks and banking, wills and estates, sales, bankruptcy. There is no prerequisite for this course.

MGMT 2307 Life Insurance 3-0-3
Principles of life insurance, business and personal use in insurance; classification and analysis of policies, reserve and policy values; organization and administration of life insurance companies.

MGMT 2309 Supervision BMGT 1301 2389 **3-0-3**
A course designed to provide an understanding of planning work leadership, decision making, work problem solving, human behavior, and personnel relations.

➲MGMT 2310 Personnel Counseling 3-0-3
This course is designed to improve the listening and decision-making skills of managers and supervisors to help employees achieve greater productivity and satisfaction in their jobs and quality of work life (QWL).

➲MGMT 2312 Fundamentals of Systems Management 3-0-3
Introduction to the "systems" concept of management and integration of this concept with the more traditional "principles" approach. This course combines theory and application of systems management and focuses on systems as they exist in many fields such as education, law enforcement, military, industry, and a variety of nonprofit organizations.

➲MGMT 2314 Ethics in Management 3-0-3
A study of the field of business management as it relates to major ethical theories. The course provides actual case studies in which ethical principles are used in solving today's business problems.

➲MGMT 2315 Public Relations 3-0-3
A course designed to prepare students for jobs in the business world covering various principles and processes of contemporary public relations as well as effective means of influencing the public. The course traces the origins of public relations and discusses current and future trends. It looks at public relations standards, a code of ethics, and public relations as a profession.

BMGT 2370

MGMT 2316 Management Applications I (MGMK 2316) 1-5-3

This course is a management laboratory that emphasizes necessary management decision-making skills that are necessary for the modern manager to successfully deal with resource problems in the work place and career field. The course is designed for students desiring to further their management training by applied learning techniques utilizing decision making case studies, computer- assisted models, or other instructional techniques. Prerequisite: Consent of the Department Chair.

MGMT 2317 Management Applications II (MGMK 2317) BMGT 2371 1-5-3

The second in a two-part management laboratory sequence that emphasizes management decision-making skills for various business career fields. Instruction is individually tailored to meet the specific career needs of the student. The course is designed for students desiring to further their management training by applied learning techniques utilizing decision making case studies, computer-assisted models, or other instructional techniques. Prerequisites: MGMT 2316 and consent of the Department Chair.

➲MGMT 2318 Total Quality Management 3-0-3

This course is designed to provide an understanding of the total quality management methods and procedures necessary to produce quality products and services. Students will learn how to establish management controls that result in minimum deviation from desired standards, calculate the true costs of producing an inferior product, analyze symptoms of organizations that lack commitment to total quality management, and define the role of each level of management and of each employer.

MGMT 2319 Small Business Accounting BUSG 1370 3-0-3

A course designed to introduce small business owners to basic accounting/ financial information necessary to the successful operation of a business. Topics covered include, but are not limited to, cost behavior, cost-volume-profit relationships, budgeting, relevant costs, pricing decisions, payroll accounting and taxes. Prerequisite: ACCT 2301.

MGMT 2320 Business Operations 3-0-3

This course is an introduction and practical approach to small business operations and management. Subjects include the analysis of one's personal skills, experience, and expectations in starting a business; technical and managerial skills necessary to run a business profitably; marketplace statistics; gathering and analyzing data; purchasing and inventory; record keeping; and product marketing. Other subjects include tax considerations for small business; revenue sources; and measures of profitability. Members of the Students in Free Enterprise (SIFE) organization that participate during the entire training program can be awarded credit for this course with the approval of the SIFE Faculty Advisor.

MGMT 2321 Entrepreneurship and Business Plan Development BUSG 1371 3-0-3

This course involves the development and presentation of a plan to create or expand a business. It provides the student with an opportunity to develop and demonstrate a mastery of the essential competencies required for business opportunity analysis, the development of a marketing plan, and the development of a business financial plan. Students will prepare a business plan for a business that they want to develop or expand. Prerequisite: MGMT 1308 or Consent of the Department Chair.

MGMT 2322 Salesmanship BMGT 1333 3-0-3

This is a course in professional personal selling designed for those students who will most likely represent organizations that sell products to the public and other organizations.

➲MGMT 2351 Advanced Leadership 3-0-3

Presents advanced leadership and management techniques, organizational goals, problem solving, communications and management of changes.

➲MGMT 2354 Management Problems 3-0-3

This course is designed to develop and improve the soldiers' skills so they may effectively execute the duties required of military managers.

➲MGMT 2358 Trainer's Workshop (TW) 2.5-0-3

This course provides management of training for the small unit, individual Skill Qualification Test (SQT), and small group performance-oriented training.

➲MGMT 2381 Job Performance and Motivation 3-0-3

A course designed to provide managers with the capability of applying approaches that influence employee job performance through the adoption of appropriate leadership and motivation techniques, and assessment of group and individual behavior patterns. Communication problem-solving techniques in a changing society as they affect the day-to-day efforts of subordinates will also be explored.

➲MGMT 2382 Individual Orientation Techniques 3-0-3

A course designed to provide managers with the skills required to orient personnel in individual job tasks and to facilitate the continuity of the organization's functions.

➲MGMT 2383 Group Orientation Techniques 3-0-3

A course designed to develop managerial skills required in group training efforts. Emphasis is placed on integrating individual experiences into the group orientation efforts. Prerequisite: MGMT 2382.

➲MGMT 2384 Assessing of Training Standards, Goals and Objectives 3-0-3

A course designed to provide managers with the ability to establish realistic and relevant training standards. The relationship among organizational goals, training objectives, and training standards are emphasized to ensure continuity of effort. Personnel involved in the process and appropriate strategies and methodologies in the establishment of training standards are also stressed. Prerequisite: MGMT 1381.

➲MGMT 2385 Management Training Theory 3-0-3

This course provides the manager with a basic knowledge of management training theories and application of the aspects of training which influence effectiveness of management and the learning process.

➲MGMT 2386 Management Learning Strategies 3-0-3

This course is designed to provide managers with a systematic approach to training program development. Theoretical and empirical modes of learning and topics related to social problems affecting the design of instruction environments will be emphasized.

MGMT 2401 Management and Marketing Internship III (MGMK 2401) 1-18-4

This course is a continuation of Management and Marketing Internship II. Prerequisite MGMT 1402 and consent of the Department Chair.

MGMT 2402 Management and Marketing Internship IV (MGMK 2402) 1-18-4

This course is a continuation of Management and Marketing Internship III. Prerequisite: MGMT 2401 and consent of the Department Chair.

➲ *Not offered on Central Campus*

(MHSV) Mental Health Services

[(CDCP) Chemical Dependency Counseling Program]

MHSV 1301 Introduction to Chemical Dependency Services (CDCP 1301) 3-0-3

This course is an overview of the field of chemical dependency services and to the clientele, work and career opportunities available to interested individuals. Competencies and self knowledge and their importance in the field will be explored. An introduction to levels and standards of care, settings, and licensure requirements for the counselor and facilities will be presented. The impact of drug use, abuse and addiction will be examined. Professional limitations in service delivery based upon level of training will be addresses.

MHSV 1302 Special Skills in Chemical Dependency Counseling (CDCP 1302) 3-0-3

This course will focus on special skills and techniques for service delivery in the various chemical dependency settings. Specific skills that will be addressed: safety, assessment, referral, crisis intervention, abuse issues, dealing with power struggles, advocacy, case management, documentation and record keeping, confidentiality, relapse prevention, direct care, and communicable diseases. Supervision, management and administration within chemical dependency service settings will be introduced.

MHSV 1303 Introduction to Counseling Theories (CDCP 1303) 3-0-3

This course presents an overview of the most prevalently used counseling theories in the delivery of human services. Application of the theoretical concepts to clients of all ages and stages of development will be made. The role and limitations of the counselor, dependent upon licensure and certification, in using the various counseling theoretical approaches will be discussed.

MHSV 1304 Basic Communications Skills in Human Services (CDCP 1304) 2-10-3

This course is designed to facilitate development of the basic communication skills necessary to develop an effective helping relationship with clients across the life span and in various service settings. Topics will include: identification of one's personal style of communication, exercises in self exploration, therapeutic versus non-therapeutic communication, recognition of and appropriate response to defense mechanisms, simulated client interactions, and problem identification. The application of concepts in this course will be accomplished through field placement and simulated classroom lab. Field placement assignments will be based upon specialization option. Transportation, insurance, CPR-First Aid. Crisis Intervention and Management of Aggressive Behavior, Infectious Disease Awareness, immunizations, and other expenses will be provided by the student.

MHSV 1305 Drug Education (CDCP 1305) 3-0-3

This course provides the student with an overview of the major drug classifications and their therapeutic use, drug regulations and the law, and the basic physiological explanation of drug action. The most commonly abused drugs are discussed in terms of effect, tolerance, addiction/dependence, cross-dependence, withdrawal, and client education needs. The impact of developmental issues and drug use from birth through adulthood will be examined.

MHSV 1306 Special Populations in Chemical Dependency Counseling (CDCP 1306) 3-0-3

This course provides introductory information about chemical dependency in the following populations: adolescents, women, geriatric, and those in the criminal justice system. Issues that impact chemical dependency identification, assessment, treatment, and referral for these populations are discussed.

MHSV 1307 Diversity in Human Services (CDCP 1307) 2-3-3

This course provides an examination of the impact of diversity in culture, gender, and ability levels on the delivery of human services across the life span. The course examines diversity issues as they relate to needs assessment, treatment and referral of the client. Emphasis will be placed upon providing equitable and effective services to all clients.

MHSV 1308 Introduction to Community Youth Services 3-0-3

This course is an overview to the field of community youth services and to the clientele, work and career opportunities available to interested individuals. Competencies and self knowledge and its importance in human services will be explored. An introduction to levels and standards of care settings and the nature of the client in those settings will be presented. The impact of developmental issues from birth through late adolescence as they apply to community youth services and legal and ethical issues such as conservatorship will be examined. Professional limitations in service delivery based upon level of training will be addressed.

MHSV 1309 Introduction to Community Service Delivery Models 3-0-3

This course will focus on the level of care in juvenile justice systems and community based programs. The standards of care required in the following service delivery models will be discussed: foster care, half-way houses, residential treatment centers group homes, therapeutic camping programs, emergency shelters, community support programs, detention centers, state schools and centers and others as applicable.

MHSV 1310 Special Skills in Community Youth Services 3-0-3

This course will focus on special skills and techniques for service delivery in the various community youth services settings. Specific skills that will be addressed: safety, assessment, referral, crisis intervention, abuse issues, dealing with power struggles, advocacy, developmentally appropriate activity, case management, documentation and record keeping, confidentiality, direct care, and communicable diseases. Supervision, management and administration within community youth service setting will be introduced.

MHSV 1311 Ethics and Legal Issues in Human Services 3-0-3

This course is an overview of the following: codes of ethics, maintaining professional boundaries, power struggles, legal standards, ethical decision making, client rights, and professional competence. Professional limitations in service delivery based upon level of training will be addressed. Experiential exercises will assist the student in evaluating their personal value system and world view as it relates to maintaining ethical standards in human services.

MHSV 2301 Family Issues in Human Services (CDCP 2301) 3-0-3

This course discusses the dynamics present in families where there are acute and chronic problems that require human services intervention. The following family systems will be explored: nuclear, extended, foster, and blended. Implications of family dysfunction caused by or expresses as a function of the following will be examined: physical and emotional abuse, substance abuse, codependency, and criminality. Techniques for facilitating family involvement in service delivery will be discussed. Specific skills that will be addressed include advocacy, crisis intervention, case management, referral, and communication and education of developmentally appropriate parenting. Professional limitations in service delivery based upon level of training will be addressed.

MHSV 2302 Individual Counseling in Chemical Dependency Services (CDCP 2302) 2-10-3

This course focuses on the refinement of the following skills for the chemical dependency client: communication, assessment, documentation, clinical record keeping, treatment planning, case management, referral, discharge planning, relapse prevention, and ethical decision making. Counselor wellness will focus on: working as a team, anxiety and stress management, time management, boundary issues and development of healthy relationships. Professional limitations in service delivery based upon level of training will be addressed. The application of concepts in this course will be accomplished through field placement and simulated classroom lab. Transportation, insurance, CPR-First Aid, Crisis Intervention and Management of Aggressive Behavior, Infectious Disease Awareness, immunizations, and other expenses will be provided by the student. Prerequisites: Departmental approval and a grade of "C" or better in MHSV 1301, 1302, 1304, 1305, 1306, 1307, 2303, 1311.

MHSV 2303 Group Dynamics (CDCP 2303) 2-10-3

This course is an introduction to the patterns and dynamics of group interactions across the life span. The focus is on group theory, structure, types, stages, development, leadership, therapeutic factors, and the impact of groups on individual and group growth and behavior. Effective group facilitation skills and techniques used to address special population issues and needs are covered, to include chemical dependency and youth services. Professional limitations in service delivery based upon level of training will be addressed. The application of concepts in this course will be accomplished through field placement and simulated classroom lab. Field placement assignments will be based upon specialization option. Transportation, insurance, CPR-First Aid, Crisis Intervention and Management of Aggressive Behavior, Infectious Disease Awareness, immunizations, and other expenses will be provided by the student. Prerequisites: Departmental approval and a grade of "C" or better, based upon specialization in, Community Youth Services - MHSV 1304, 1305, 1308,1310; Chemical Dependency - MHSV 1301, 1302, 1304, 1305.

MHSV 2305 Chemical Dependency Issues for Women (CDCP 2305) 3-0-3

This course focuses on issues that impact the treatment of chemically dependent women. The unique issues specific to the following age groups will be examined: latency, adolescence, adulthood, and the geriatric woman. Identification, statistic, major drugs of abuse, patterns of use, cultural issues, medical complications, pregnancy, and fetal effects are discussed. The relationship of chemical dependency to violence, socialization, co-dependency, parenting, life span issues, economics, barriers to treatment, and support systems is presented. Special attention will be given to case management issues relevant to women.

MHSV 2306 Chemical Dependency Issues for Adolescents (CDCP 2306) 3-0-3

This course explores the dynamics of the adolescent with chemical dependency. Identification, statistics, major drugs of abuse, patterns of use, cultural issues, and medical complications are discussed. Special focus will be given to developmental issues, life skill development, conflict mediation, peer pressure, family relationships, team work, violence, gangs, gambling and communicable diseases. Attention will be given to case management issues relevant to adolescents. Professional limitations in service delivery based upon level of training will be addressed. Ethical and legal parameters specific to working with adolescents to include but not limited to: boundaries, power struggles, legal standards, ethical decision making, client rights, and professional competence will be examined.

MHSV 2307 Introduction to Mental Disorders 3-0-3

This course is an introduction to the symptoms and etiology of behavioral, emotional and mental disorders across the life span. Diagnostic criteria as presented in DSM-IV and therapeutic approaches will be reviewed.

MHSV 2308 Behavioral Management Skills in Youth Services 2-10-3

This course is a study of behavioral management techniques for clients in youth service settings. The following skills are included but not limited to: milieu development, behavior modification, administration or supervision of self administration of medication, mediation of conflict, problem solving, decision making, working as a team, anxiety and stress management, time management, and development of health relationships. Emphasis will be placed on assisting the client in developing life skills. Appropriate response to the child/youth in special circumstances will be covered: hallucinations, anxiety, panic, acting out, or related behavioral manifestations. The application of concepts in this course will be accomplished through field placement and simulated classroom lab. Transportation, insurance, CPR-First-Aid, Crisis Intervention and Management of Aggressive Behavior, Infectious Disease Awareness, immunizations, and other expenses will be provided by the student. Prerequisites: Departmental approval, and a grade of "C" or better in MHSV 1304, 1305, 1307, 1308, 1309, 1310, 1311, 2303, 1310.

MHSV 2310 Special Topics - Issues in Human Services 3-0-3

Course topics are designed to meet specific community need as identified by local agencies and institutions. Skills needed to provide specific human services in a variety of settings are explored. This course may be repeated for credit as topics vary.

MHSV 2401 Field Placement in Chemical Dependency Counseling (CDCP 2401) 2-20-4

This course provides for a supervised filed placement experience or a 300-hour Texas Commission on Alcohol and Drug Abuse (TCADA) approved practicum. The focus of the field placement experience is on active participation in service delivery and application of knowledge acquired about the core functions of the chemical dependency counselor as identified by TCADA, in prerequisite courses. Experience will vary based upon service setting. Appropriate personnel will provide direct supervision and evaluation of student performance on a day-to-day basis. Professional limitations in service delivery based upon level of training will be addressed. Course grade determination is outlined in the syllabus. Transportation, insurance, CPR-First Aid, Crisis Intervention and Management of Aggressive Behavior, Infectious Disease Awareness, immunizations, and other expenses will be provided by the student. Prerequisites: Department approval and a grade of "C" or better in MHSV 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1311, 2301, 2302, 2303, 2307.

MHSV 2402 Field Placement in Community Youth Services 2-20-4

This course provides for a supervised field placement experience in a community youth service agency and classroom discussion of placement experience. Professional limitations in service delivery based upon level of training will be addressed. The focus of the field placement experience is on active participation in service delivery and application of knowledge acquired in prerequisite courses. Experience will vary based upon service setting. Agency personnel will provide direct supervision and evaluation of student performance on a day-to-day basis. Course grade determination is outlined in the syllabus. Transportation, insurance, CPR-First Aid, Crisis Intervention and Management of Aggressive Behavior, Infectious Disease Awareness, immunizations, and other expenses will be provided by the student. Prerequisites: Departmental approval and a grade of "C" or better in MHSV 1303, 1304, 1305, 1307, 1308, 1309, 1310, 1311, 2301, 2303, 2307, 2308.

(MILS) Military Science Management

(Not offered in Texas)

MILS 1101 Military Science I 1-0-1
A study of first-line to mid-level supervision. The course reviews procedures in the context of the standard supervisory roles of directing, problem solving, decision making, and personal relations at the primary leader level.

MILS 1102 Fundamentals of Leadership 1-0-1
An introduction to the theories of motivation, with a focus on their practical application reflected in current military leadership fundamentals. Includes an overview of the traits, techniques, and styles common to all effective leaders.

MILS 1105 Introduction to Military Law 1-0-1
An introduction to the Uniform Code of Military Justice. An overview of the military judicial system, the responsibilities at each level of the organization, and its unique qualities in comparison with civilian legal systems.

MILS 1106 Naval Science I 1-0-1
A study of first-line to mid-level supervision. This course reviews leadership procedures and the standard supervisory roles of directing, problem solving, decision making, and personal relations in the context of the U.S. Navy.

MILS 1107 Air Force Science I 1-0-1
A study of first-line to mid-level supervision. This course reviews leadership procedures and the standard supervisory roles of directing, problem solving, decision making, and personal relations in the context of the U.S. Air Force.

MILS 1108 Military History of the Sinai 1-0-1
This course provides a historical survey of the military history of the Sinai Peninsula with emphasis on the cultural, political, and economic conditions which contributed to the regional conflicts.

MILS 1201 Military Science II 2-0-2
Fundamental course on the basics of applied management in the context of the military, its missions, organization, and operations. The course concentrates on the basic leadership level of employing personnel and equipment. Prerequisite: MILS 1101 or consent of the instructor.

MILS 1202 Briefing Techniques, Aids and Devices 2-0-2
Combination of formal instruction, practical exercises, and critiques designed to teach and improve briefing techniques. Includes information, staff, and decision briefings as well as appropriate and effective use of visual aids.

MILS 1203 Professionalism and Responsibility 2-0-2
An organizational behavior approach that examines the beliefs, values, and norms of the organization; how they impact on the individual; and implications for managers. Military culture is used throughout the course to illustrate how professionalism and responsibility are defined and measured by the degree of similarity between the individual and the organization.

MILS 1204 Management of Performance Oriented Training 2-0-2
Course teaches performance-oriented training by looking at the roots of the performance approach as developed by the military and its relation to current learning theory. The course includes a detailed study of the task/conditions/standards model, lesson plans, aids, and devices.

MILS 1205 Evaluation of Instruction & Training 2-0-2
Follow on course to MILS 1204, to provide the leader with the tools needed to evaluate the effectiveness of training, reassess proficiency, and adjust training program goals and objectives.

MILS 1207 Professional Development of the Manager 2-0-2
Course explores effective training of junior-level leaders. Studies the tools of proper delegation of tasks and assistance to subordinates in problem solving. Emphasis will be placed on the effectiveness of active and passive styles of leadership in reinforcing good performance and motivating towards excellence.

MILS 1208 The Training Management System 2-0-2
A systematic approach to training that consolidates the supervisory and management levels into a short-range training program. Course looks at military training management systems, time management cycles, and the training schedule development process.

MILS 1209 Managerial Theories 2-0-2
An examination of relevant managerial theories to include the management function, decision making, problem-solving techniques, quality control, and performance standard oriented approaches to management.

MILS 1210 Naval Science II 2-0-2
Fundamental course on the basics of applied management in the context of the U.S. Navy, its missions, organization, and operations. The course concentrates on the basic leadership level of employing personnel and equipment.

MILS 1211 Naval Science III 2-0-2
An applied management course at the advanced leadership level, concentrating on mid-level management skills required to employ assets at higher levels of command in the U.S. Navy. Course covers situational analysis, staffing procedures, communications, planning and controlling operations, and evaluations.

MILS 1212 Air Force Science II 2-0-2
Fundamental course on the basics of applied management in the context of the U.S. Air Force, its missions, organization, and operations. The course concentrates on the basic leadership level of employing personnel and equipment.

MILS 1213 Air Force Science III 2-0-2
An applied management course at the advanced leadership level, concentrating on mid-level management skills required to employ assets at higher levels of command in the U.S. Air Force. Course covers situational analysis, staffing procedures, communications, planning and control, in relation to Air Force operations.

MILS 1300 Military Organization and Staff Functions 3-0-3
A study of organizational structure and its impact on the manner in which an organization functions. The course uses the Department of Defense, and one of its component service branches as an example of an organization structured to fit its environment; how this structure impacts on such management functions as planning, decision making, staffing, and control.

MILS 1301 U.S. Military Heritage, Mission and Organization 3-0-3
A case study in organizational development. Course traces the evolution of the U.S. military through history with emphasis on the impact of events and technological developments on the organization's mission, structure, traditions, and customs.

MILS 2101 Stress Management 1-0-1
Supervisory course that identifies the factors causing stress, how to interpret the signs of stress and the basic fundamentals of personal and organizational stress management. The instruction includes the most common causes of stress in the work place and preventative measures a leader can take to control them.

MILS 2103 Time Management 1-0-1

This course teaches the fundamentals of effective time management for the leader and for the organization as a whole, by defining time as a perishable resource that cannot be increased or decreased. Course emphasizes the role time plays in making the organization both effective and efficient as well as the constraints it places over our personal and professional lives.

MILS 2109 Military Science Seminar 1-0-1

A problems course dealing with current military science trends, issues, and literature. This course may be repeated for credit in courses dealing with different problems and issues.

MILS 2201 Military Science III 2-0-2

An applied management course at the advanced leadership level, concentrating on the mid-level management skills required to employ assets at higher levels of command. Course covers situational analysis, staffing procedures, communications, planning and controlling operations, and evaluations.

MILS 2202 Military Science IV 2-0-2

Strategic level application of management science tools in the military to establish and achieve long-range objectives. Course is geared toward senior-level decision making and includes management by objective, planning and control of delegated operations, and creative problem solving.

MILS 2203 Group Orientation Techniques 2-0-2

This course provides practical application of group dynamics to developing moral and esprit de corps. Course examines why groups form, how they develop, their reward power over individuals, and how they can be used as a motivation tool by the leader to enhance job satisfaction.

MILS 2204 The Noncommissioned Officer 2-0-2

A case study in supervisory role development. Course traces the role of the noncommissioned officer in the U.S. military to include duties, authority, responsibilities, and the relationship with officers, warrant officers, and service members. Emphasis is given to the impact of mission changes and technological developments that have continuously redefined the supervisory role.

MILS 2205 The Commissioned Officer 2-0-2

A case study of middle- and upper-level management roles. Course covers the responsibilities, duties and roles at each level of commissioned officer service. The functional relationship between management and supervision is explored in an examination of officer, warrant officer, and noncommissioned officer relationships.

MILS 2206 Management Learning Strategies 2-0-2

An course for leaders who want to explore further into the arena of training in organizations, including needs assessment, instruction techniques, and evaluation procedures. Training for career changes, cross training, and the implications of fair labor standards are also addressed.

MILS 2207 Contemporary Social Issues in the Military 2-0-2

This course examines the current social and political issues in the United States and the U.S. military. Discussion will center on how the issues might effect policy and decisions. Course subject matter is drawn from current events and varies from term to term.

MILS 2208 The U.S. Military in a Contemporary World 2-0-2

This course examines the strategic interests of the United States and NATO, current foreign affairs issues and their impact on the U.S. military. Course subject matter is drawn from current events and will vary from term to term.

MILS 2209 Individual Orientation Techniques 2-0-2

Designed to provide the leader with the skills necessary to manage change within an organization. Course examines the turbulence caused by personnel turnover and automation system transition on the organization and how to cope with it. Orientation programs are evaluated for their effectiveness in providing expedient and productive transition for the individual and the unit.

MILS 2210 Assessing Training Standards, Goals and Objectives 2-0-2

Combination of formal instruction and practical exercises in establishing objectives under conditions of constrained resources. An in-depth look at the military mission essential task list approach for defining training goals, setting strategies, and assessing effectiveness.

MILS 2211 Job Performance and Motivation 2-0-2

An in-depth personnel management study of motivational theories and their application to the military. Includes both older needs theory and more current equity and group behavior models and their implications for leaders in today's environments.

MILS 2261 Leadership and Communication Seminar 2-0-2

Two-weekend seminar of role playing exercises with critiques and feedback designed to improve communication skills, enhance interpersonal awareness, and give the manager more effective group interaction, organization, and supervisory skills.

MILS 2301 Comparative Military Systems 3-0-3

A comparison of selected military systems in the world. Course examines military spending, macroeconomic factors, defense planning, regional alliances and strategies of various countries.

MILS 2309 Military Science Seminar 3-0-3

A problems course dealing with current military science trends, issues, and literature. This course may be repeated for credit in courses dealing with different problems and issues.

MILS 2351 Advanced Leadership 3-0-3

Advanced management study with an in-depth look at the differences and similarities of leadership and management. Includes all elements of the management function, leadership styles, and communication.

MILS 2354 Management Problems 3-0-3

Case study approach in practical application of management theory to the everyday problems of managers. Study groups work out their own solutions and exchange ideas with other groups in presentation and critique forums.

MILS 2371, 2372 Military History I and II 3-0-3

Courses designed to give the noncommissioned officer a concept of the development of the U.S. Army from pre-revolutionary days to the present, the effect of society on the structures and development of the Army, and the history of the development of tactics and strategies based on modern technology.

MILS 2373 U.S. Naval Heritage 3-0-3

This course will enhance the student's appreciation and understanding of the American naval heritage. It will study the events, individuals, technological advances, and schools of thought which have affected American naval development.

(MISC) Microcomputer Technology

MISC 1100 Special Topics 0-3-1
Recent developments and topics of current interest taught in a laboratory format. May be repeated when topics vary.

MISC 1131 Introduction to UNIX 1-0-1
An introduction to the fundamentals of UNIX. Topics include an overview of system structure, file systems, shells, shell scripts, communications, system administration, and a comparison of UNIX and MS-DOS capabilities. Provides practical lab exercises by topic.

MISC 1141 MS-DOS Fundamentals 1-1-1
A coverage of commonly used DOS commands and procedures. Introduces basic DOS concepts, disk preparation, storing and retrieving of information on disk, and file manipulation.

MISC 1306 Introduction to BASIC 2-2-3
Offers an introduction to programming in BASIC for the student interested in using a computer at home, in a small business or as a tool in a subject area such as math or science. Applications will illustrate personal computing techniques. Introduction to programming for non-computer majors.

MISC 1400 Microcomputer Fundamentals 3-3-4
Provides the student with fundamental skills needed in designing computer programs. Focus will be on problem analysis and developing algorithms for the step-by-step solution to problems. Students will learn to use a microcomputer under the MS-DOS operating system in a hands-on environment. A microcomputer language will be used for programming and debugging.

MISC 1403 Introduction to Computer Science and Programming 3-3-4
Introductory programming for Microcomputer Technology majors. Problem solving, algorithm development, pseudocode, and flowcharting. In-depth coverage of a high-level language through programming assignments.

MISC 1404 COBOL Programming 3-3-4
Provides the student with skills and fundamentals in solving business data processing problems using COBOL. The student becomes effective in COBOL programming techniques involving sequential files, single- and double-dimension table handling, and control breaks.

MISC 1405 Computer Concepts and Analysis 3-3-4
Provides the essential foundation for computer science majors in computer concepts, terminology, and business computer systems. Students will be introduced to word processor and spreadsheet software.

MISC 1406 Computer Organization and Architecture 3-3-4
A study of hardware and software characteristics of digital computers. Designed to give the student an understanding of how the fundamental principles by which computers work affect and govern programming techniques. Topics include data representation, machine instruction types, fetch and execution cycles, interrupt schemes, metaprograms, I/O handling, and assembler concepts. Prerequisites: COSC 1403 or MISC 1451 or COSC 1401.

MISC 1420 Word Processing for Microcomputers 3-3-4
An entry-level course designed to teach the use of a current state-of-the-art word processor in a hands-on environment to include installation of word processor software.

MISC 1430 Spreadsheets for Microcomputers 3-3-4
An entry-level course designed to teach the use of a current state-of-the-art spreadsheet in a hands-on environment to include installation of spreadsheet software.

MISC 1440 Data Base for Microcomputers 3-3-4
An introduction to state-of-the-art Database Management Systems for the Microcomputer. Major topics include database design, table creation, query and view construction, form building and report generation. Theory topics are reinforced with hands-on exercises. Prerequisites: MISC 1420, MISC 1430, or MISC 1450.

MISC 1450 Microcomputers for Business 3-3-4
An introduction to the use of the microcomputer as a business tool. Designed specifically for the business oriented, this course will provide familiarity with the microcomputer and its use in the business sector. A hands-on introduction to the use of a word processor, spreadsheet, and database is provided. Types of hardware and software available for business will be studied.

MISC 1451 Introduction to Microcomputer Programming 3-3-4
Introductory programming course for Microcomputer Technology Major. Problem solving, algorithm development, pseudocode and flowcharting. An in-depth look at a high-level language through programming assignments.

MISC 1454 PASCAL Programming 3-3-4
A thorough coverage of structured programming. Emphasis on top-down programming and modular organization. Major topics to be covered include constants, variables, expressions, input and output, self-contained procedures, making decision (REPEAT-UNTIL, WHILE-DO and FOR loops), data types, arrays, character strings, records and set pointers, and disk files. Prerequisite: MISC 1451 or COSC 1403.

MISC 1460 Desk Top Publishing 3-3-4
Designed to provide the student with a working knowledge of desk top publishing. Taught in a hands-on environment. Prerequisite: MISC 1420 or MISC 1450.

MISC 1461 Operating Systems 3-3-4
A study of microcomputer operating systems. Topics include commands, system configuration, batch files, directory and hard disk management. Prerequisite: 8 semester hours of computer courses.

MISC 2110 Topics in Computer Science Laboratory 0-3-1
A laboratory course. May be offered as a stand-alone laboratory course or in conjunction with MISC 2310 when a laboratory is required to develop the topic.

MISC 2301 Information Center Management 3-0-3
Defines the infrastructure of information centers and describes their role and responsibilities in terms of assisting professionals with varying degrees of computer knowledge in using computer technology in the performance of their job function. Prerequisite: MISC 1450.

MISC 2302 Hardware/Software Selection and Acquisition 3-0-3
Selection and acquisition of hardware and software. Topics include capacity sizing of key hardware components, compatibility considerations, lease/purchase alternatives, in-house versus packaged software, documentation and training provided, vendor responsibilities and support, future up-grade capability to support growth, procurement proposals and contracting. Prerequisite: 12 semester hours of MISC courses or equivalent experience.

MISC 2310 Topics in Computer Science 3-0-3
A study of recent developments and topics of current interest in computer science.

MISC 2401 Advanced COBOL 3-3-4
Offers the student of COBOL programming an in-depth study of the theory, programming techniques, and programming efficiencies that will be required of the commercial COBOL programmer. Thorough coverage is given to file design and the special features of ANSI COBOL language. Emphasis is placed on multi-dimensional table handling, searching and sorting techniques, and indexed file manipulation. Structured design and programming will be stressed. Prerequisite: MISC 1404.

MISC 2402 Systems in the MIS Environment 3-3-4
This course examines advanced systems including data base, distributed processing, teleprocessing, local area networks, management information systems and decision support systems. Emphasis will be placed on data base management systems through the development of a data base project. Prerequisite: 12 semester hours of computer courses.

MISC 2453 Visual BASIC Programming 3-3-4
An introduction to the Visual BASIC Programming Language. Major topics include forms and controls, selection, loops, data access and menus. Theory topics are reinforced with hands-on programming exercises. Prerequisite: Minimum of one other programming language.

MISC 2454 Basic Communications, Networking and Internet 3-3-4
A Study of data communications and networking of microcomputer systems. Topics include communications hardware and software, using the Internet as a resource tool, and Local Area Networks. Prerequisite: MISC 1461.

MISC 2455 Microcomputer Field Projects 1-9-4
This course consists of practical applications in the field of microcomputers. It is designed to fit the career objectives of the student. Prerequisite: Consent of the Department Chair.

MISC 2456 C Language Programming I 3-3-4
The use of C in application programming. Major topics include fundamental flow-control constructions, statement grouping, decision making, looping with termination test at top (WHILE, FOR) or bottom (DO), and case selection (SWITCH). Detailed use of functions with internal, external, and global variables. Address arithmetic and call by reference will also be covered. Prerequisite: COSC 1406 and one other programming language.

MISC 2457 Programming with ADA* 3-3-4
An introduction of the basic syntax and semantics of ADA programming language. The design and use of the language will be the general theme of the course while programming exercises will be used to illustrate specific implementations of the language structure. Emphasis will be on importance of style and linguistic considerations. Prerequisite: MISC 1454.

* ADA is a registered trademark of the United States Department of Defense.

MISC 2458 C Language Programming II 3-3-4
An introduction to Object-Oriented Programming (OOP) using the C++ Language. Major topics include data structures, classes, inheritance, encapsulation and polymorphism. Theory topics are reinforced with hands-on programming exercises. Prerequisite: MISC 2456.

MISC 2460 Multimedia Applications 3-3-4
An introduction to the fundamentals of multimedia. Provides the student with an understanding of how computer graphics, computer-generated sounds, and digitized sources can be combined into effective multimedia presentations. Student will be required to design, produce, and present a multimedia presentation. Prerequisites: MISC 1450 and MISC 1460.

(MSMG) Military Science Management-ROTC

MSMG 1000 Leadership Laboratory 0-1-0
Practical application of adventure training skills, first aid, general military skills, drill, and ceremonies. One and one-half laboratory hours a week for one semester. Required of all military science students. Prerequisite: Concurrent enrollment in another military science course.

MSMG 1201 Basic Military Science I-A 2-0-2
Organization and functions of the military and ROTC; customs and courtesies of the service; adventure training; introduction to rappelling and mountaineering techniques; first aid. One two-hour lecture/practice session a week for one semester. Co-requisite: MSMG 1000, Leadership Lab.

MSMG 1203 Basic Military Science I-B 2-0-2
Leadership roles of junior officers and noncommissioned officers; marksmanship techniques, familiarization with the weapons used in infantry units. One two-hour lecture/practice session a week for one semester. Co-requisite: MSMG 1000, Leadership Lab.

MSMG 1210 Basic Military Science II-A 2-0-2
Organization, equipment, and missions of Army combat units; individual and small-unit tactics; leadership in a dynamic environment. Two lecture/practice hours a week for one semester; and a weekend field training exercise. Co-requisite: MSMG 1000, Leadership Lab.

MSMG 1212 Basic Military Science II-B 2-0-2
Leadership skills in adverse conditions. Map reading and a small unit patrolling missions. Two lecture/practice hours a week for one semester, and a weekend field training exercise. Co-requisite: MSMG 1000, Leadership Lab.

(MTNT) Maintenance Technology see also Skills Center (TIBT)

MTNT 1401 Carpentry I 3-3-4
This course is designed to provide the student with an understanding of carpentry as a trade. Included are the use of special tools, measuring devices, wood types, building and concrete forms, framing, floor, wall, and roof construction. Prerequisite or Corequisite: INDU 1400.

MTNT 1402 Electricity 3-3-4
This course is designed to provide the student with a working knowledge of electrical installation as well as service and repair procedures for residential and light commercial buildings. Prerequisite or Corequisite: INDU 1400.

⊃MTNT 1411 Basic Masonry I 2-7-4
This course is an introduction to the highly skilled craft of masonry including safety methods, practices, and proper use of tools and equipment. The student will learn the names, uses, and maintenance of basic masonry tools and equipment. A basic study of masonry materials and federal and state guidelines regulating the trade, safety, and building plans.

⊃MTNT 1412 Basic Masonry II 2-6-4
This course covers the theory and practical applications of the basic bricklaying techniques such as mortar making and spreading, setting courses and laying of brick. Prerequisite: MTNT 1411.

⊃MTNT 1413 Intermediate Masonry I 2-7-4
The student will learn the theory and practical applications of laying straight leads and walls using standard bonds, and the construction of piers. Use of plain and reinforced mortars will be emphasized. Prerequisite or Corequisite: MTNT 1412.

MTNT 2402 Carpentry II 3-3-4
This course is a continuation of MTNT 1401, with additional emphasis placed on cabinetry, exterior and interior trim and finish work, including door and hardware installation. Prerequisite: INDU 1400 and MTNT 1401.

MTNT 2403 Plumbing I 3-3-4
This course covers the theory and practical application of plumbing maintenance, service and repair procedures for residential and light commercial buildings. Topics of study include plastic, copper, cast iron, galvanized pipe, cutting and joining. Prerequisite or Corequisite: INDU 1400.

MTNT 2404 Painting and Refinishing 3-3-4
This course covers the theory and practical application of painting and refinishing residential and light commercial buildings. Topics of study include various types of paint, surface preparation, proper maintenance of and refinishing damaged finished surfaces. Prerequisite or Corequisite: INDU 1400.

➲MTNT 2405 Foundations, Framing and Roofing 3-3-4
The student will be introduced to form fabrication, setting foundations, setting piers and castings, and will practice framing and roofing residential buildings. Students will also have practical exercises in roofing. The course also covers modern placement methods of materials for structures and building layout systems. Prerequisite: MTNT 1401.

➲MTNT 2406 Building Materials and Estimating 3-3-4
This course begins with a study of the manufacturing process, uses, and selection of building construction materials, and continues with exercises in estimating areas, volumes of concrete, foundations, linear and board foot requirements, wall framing, ceiling joists, roof rafter and sheeting material requirements. Prerequisite: MTNT 1401.

➲MTNT 2407 Interior-Exterior Finishing 3-3-4
A study of interior and exterior finishing. The topics covered are cornice treatment, roof coverings, window installation and trim, exterior doors, frames and trim, exterior wall coverings which are typically applied by carpenters, insulation and vapor barriers, wall and ceiling coverings, floor finishing, stair finishing, shelving and interior trim. The student will also learn the importance of truing areas where cabinets will be installed. Prerequisite or Corequisite: MTNT 2405.

➲MTN 2408 Mill Cabinetry Construction and Installation 3-3-4
This course is designed to teach the student to plan operations, select lumber and perform a variety of operations and basic skills required in mill cabinetry. Students will receive practical experience in layout, construction, installation of cabinet work and applying plastic laminates. Prerequisite or Corequisite MTNT 2402.

➲MTNT 2409 Milling Machines 3-3-4
Practical application in the basic skills in the set-up and operation of wood machines. The course also covers mass production of fine cabinetry, mill work, and wood finishing. Prerequisite or Corequisite: MTNT 2408.

MTNT 2410 Plumbing II 3-3-4
This course is a continuation of MTNT 2403, Plumbing I, with additional emphasis on "roughing-in" procedures. Course content will include hot and cold water systems, natural gas and propane piping, circulation systems, measuring and citing in accordance with established codes, cost estimating, and sprinkler systems. Also included are the procedures involved in cast iron pipe installation. Prerequisite: MTNT 2403.

➲MTNT 2414 Intermediate Masonry II 2-6-4
This course is designed to develop the student's ability to lay brick to the line, alone and in group situations with maximum efficiency, safety, and work quality. The theory and practice of special construction such as bond patterns, fireplaces, arches, and lintels will be covered. Prerequisite: MTNT 1413 or consent of the Department Chair.

➲MTNT 2415 Advanced Masonry I and Blueprint Reading 2-7-4
This course will teach the masonry student the skills necessary to estimate the amount and cost of building material, mortar, equipment, and other materials required to complete a given job. The student will also learn how to estimate man-hours required and convert all of the above estimate man-hours required and convert all of the above estimations into a monetary figure used in bidding and how to use estimation formulas. It also provides additional training in bricklaying. Prerequisite: MTNT 2414 or consent of the Department Chair.

➲MTNT 2416 Advanced Masonry II and Estimating 2-7-4
This course will teach the masonry student the skills necessary to estimate the amount and cost of building material, mortar, equipment and other materials required to complete a given job. The student will also learn how to estimate man-hours required and convert all of the above estimations into a monetary figure used in bidding and how to use estimation formulas. It also provides additional training in bricklaying. Prerequisite: MTNT 2415 or consent of the Department Chair.

MTNT 2419 Maintenance Technology Internship 1-18-4
This course consists of on-the-job maintenance technology training that utilizes the principles, knowledge, and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College instructor/coordinator. Prerequisite: Satisfactory completion of all other INDU, AIRC, MTNT, and WLDG, or all TIBT-prefix courses, or consent of the Department Chair.

➲ *Not offered on Central Campus*

(MUSI) Music

MUSI 1141 Choir/Ensemble 1-1-1
This course is open to all students. The choir/ensembles will perform on and off campus. If a Music major, one ensemble is required each semester. Students may choose piano ensemble, chamber ensemble or choir.

MUSI 1169 Individualized Instruction I 0-1-1
Private instruction in any instrument or voice is available. Literature from all style periods and technical skills will be emphasized. One hour lesson per week. Two hours practice per day is required. Instructor approval.

MUSI 1170 Individualized Instruction II 0-1-1
Private instruction in any instrument or voice is available. Literature from all style periods and technical skills will be emphasized. One hour lesson per week. Two hours practice per day is required. Prerequisite: MUSI 1169 or instructor approval.

MUSI 1181 Class Piano I 1-1-1
Introduction to the keyboard. Beginning and elementary level teaching literature and technical skills will be emphasized. Course is geared towards students who have little or no previous musical experience. Five hours weekly practice is required. Open to all students.

MUSI 1182 Class Piano II 1-1-1
Elementary level piano study. Elementary and early intermediate teaching literature of all style periods and technical skills will be emphasized. Some memory work is required. Prerequisite: MUSI 1181 or previous musical experience and instructor approval.

MUSI 1183 Class Voice I 1-1-1
This course is concerned with the most basic principles of singing; correct breathing, posture and the proper use of the vocal anatomy (i.e., palate, larynx, and tongue). Basic vocal literature will be introduced. Prerequisite: MUSI 1301 or instructor approval.

MUSI 1184 Class Voice II 1-1-1
This course is a continuation of Class Voice I. More advanced literature will be studied. Prerequisite: MUSI 1183.

MUSI 1216 Ear Training and Sight Singing I 1-2-2
This course is designed to help the student develop the aural skills pertinent to proficiency in music theory. It includes the study and proper identification of melodic patterns, intervals and triads, and exercises in melodic dictation. Prerequisite: MUSI 1301.

MUSI 1217 Ear Training and Sight Singing II 1-2-2
A continuation of Ear Training and Sight Singing I. Sight singing, intervals, triads, and seventh chords, asymmetric and mixed meters. Exercises in melodic and harmonic dictation. Prerequisite: MUSI 1216.

MUSI 1301 Music Fundamentals 2-1-3
An introduction to music including note reading, rhythm, intervals, triads, scales, and key signatures.

MUSI 1304 Foundations of Music 2-1-3
A study of the basic fundamentals of music with an introduction to melodic, rhythmic, and harmonic instruments. Emphasis on participation in singing and reading music. For Music majors, students in the field of education and the general college student.

MUSI 1306 Music Appreciation 3-0-3
This course is designed for the Music major as well as for the general college student. It emphasizes intelligent, directed listening to music with attention focused on the materials, the forms and the periods and styles of music. Course work will also cover the relation of music to other areas of cultural development.

MUSI 1308 Music Literature I 3-1-3
An in-depth study of the music from the 15th through the 17th centuries. Emphasis will be placed on principle forms and composers of the literature of those historical periods. Prerequisite: MUSI 1306.

MUSI 1309 Music Literature II 3-1-3
A continuation of Music Literature I with an in-depth study of music in the periods of the late 18th through 20th centuries. Prerequisite: MUSI 1308.

MUSI 1311 Music Theory I 2-1-3
A continuation of Music Fundamentals. Harmonic Progressions, seventh chords, cadences, pentatonic, and modal scales. Prerequisite: MUSI 1301 or placement exam by the instructor.

MUSI 1312 Music Theory II 2-1-3
A continuation of Music Theory I with an introduction to four-part writing and analysis of music. Prerequisite: MUSI 1311 or placement exam by the instructor.

MUSI 2271 Individualized Instruction III 0-2-2
For students with a considerable keyboard skill. Scales, chords, and arpeggios on four octaves in all keys. Literature: selections from the romantic, impressionistic and modern piano literature. All work is to be memorized. One hour private lesson per week. Two hours daily practice required. Prerequisite: MUSI 1170.

MUSI 2272 Individualized Instruction IV 0-2-2
For students with a considerable keyboard skill. Scales, chords and arpeggios on four octaves in all keys. Literature: selections from the romantic, impressionistic and modern piano literature. All work is to be memorized. One hour private lesson per week. Two hours daily practice required. Prerequisite: MUSI 2271.

MUSI 2303 Piano Pedagogy 2-1-3
Open to Music majors only. The study of piano teaching methods from the beginning through the intermediate levels including the development of technique, memory, style, and musicianship and the planning of a balanced repertoire, review and evaluation of piano literature. Laboratory includes supervised practice teaching. Prerequisite: Department Chair approval.

MUSI 2311 Music Theory III/Elementary Harmony 2-1-3
A study of the harmonic materials of the 18th and 19th centuries through analysis and written exercises. Dominant and secondary seventh chords, secondary dominants, the diminished seventh chord, the Neapolitan sixth, the augmented sixth chords, nonharmonic tones, harmonic tones, harmonic dictation for the keyboard. Prerequisite: MUSI 1311.

MUSI 2312 Music Theory IV/Intermediate Harmony 2-1-3
The study of harmony as an organizing element of the large-scale musical structure. Diatonic, chromatic and inharmonic modulations; the modulating sequence. Melody harmonization, analysis of larger works, harmonic dictation. Modulation to related and distant keys on the keyboard. Prerequisite: MUSI 2311.

New course PR F98

(NURI) Nursing

NURI 1101 Psychiatric Nursing I 1-1-1
This course introduces the student to the care of the emotional ill person.

		New course PR F98
Music	1201	2421
	2343	2331
	2242	1324
	1216	2333
	2341	2232
	1222	1212
	1321	1113
	1223	1114
		1415

Post courses

NURI 2101 Nursing Trends Seminar 1-0-1
This course is designed to ease the transition from student to graduate status through exploration of patterns of patient care, areas of employment, legal and professional responsibilities, current issues and trends. The seminar method is used throughout. Prerequisite: NURI 2903 and Corequisite: NURI 2904.

NURI 2102 Psychiatric Nursing II 1-1-1
Focus is on psychopathologies and the various nursing interventions appropriate for treatment. Emotional illness across all ages is included. There is a one-hour laboratory component in this course. Prerequisite: NURI 1101, 1901, and 1902. Corequisite: NURI 2903 or another clinical nursing course or consent of the Department Chair.

NURI 2103 Psychiatric Nursing III 0-4-1
This course will center on clinical application of psychiatric nursing concepts in the care of persons seeking help for emotional/mental health problems. Students are guided in use of techniques of establishing, maintaining and terminating therapeutic nurse-patient/client relationships. A number of community facilities will be utilized for student's supervised clinical experience. Prerequisite: NURI 2102, 2903 and Corequisite: NURI 2904.

NURI 2903 Maternal and Child Health Nursing 4-20-9
The parents, child, family and/or significant others are considered as a unit in this course. Nursing care experience includes maternity care (antepartum, intrapartum, and postpartum), neonatal care, and pediatric care. The different needs of children related to developmental stages and pathological conditions are emphasized. Family planning, health teaching, and family adaptation to problems of daily living are also discussed. Prerequisite: NURI 1902, BIOL 2402, and PSYC 2314. Corequisite: BIOL 2421 and NURI 2102.

NURI 2904 Medical-Surgical Nursing II 4-20-9
The course aids the student in developing skills in caring for groups of patients with more complicated medical-surgical nursing problems. The patient and significant others are considered in the planning and administering of nursing care by use of the nursing process in the hospital, planning for discharge and continuing care in the home or with other agencies. Experiences in team nursing will provide the student with the opportunity to function as a team member and to develop beginning skills of team leading. Lectures, seminar discussions, group work, audio-visual aids, simulated experience projects, independent research projects, and nursing conferences may be utilized in addition to clinical practice. Prerequisite: NURI 2903 and BIOL 2421. Corequisite: NURI 2103 and 2101.

(OADM) Office Administration
see also Skills Center (TIHI) and (TIOA)

OADM 1131 Beginning Typing I 1.5-1.5-1
A beginning course in touch typing. The course will emphasize mastery of machine parts and the keyboard.

OADM 1133 Intermediate Typing I 1.5-1.5-1
A continuation of Beginning Typing II and Beginning Keyboarding/Data Entry. Students will increase typing accuracy and speed. Prerequisite: WOPO 1303 or OADM 1232 or ability to type 25 WPM for five minutes with no more than five errors.

OADM 1232 Beginning Typing II 1.5-1.5-2
A continuation of Beginning Typing I. Special emphasis will be placed on speed development. The course will include an introduction to letter writing, tabulating, and preparing manuscripts. Prerequisite: OADM 1131.

OADM 1234 Intermediate Typing II 1.5-1.5-2
A continuation of Intermediate Typing I. Students will compose and type business letters, tabulations, and manuscripts of a more demanding nature. Prerequisite: OADM 1133.

OADM 1301 Beginning Shorthand 2-4-3
An introduction of shorthand. Students will receive initial training in shorthand emphasizing reading, writing, theory principles, brief forms and related activities.

OADM 1302 Intermediate Shorthand 2-4-3
Students will continue shorthand training and reinforcement of theory. Prerequisite: OADM 1301 or equivalent.

OADM 1305 Information and Records Management 2-4-3
This course introduces the basic principles and procedures concerning the management of document-based information systems required in the operation of an organization's business. Topics include document-based records classification, storage, maintenance, and disposition methods and systems; electronic database creation, storage, and retrieval technology; and the principles for the selection of records equipment and supplies. Prerequisite: WOPO 1303 or equivalent.

OADM 1306 Office Procedures and Applications 3-0-3
Designed for the student who wishes to prepare for a career as an executive secretary. The following topics are covered: human relations skills, meetings and conferences, travel arrangements, information sources, mail handling, telephone techniques, receptionist duties, scheduling, and related office routines.

OADM 1308 Business Correspondence 3-0-3
A course designed to teach effective business writing and to give practice in composing all types of business correspondence, including e-mail. Students will also complete research using the Internet.

OADM 1309 Business Mathematics and Calculating Machines 2-4-3
Technique familiarization in the operation of the most commonly used office machines: computation; calculations; speed drills; percentages, discounts and net values, chain discounts, business forms. Emphasis will be placed on business mathematics.

OADM 1401 Administrative Secretarial Cooperative Training I 1-21-4
This course consists of on-the-job administrative secretarial training that utilizes the principles, skills, and knowledge gained in the setting of the classroom. The student is employed at an approved work site under the supervision of the Department Chair.

OADM 2301 Advanced Shorthand 3-3-3
Students will improve their ability to take dictation and transcribe mailable copy. Theory principles, brief form derivatives, vocabulary development, speed building, mailable transcription, and office-style dictation will be emphasized. Prerequisite: OADM 1302 or equivalent.

OADM 2302 Advanced Typewriting 3-3-3
This course includes advanced work in such specialized production as tabulation, interoffice correspondence, manuscripts, telegrams, legal forms, medical forms, special interoffice forms, and additional work on the arrangement of business letters with special features. Prerequisite: WOPO 1303 and 1304.

OADM 2304 Office Accounting I ACNT 1325 2-4-3
Elementary principles of accounting, journalization, posting, statements, special journals, subsidiary ledgers, payroll records, and payroll taxes. Special emphasis is placed on personal, family and small business accounting systems.

OADM 2305 Office Accounting II 2-4-3
Analysis and recording of business transactions, use of the journal and ledgers, trial balance and worksheets, adjusting and closing entries, accounting statements, introduction to partnership and corporate accounting, special journals and ledgers, business papers and business procedures relating to accounting voucher systems. Prerequisite: OADM 2304 or equivalent.

OADM 2307 Automated Office Management 3-0-3
This course includes topics of instruction in office procedures, work simplification, selection and training of office workers, supervision, office etiquette and ethics, and an analysis of the responsibilities of the manager, secretary, clerk, and other office workers. The student is given an opportunity to relate knowledge, information and skills acquired in previous academic courses. Special emphasis is placed on the relationship of various systems that affect the modern office. Prerequisite: Sophomore standing or consent of the Department Chair.

OADM 2308 Office Occupations Internship 1-5-3
The student will be provided a combination of occupationally related classroom instruction and on-the-job training in cooperation with offices within the Office Administration Department and other campus offices. Actual work training will be available in the following areas: keyboarding, filing, duplication, use of telephone, preparation of correspondence, voice transcription machine, record keeping, proofreading, etc. Departmental approval is required.

OADM 2309 Office Administration Internship 1-5-3
Students will be provided a combination of occupational related class work instruction and on-the-job training in cooperation with Office Administration Department and other campus offices. Students will demonstrate advanced competencies with work experiences in the following areas: taking dictation, keyboarding, letter composing, telephone procedures, filing, work scheduling, financial calculating, duplicating, transcribing from dictation equipment, etc. Departmental approval is required.

➲OADM 2350 Machine Shorthand 3-3-3
This course is an introduction to machine shorthand. It covers machine shorthand principles, abbreviations, derivatives, word lists, and operation of the machine. The students develop dexterity and keyboard mastery through writing practices and laboratory exercises.

OADM 2401 Administrative Secretarial Cooperative Training II 1-21-4
This course is a continuation of the Administrative Secretarial Cooperative Training I. Prerequisite: OADM 1401.

➲ *Not offered on Central Campus*

Paralegal/Legal Assistant

See (LEGA)

(PHED) Physical Education

PHED 1100 Football and Basketball 0-3-1

PHED 1101 Volleyball and Softball 0-3-1

PHED 1102 Beginning Badminton 0-3-1

PHED 1103 Beginning Bowling 0-3-1

PHED 1104 Soccer 0-3-1

PHED 1105 Folk and Square Dancing 0-3-1

PHED 1106 Beginning Swimming 0-3-1

PHED 1107 Beginning Tennis 0-3-1

PHED 1108 Beginning Golf 0-3-1

PHED 1109 Basketball and Soccer 0-3-1

PHED 1110 Karate I 0-3-1

PHED 1113 Country Western Dance 0-3-1

PHED 1114 Volleyball 0-3-1

PHED 1115 Basketball 0-3-1

PHED 1117 Hunting 0-3-1

PHED 1118 Jogging/Walking 0-3-1

PHED 1119 Racquetball 0-3-1

PHED 1120 Body Building 0-3-1

PHED 1123 Advanced Bowling 0-3-1

PHED 1124 Advanced Swimming 0-3-1

PHED 1125 Intermediate Tennis 0-3-1

PHED 1126 Advanced Golf 0-3-1

PHED 1127 Tumbling 0-3-1

PHED 1129 Advanced Badminton 0-3-1

PHED 1130 Physical Conditioning 0-3-1

PHED 1131 Aerobics 0-3-1

PHED 1132 Varsity Athletics 0-3-1

PHED 1133 Weight Training 0-3-1

PHED 1134 Cycling 0-3-1

PHED 1135 Archery 0-3-1

PHED 1136 Figure Control 0-3-1

PHED 1138 Rhythmic Aerobics 0-3-1

PHED 1140 Karate II 0-3-1

PHED 1151 Scuba Diving 0-3-1
PADI open-water, level-one certification may be earned.

PHED 1152 Scuba Diving II 0-3-1
Advanced open-water certification may be earned.

PHED 1301 Foundations of Physical Education 3-0-3
A course which introduces the student to the fields of health, physical education, and recreation. Emphasis on the scope and organization of professional activities, opportunities and qualifications of the professional physical educator.

PHED 1304 Foundations of Health 3-0-3
A fundamental course in principles and problems of healthy living. Emphasis on current information and research as it applies to individuals' daily lives.

PHED 1306 Safety and First Aid 3-0-3
Health, knowledge and practice with regard to individual and group welfare; personal hygiene; community health problems; communicable disease control; and health organizations. Instruction in American National Red Cross first aid methods for emergency treatments of injuries and sudden illness. American Red Cross certification in Community CPR and Standard First-Aid Responding to Emergencies may be earned.

PHED 1308 Sports Officiating 3-0-3
Theory and practice in techniques of officiating. Prerequisite: Officiating experience.

PHED 1336 Principles of Recreational Leadership 3-0-3
A study of the development of skills and leadership ability in various program areas of recreation including boys clubs, city recreation and armed forces. It describes recreational leadership methods for selection and discusses the principles and problems of recreational supervision.

PHED 2155 Water Safety 0-3-1
Participation and instruction in advanced aquatic activities. Prerequisite: Demonstrated swimming skills.

(PHIL) Philosophy

PHIL 1301 Introduction to Philosophy 3-0-3
A general introduction to critical and reflective thinking as applied to the basic problems of existence and the meaning of human life and institutions; study of methods and types of evidence utilized by authority, intuition, revelation, reason and scientific methods, and a study of the nature of philosophy, including its relation to religion, science, and art.

PHIL 1304 World Religions 3-0-3
A survey course dealing with the origins, tenets, and development of the major world religions. Deductive method used to understand religion as a phenomenon in man's life. Discussion of Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

PHIL 2303 Logic 3-0-3
Nature and methods of correct reasoning, deductive proof, inductive proof, fallacies, and arguments.

PHIL 2306 Introduction to Ethics 3-0-3
Study of basic principles of the normal life, with critical examination of traditional and current theories of the nature of goodness, happiness, duty, and freedom.

PHIL 2307 Introduction to Social and Political Philosophy 3-0-3
Critical examination of the major theories concerning the organization of societies and government.

PHIL 2374 Old Testament Survey 3-0-3
A general survey of Old Testament as to origin, literature, and history with special study of the institutions, religions, and natural life of the Hebrew people.

PHIL 2375 New Testament Survey 3-0-3
The course will consist of a survey of all the New Testament literature: the Synoptic Gospels, the Johanine Corpus, Acts, the Pauline Letters, and the General Epistles. Particular attention will be given to the methods and results of contemporary critical research in the New Testament studies. Thus, both primary sources (New Testament documents) and secondary literature on the New Testament will be used.

(PHYS) Physical Sciences

PHYS 1305 Survey of Physics 3-0-3
A survey of the fundamental principles of physics designed to acquaint students with the basic concepts of classical and modern physics which are the foundation of everyday phenomena.

PHYS 1311 Survey of Astronomy 3-0-3
A non-mathematical approach to the solar system. Beginnings of astronomy, motions of celestial bodies, members of the solar system, atoms and light are studies. Planetarium and observatory are used in class.

PHYS 1312 Descriptive Astronomy 3-0-3
A non-mathematical approach to the analysis of star light, stellar characteristics, stellar evolution, the sun, galactic characteristics, and cosmology are included. Planetarium and observatory are used in class.

PHYS 1315 General Physical Science 3-0-3
This is an introductory course for students who need to acquire a basic understanding of the philosophy and methods of science. Topics will be selected from various fields of physical science and will cover a review of the basic principles and theories.

PHYS 1401 College Physics I 3-3-4
Fundamentals of classical mechanics, heat, and sound are discussed. This course is primarily for students who plan to major in medicine, dentistry, veterinary medicine, pharmacy, and for all other students needing a two semester course in physics. The course includes three hours of lecture and three hours of laboratory per week. Prerequisite: MATH 1316 or concurrent enrollment.

PHYS 1402 College Physics II 3-3-4
A continuation of College Physics I, fundamentals of classical electricity, magnetism, light, wave-motion, atomic and nuclear physics are covered. Prerequisite: PHYS 1401 or consent of the Department Chair.

PHYS 1413 Environmental Science 3-3-4
This is a one-semester lab course designed for the non-science major. Emphasis is placed on a global approach to principles and problems in our environment. Topics include energy resources, air and water pollutants, environmental causes of cancer, pesticides and other toxic chemicals, solid and hazardous wastes, noise limits, crowding, land use and abuse, economic considerations and some governmental regulatory agencies. Lab includes methods of measurement, analysis and interpretation of environmental data.

PHYS 1415 Physical Science 3-3-4
This course is an introduction to the methods and philosophy of sciences and is designed for non-science majors surveying topics from physics, chemistry, geology, astronomy, and meteorology. Methods of instruction include practical laboratory experiments, computer applications, and guided discussions. This course is designed to provide development of skills needed for success in other science classes and for improving science literacy.

PHYS 2425 Modern Physics I 3-3-4
Mechanics and heat for Science majors/minors and Engineering majors. Vector Algebra and Calculus are used. The course includes three hours of lecture and three hours of laboratory per week. Prerequisite: MATH 2313 or concurrent enrollment.

PHYS 2426 Modern Physics II 3-3-4

Electricity, magnetism, wave-motion and light, an introduction to modern physics for Science majors and minors, and Engineering majors. Vector Algebra and Calculus are used. The course includes three hours of lecture and three hours of laboratory per week. Prerequisite: PHYS 2425 or equivalent.

➲*Not offered on Central Campus*

(PSYC) Psychology

PSYC 2301 Introduction to Psychology 3-0-3

Basic principles of human experience and behavior involving biological, environmental and sociological studies. An overview course including an introduction to the major studies of psychology.

PSYC 2306 Understanding Human Sexuality 3-0-3

The study of the physiological, sociological, and psychological aspects of human sexuality. Prerequisite: PSYC 2301, PSYC 2315, or consent of the Department Chair.

PSYC 2308 Child Growth and Development 3-0-3

The purpose of this course is to develop an understanding of children and to engender a real interest in them. Consideration is given to the human organism as it develops physically, mentally, emotionally, and socially from birth through adolescence.

PSYC 2314 Life Span Development 3-0-3

This course will study the relationship of the physical, emotional, social and mental factors of growth and development of children and throughout the life span.

PSYC 2315 Personality Adjustment 3-0-3

A study of psychological concepts and principles related to healthy personality and social adjustments.

PSYC 2316 Psychology of Personality 3-0-3

The study of various approaches to determinants, development, and assessment of personality. Prerequisite: PSYC 2301.

PSYC 2319 Social Psychology 3-0-3

The study of individual behavior within the social environment.

(REAE) Real Estate

REAE 1300 Real Estate Mathematics 3-0-3

This course includes, but is not limited to, basic arithmetic skills and review of mathematical logic, percentage, interest, time-value of money, depreciation, amortization, proration, and estimation of closing statements. In addition, there is an introduction to real estate investments and the basic mathematical skills needed by the successful real estate agent.

REAE 1301 Real Estate Principles 3-0-3

This course meets the Texas Real Estate Licensing Act (TRELA) requirement for real estate core course on real estate principles. The course includes: licensing requirements for a real estate broker and salesperson, ethics of practice, title to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also includes a minimum of three classroom hours of instruction on federal, state and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment.

REAE 1302 Real Estate Marketing 3-0-3

This course includes a study of real estate professionalism and ethics, characteristics of successful salesmen, time management, psychology of marketing, listing procedures, advertising, negotiating and closing, financing, and the Deceptive Trade Practices-Consumer Protection Act, as amended, and the Business & Commerce Code.

REAE 1303 Introduction to Residential Construction 3-0-3

This course is a beginner's orientation to the concepts and terminology of residential construction including one-to-four-family residential units. Topics include site analysis; foundation work; framing, interior and exterior walls; plumbing and electrical work; energy efficiency; roofing; paint and trim work; the role of architects, builders, and real estate brokers in the new home construction business; and other related topics. This course is accepted by the Texas Real Estate Commission as a "related" real estate course for license credit toward both the salesman's and broker's licenses. The course is also apropos for the general consumer public seeking an orientation to new home construction.

REAE 1304 Real Estate Law: Agency 3-0-3

This course meets the Texas Real Estate Licensing Act (TRELA) requirement for a real estate core course on the law of agency. The course includes the principle-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 representation procedures, and the disclosure of agency.

REAE 2300 Contract Law 3-0-3

This course meets the Texas Real Estate Licensing Act (TRELA) requirement for a real estate core course on contract law. Topics covered include: 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. Instruction also includes the TREC promulgated contract forms, with emphasis on those forms most commonly used.

REAE 2301 Real Estate Brokerage 3-0-3

This is an examination of the law of agency; planning and organization; operational policies and procedures; recruiting, selection, and training of personnel; records and control; real estate firm analysis; expansion criteria; the causes of the success and failure of real estate firms; planning for operations; the management of sales activities; maximizing profits through control; meeting competition; and the search for professionalism. Prerequisite: REAE 1301 or consent of the Department Chair.

REAE 2302 Residential Real Estate Appraisal 3-0-3

This course is an explanation of the purposes and functions of appraisal; the social and economic determinants of value; appraisal case studies; cost; market data; income approaches to appraisal; final correlations; and reporting. The course also consists of discussions and case studies involving the nature of neighborhood analysis; land or site analysis and valuation; residential styles and utility; mortgage equity and discounted cash flow; and codes of ethics associated with the appraisal industry. Prerequisites: REAE 1301 or consent of the Department Chair.

REAE 2303 Real Estate Property Management 3-0-3

This is an explanation of the role of the property manager, landlord policies, operational guidelines; leases; lease negotiations; tenant relations; maintenance; reports; habitability laws; the federal, state, and local Fair Housing Laws; an overview of the real estate market; the rising role of government in real estate; cyclic aspects of real estate; the marketing process in property management; the administrative processes necessary for success; and the operation and management of a property management firm. Prerequisite: REAE 1301 or consent of the Department Chair.

REAE 2304 Real Estate Finance 1319 **3-0-3**
This course is an overview of monetary systems, primary and secondary money markets, sources of mortgage loans, federal government procedures, closing costs, alternative financial instruments, loan application process and procedures, equal credit opportunity, the Community Reinvestment Act, and the Texas Housing Agency purpose and operations. This course also includes the history and background of real estate financing; money and interest rates; notes and mortgages; sources of mortgage money; property appraisal; analyzing borrowers; residential loan analysis; loan analysis of income properties; loan analysis of industrial, rural, and development properties; and settlement procedures. Prerequisite: REAE 1301 or consent of the Department Chair.

REAE 2305 Real Estate Law 1309 **3-0-3**
This course consists of legal concepts of real estate, land description real property rights, estates in land, contracts, encumbrances, foreclosures, recording procedures, evidence of title, an explanation as to how ownership is held, fixture and easements, conveyances, acknowledgments, constructive notice, mortgages, closings, landlord and tenant relationships, regulation of real estate, and real estate taxation.

REAE 2306 Real Estate Seminar 1391 **3-0-3**
This course is a special subjects course that may vary in content with each offering. It is designed to provide a classroom setting to meet the changing needs in real estate education and training. Subjects may range from math, finance, law, contracts, construction, appraisal, property management, taxation, investments, interior decoration, site analysis, blueprint reading, microcomputer applications, and various other subjects. License applicants are instructed to inquire within the Business Administration Department as to whether the Texas Real Estate Commission will accept credits toward license requirements.

REAE 2307 Income Property Appraisal 1327 **3-0-3**
This is an explanation of the purposes and functions of appraisal, the social and economic determinants of value, appraisal case studies, cost, market data, income approaches to appraisal, final correlations, and reporting. The course also consists of discussions and case studies pertaining to building material and equipment, building costs and estimates, accrued depreciation, gross income estimates, analysis of expenses, rates in capitalization, straight and annuity capitalization, and reconciliation of value indications. Prerequisites: REAE 1301, REAE 2302 or consent of the Department Chair.

REAE 2308 Real Estate Investments 1307 **3-0-3**
This course includes an analysis of real estate investment, characteristics, techniques of investment analysis, time-value of money, discounted and non-discounted investment criteria, leverage, tax shelters, depreciation, and applications to property tax. In addition, a study of consumer investment alternatives to real estate and the customer/client counseling concerns for real estate investments will be covered. Prerequisites: REAE 1300, REAE 1301, and REAE 2304; or approval of the Department Chair.

REAE 2309 Advanced Real Estate Finance **3-0-3**
This is an advanced course in real estate finance designed for the licensed real estate salesman or broker, entry-level mortgage loan processor, general contractor, or real estate investor. Subjects include monetary systems, primary and secondary markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity acts, Community Reinvestment Act, and the Texas Housing Agency. In addition, students will receive an extensive amount of "hands-on" training in qualification underwriting guidelines, closing costs, yield analysis, graduated payment mortgages, adjustable rate mortgages, and other variable rate programs. Prerequisites: REAE 2304 and REAE 1300, or equivalent.

REAE 2310 Real Estate Law: Contracts II **3-0-3**
This course is approved by the Texas Real Estate Commission as a "core" real estate course that can be applied for credit toward both the real estate salesman's and broker's license requirements. Contents include the required excerpts from the Texas Real Estate License Act, as amended, including legal concepts of real estate, land description, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, and evidence of titles. In addition, there is thorough coverage of the Broker-Lawyer Committee State of Principles and detailed instruction in the actual completion of all promulgated contract forms, with an emphasis on those forms most commonly used. This course is designed to give the real estate student an advanced class on using earnest money contracts in accordance with generally accepted principles of form and salesmanship.

REAE 2401 Real Estate Internship I 2488 **1-18-4**
On-the-job training in the real estate profession that utilizes the principles, skills, and knowledge gained in the theoretical setting of the classroom. The student works at an approved work site under the supervision of a College coordinator. Prerequisite: Consent of the Department Chair.

REAE 2402 Real Estate Internship II 2489 **1-18-4**
This course is a continuation of Real Estate Internship I. Prerequisite: REAE 2401 and consent of the Department Chair.

(ROTC) Reserve Officer Training Corp

See (MSMG) Military Science Management

(SCIE) Science

See (BIOL), (CHEM), (GEOL) or (PHYS)

(SGER) Small Gas Engine Repair

(Not Offered in Texas)

SGER 1401 Gas Engine Fundamentals SMER 1471 **3-3-4**
A study of the fundamental principles and operation of the two- and four-stroke air-cooled engine. Testing and maintenance procedures are performed on the ignition, compression, fuel, starting and lubrication systems of 2-HP and 8-HP engines. Prerequisite or Corequisite: INDU 1400.

SGER 1407 Small Gas Engine Service SMER 1428 **3-3-4**
This course provides the student with "hands-on" experience in the repair and overhaul of small gas engines. Emphasis will be placed upon valve reconditioning, magneto and ignition repair, carburetor overhaul, crankshaft replacement, and other types of service requirements. Prerequisite: SGER 1401 or consent of the Department Chair.

SGER 2311 Shop Organization and Management SMER 1372 **3-0-3**
This course is designed to provide the student with an understanding of small engine repair business management. Areas of study include customer relations, warranty provisions, service salesmanship, organization and shop lay-out, and the financial and operational aspects of managing a small engine repair business. Prerequisite: Sophomore standing or consent of the Department Chair.

SGER 2402 Chain Saw Service and Repair SMER 1431 **3-3-4**
This course provides the student with the theory and repair skills necessary to service all types of modern chain saws. Areas of study include preventative maintenance, chains, guide bars, sprockets, clutches, fuel, ignition, and lubrication systems. Prerequisite: SGER 1401 and 1407 or consent of the Department Chair.

SGER 2408 Outboard Motor Service and Repair 3-3-4
This course is designed to provide the student with the necessary skills to disassemble, repair, and assemble outboard engines and lower drive units on various types of outboard engines. Special emphasis will be placed on the cooling, ignition, and fuel systems; and the use of special tools, and service manuals. Prerequisite: Sophomore standing or consent of the Department Chair.

SGER 2410 Lawn and Garden Equipment Service 2-4-4
This course is designed to provide the student with "hands-on" experience in the repair of all types of power lawn care units including lawn mowers, riding mowers, garden tractors, tillers, and other similar small engine applications. Skills employed will utilize both oxygas and arc welding equipment when necessary. Prerequisite: SGER 1407, WLDG 1401. Corequisite: WLDG 1402.

SGER 2412 Motion Drive Systems 3-3-4
This course is designed to provide the student with an understanding of the theory and operating principles of motion drive systems used in small gas engine-powered equipment. Emphasis will be placed on inspection, diagnosing, and repair of differentials, transmissions, and transaxles used in these applications. Prerequisite: SGER 1407 and 2410 or consent of the Department Chair.

SGER 2413 Large Air-Cooled Engines 3-3-4
This course is designed to provide the student with and understanding of the theory and operating principles of large air-cooled engines used in lawn mower, RV, and generator applications. Single- and twin-cylinder engines will be included. Emphasis will be placed on inspection, testing, diagnosing, and repair/overhaul procedures. Prerequisite: SGER 1401 and SGER 1407 or consent of the Department Chair.

(SOCI) Sociology

SOCI 1301 Introduction to Sociology 3-0-3
The study of human society, human behavior and personality as a product of group life, community organization, social change and current social problems.

SOCI 1306 Contemporary Social Problems 3-0-3
Identification and analysis of contemporary social problems and development of criteria for evaluating problems for social betterment.

SOCI 2301 Marriage and The Family 3-0-3
A study of problems in courtship, marriage, and family living as they relate to the social structure of American society.

SOCI 2319 Race and Ethnicity 3-0-3
The historical, economic, social, and cultural development of minority groups. May include Afro-American, Mexican American, Asian American, and Native American issues.

SOCI 2336 Criminology 3-0-3
Cases and manifestations of delinquency, case studies of criminals and their social milieu; the offender and agencies of his adjustment; analysis and evaluation of penal methods.

(SPAN) Spanish

➲SPAN 1311 Elementary Spanish I 3-1-3
Introduction to Spanish with emphasis on conversation, grammar, and vocabulary. May not be transferrable.

➲SPAN 1312 Elementary Spanish II 3-1-3
Continuation of Spanish conversation, grammar, and vocabulary. Prerequisite: SPAN 1311. May not be transferrable.

SPAN 1411 Beginning Spanish I 4-2-4
The study of Spanish grammar and development of vocabulary. Stresses conversation in Spanish.

SPAN 1412 Beginning Spanish II 4-2-4
A continuation of Beginning Spanish I, with continued emphasis on conversation. Prerequisite: SPAN 1411.

SPAN 2311 Intermediate Spanish I 3-0-3
Continued emphasis on conversation, correct pronunciation, and correct writing. Reading from various Spanish-American authors. Prerequisites: SPAN 1411 and 1412, or two years of Spanish at an accredited high school.

SPAN 2312 Intermediate Spanish II 3-0-3
Continues the readings from Spanish-American authors. Emphasizes grammar, composition, and conversation. Prerequisite: SPAN 2311 or equivalent.

➲*Not offered on Central Campus*

(SPCH) Speech

SPCH 1144 Forensic Activities I 1-0-1
Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments.

SPCH 1145 Forensic Activities II 1-0-1
Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments.

SPCH 1315 Public Speaking 3-0-3
Research, composition, organization, and delivery of speeches for various purposes and occasions in a variety of communication situations.

SPCH 1318 Interpersonal Communications 3-0-3
Theory, examples, and participation in exercises to improve effective one-to-one and small group communication.

SPCH 1321 Business and Professional Speaking 3-0-3
Theories and skills of speech communication as applied to business and professional situations. Includes participating in an interview, preparing a resume and cover letter, engaging in problem-solving discussions, and delivering public speeches.

SPCH 2144 Forensic Activities III 1-0-1
Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments.

SPCH 2145 Forensic Activities IV 1-0-1
Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments.

SPCH 2341 Oral Performance of Literature 3-0-3
Study and practice in the principles of oral reading of literature. Stresses analyzing good literature and recreating the logical and emotional content for an audience. Also includes group oral interpretation.

(TAGA) Tagalog

(Not Offered in Texas)

TAGA 1401 Beginning Tagalog I 3-3-4
This course covers the fundamental skills involved in comprehending, speaking, reading, and writing Tagalog. It also includes basic vocabulary, grammatical structures, and culture.

(TELE) Television/Radio Telecommunications

TELE 1301 Introduction to Telecommunications 3-0-3
This is a survey course tracing the history of broadcasting and cable from 1884 to the present. Besides history, the course will present information on comparative systems of broadcasting and on the basic operational procedures of radio and television stations, cable facilities, and emerging telecommunicationsentities.

TELE 1305 Writing for Broadcasting and Media 3-0-3
This course covers the stylistic writing techniques as needed for commercial copy, promotional copy, public service announcements, broadcast news writing, and public relations materials. Students can select projects to complement their career goals.

TELE 1402 Beginning Radio Production 3-3-4
In this course, fundamental techniques and practices of production and programming are emphasized with a great deal of practical experience in radio production facilities. Production of various types of programs including interviews, documentaries, and basic news will be studied. Each student will be trained to competently operate a radio control board, turntables, and tape recorders.

TELE 1403 Beginning Television Production 3-3-4
This course is designed to give the student the fundamental skills in camera operation, microphone techniques, basic set design, basic graphics, and lighting. In addition, each student will participate in the production of live broadcasts from the College owned television station and other live and taped productions. A basic study of the operation of a television station will be covered.

TELE 1405 Announcing and Performance for Radio and Television 3-3-4
This course covers the duties and responsibilities of the announcer, such as operation of audio console, announcing commercial copy, announcing station breaks, newscasting, interviewing, etc. Special emphasis is given in the areas of voice and diction and pronunciation. Practical experience will be offered through the use of College-owned radio and television stations.

TELE 1406 Introduction to Field Production 2-7-4
This course is designed to introduce the student to the fundamentals of videography with emphasis on television electronic news gathering. Basic picture composition, field lighting and audio techniques will be taught. Students will use professional field cameras and edit group and individual video projects. Laboratory exercises will provide extensive hands-on training in the practical aspects of electronic news gathering videography. Corequisite: TELE 1403.

TELE 1407 Advanced Audio Production 3-3-4
Major emphasis in this course is advanced training in the production of radio commercials, promotion announcements, and multi-track training materials using advanced multi-track and tapeless equipment. Each student will be trained to competently operate a multi-track recorder, multi-track console, and non-linear, digital audio editing equipment.

TELE 1408 Advanced Television Production 3-3-4
This course offers advanced training in television production. Included will be experience as a cameraperson, floor director, talent, lighting director, technical director, producer, graphics, video tape operator, and audio engineer. Practical experience in weekly television program production will be available through the use of College-owned television stations. In addition, a critical look will be given to television programming techniques, types of station structure, and innovative technological breakthroughs. Prerequisite: TELE 1403 or consent of the Department Chair.

TELE 2304 Broadcast Sales 3-0-3
This course is designed to give the student a working knowledge of broadcast time sales. Areas of study include sales call preparation, sales presentations, spot scheduling, client interviews, collections, rate cards, contracts, and sales promotions. Station ratings and their use in broadcast sales will also be studied. Prerequisite: TELE 1301 or consent of the Department Chair.

TELE 2306 Telecommunications Seminar 3-0-3
This seminar is designed to allow the student of broadcasting to take an in-depth look at the industry he will soon serve. Individual investigation will be conducted on the current trends in broadcasting, major issues facing the broadcaster, and the importance of broadcasting in today's society. Considerable discussion on such issues as freedom of the press and the future of broadcasting will take place. This course will give the student an up-to-date and realistic perspective on his chosen industry. Prerequisite: Sophomore standing or consent of the Department Chair.

TELE 2307 Broadcast Station Management 3-0-3
This course is an in-depth study of management responsibilities within the broadcast industry. Areas of study include personnel management, station budgets, profit and loss statements, network negotiations, and equipment purchases. Also included is a study of the Federal Communications Commission's rules and regulations pertaining to the overall operation of the broadcast station. Prerequisite: TELE 1301 or consent of the Department Chair.

TELE 2309 Broadcast and Cable Operations 3-0-3
This course is designed to provide the student with an understanding and appreciation for the overall operation of radio and television stations and cable companies as businesses. The relationship of the various departments and functions will be covered. Emphasis on how each department contributes to the economic success of the business enterprise. Prerequisite: TELE 1301.

TELE 2310 Telecommunications Independent Study Project 1-6-3
The independent study project will provide an advanced student with the opportunity to utilize Telecommunications skills for advanced work in the area of the student's choice. The course will be project oriented and will require the student to submit a formal plan for the project which will require consent of the Department Chair prior to enrollment. The progress of the student will be monitored throughout the semester. The project will require a deliverable program, report or similar product.

TELE 2311, 2312 Advertising and Promotions I & II 2-4-3
Advertising and Promotions provides students with an understanding of the field of business and corporate communications. Students will develop scripts for promotional and training audio and video materials. Exercises will include press release production, development of print and video annual reports, product presentations and similar materials. Students will gain skills necessary to monitor contracts for productions accomplished through outside contractors and ad agencies and will learn how to plan and evaluate advertising campaigns.

TELE 2401, 2402 Technical Aspects of Broadcasting I & II 2-7-4

These courses will provide students with knowledge and experience in the technical operation of broadcast facilities. Students will be involved in both classroom and laboratory based activities which will provide knowledge of broadcast equipment installation, set-up, operation, and maintenance. As a part of the course, students will perform engineering functions in the operation of radio and TV facilities. The two semesters will be structured to ensure a comprehensive and progressive exposure to the appropriate technical topics. Prerequisites: ELTE 1401, TELE 1402, and TELE 1403.

TELE 2407 Advanced Field Production 3-3-4

Electronic field production techniques are covered including mini-camera operations, electronic editing principles, remote audio, and lighting techniques. Students assist television station staff with remote production assignments. Prerequisite: TELE 1406 or consent of the Department Chair.

TELE 2408 Telecommunications Internship 2-7-4

The purpose of this course is to give each student an opportunity to receive practical experience in a specialized area of study. A student may choose his individual intern study from any of the following broadcast-related areas: graphic arts, set design, photography, cinematography, broadcast journalism, sales, radio production, television production, broadcast promotion, traffic and continuity. Prerequisites: TELE 1402 and 1403 or consent of the Department Chair.

TELE 2409 Telecommunications Projects 2-7-4

The telecommunications projects will provide advanced training experience in the area of the student's interest. Each student will develop an individual project or will serve as a responsible member of a group in the development of a major project. This course may be repeated for credit when content changes. Prerequisite: TELE 1402 and 1403 or consent of the Department Chair.

(TIAB) Auto Collision Repair Technology

see also Degree Plan (ATBR)

TIAB 1400 Auto Body Shop Procedures 2-7-4

This course is designed to provide the student with instruction in auto body shop safety including the role of the Occupational Safety and Health Act (OSHA) and the Hazardous Communications Act. Instruction also includes the study of auto body construction in terms of design changes, assembly methods, and comparisons of conventional and unibody vehicles. The identification and proper use of hand tools, power tools, special tools, and equipment is also covered. This course also introduces the student to the selection and use of body filler material; abrasives, and body sealers used in the repair industry. Basic shop math and the metric and U.S. Customary measurement systems are studied. The student will also be instructed in the use of shop manuals and basic estimating procedures. Job seeking skills will also be emphasized.

TIAB 1401 Auto Body Glass, Hardware and Trim 2-6-4

This course is designed to provide the student with instruction in the removal, replacement, and service of both stationary and movable automotive glass as well as related interior and exterior hardware such as manual and power lock mechanisms and regulators. The removal and replacement/repair of exterior and interior trim is also covered. Prerequisite: TIAB 1400 or consent of the Department Chair.

TIAB 1403 Auto Body Welding and Cutting 2-7-4

This course is designed to provide the student with instruction in the use of those gas and electrical welding and cutting processes required in Auto Collision Repair. Basic gas welding and cutting, GMAW (MIG), resistance spot welding, and plasma arc cutting will be covered. Emphasis will be placed on safety; equipment selection and set up; the design, preparation, and fitting of weld joints; and the application of correct welding procedures to specific repair requirements. The welding of high-strength steel is also covered. Prerequisite: TIAB 1401 or consent of the Department Chair.

TIAB 1404 Basic Auto Body Refinishing 2-6-4

This course is designed to provide the student with instruction in the basic procedures and techniques required for vehicle refinishing including the proper methods of surface preparation, materials preparation, and common paint problem identification and correction. Also included is the study of the different types of refinishing materials available to the industry and their relationship to the type of repair requirements. Special emphasis will be placed on the proper use of the spray gun, pattern settings, pressure settings, and spraying techniques. Paint shop safety will be an integral part of the instruction. Prerequisite: TIAB 1403 or consent of the Department Chair.

TIAB 1405 Minor Auto Body Repairs 2-7-4

This course is designed to provide the student with instruction in the identification and analysis of basic damage conditions as well as the roughing and shaping procedures on automotive sheet metal necessary to make satisfactory minor body repairs. Emphasis will also be placed on the alignment and adjustment of component parts such as doors, hoods, deck lids, front sheet-metal assemblies, and bumpers. Prerequisite: TIAB 1404 or consent of the Department Chair.

TIAB 2406 Auto Body Fiberglass and Plastic Repairs 2-6-4

This course is designed to provide the student with instruction in the repair of the non-metal panels used in auto body construction. Included in the course are the identification and use locations of non-metal parts; the selection of proper repair materials and methods for specific types of plastic and fiberglass panels; and the use of hot-air and airless plastic welders. Prerequisite: TIAB 1405 or consent of Department Chair.

TIAB 2407 Advanced Auto Body Refinishing 2-7-4

This course is designed to provide the student with instruction in advanced practices and procedures necessary for the development of saleable skills in auto body refinishing. Included in the course is skill development in the areas of tinting and blending, two-toning, spot repair, panel repair, and complete vehicle refinishing. The refinishing of interior and exterior plastic and vinyl parts will be covered. The student will also receive instruction in refinishing estimation. Prerequisite: TIAB 2406 or consent of Department Chair.

TIAB 2408 Auto Body Mechanical and Electrical Services 2-7-4

This course is designed to provide the student with instruction in the repair, replacement, and/or service of those mechanical or electrical systems that are subject to damage from a collision. Included in this course is drive train removal, reinstallation, and service; cooling system service and repair; exhaust system service; and emission control systems. Also covered is basic electrical theory, test equipment and use, wire and connector repair, and reading wiring diagrams and troubleshooting trees. Prerequisite: TIAB 2407 or consent of Department Chair.

TIAB 2409 Major Auto Body Repair 2-7-4

This course is designed to provide the student with instruction in the methods and equipment use required in the repair of more extensive panel damage as well as damage involving frame and body structures. Included in the course is the repair and replacement of exterior body panels, sectioning and the use of recycled parts, conventional frame and unibody repair, and corrosion protection of repaired areas. The procedures for writing a complete collision repair estimate will also be covered. Prerequisite: TIAB 2408 or consent of Department Chair.

(TIAM) Automotive Technician
see also Degree Plan (AUTO)

TIAM 1303 Automotive Auxiliary Systems 2-4-3
This course is designed to provide the student with a working knowledge of automotive air induction and exhaust systems, cooling systems and lubrication systems. System designs, operating principles, components, test equipment, and service will be covered. Emphasis will be placed on troubleshooting, component removal and replacement, and systems testing. The student will troubleshoot, test, diagnose, remove, repair, and replace components of auxiliary systems. Prerequisite: TIAM 1502 or consent of the Department Chair.

TIAM 1400 Automotive Shop Procedures, Tools and Equipment AUMT 1405 2-6-4
This course introduces the student to shop safety, basic first aid, OSHA and Hazardous Communications Act, shop mathematics, and the U.S. Customary and Metric measuring systems. Emphasis is placed on the proper use of common hand tools, power tools, precision measuring devices, special purpose tools and diagnostic tools and test equipment, and electrical test equipment. It also includes automotive terminology, service publications and shop work requests, cleaning methods and those items that are common to the automotive technician trade (gears, bearings, fasteners, belts, pulleys, fuels, lubricants, fluids and lines and fittings).

TIAM 1401 Automotive Fundamentals 2305 3-3-4
This course provides the student with the basics of today's automobile. Automotive systems, operating principles of two- and four-stroke cycle gasoline engines, the combustion process, and exhaust emissions will be covered. Emphasis will be placed on operating principles and component function. The student will identify automotive systems and components and explain their function. Prerequisite: TIAM 1400 or consent of the Department Chair.

TIAM 1404 Automotive Fuel Systems 1471 2-6-4
This course is designed to provide the student with a working knowledge of automotive fuel systems. Carburetors, fuel pumps, filter systems, air fuel ratios, electronic fuel injection and computer controlled systems, and exhaust emission systems will be covered. The student will troubleshoot, diagnose, repair and adjust these systems. Prerequisites: TIAM 1303 or consent of the Department Chair.

TIAM 1405 Automotive Air Conditioning 1445 2-6-4
This course is designed to provide the student with a working knowledge of automotive air conditioning systems. Operating principles, component and system design, troubleshooting, diagnosis, and service will be covered. Emphasis will be placed on tools and test equipment, troubleshooting, and system service. Prerequisite: TIAM 1303, 1400, 1401, and 1502; or TIAB 1400 and 2408; or TIDM 1401 and 1405; or consent of the Department Chair.

TIAM 1406 Automotive Brake Systems 1410 2-6-4
This course provides the student with a working knowledge of automotive brake systems. Operating principles of drum, disc, and automotive brake systems; hydraulic brake systems service procedures, parking brake service, wheel cylinder and master cylinder service, and power assist systems service will be covered. The student will use brake lathes and other equipment to troubleshoot, diagnose and repair brake systems. Prerequisite: TIAM 1400 and TIAM 1401 or TIAB 1400 or consent of the Department Chair.

AUMT 1407

TIAM 1502 Automotive Electrical Systems 3-6-5
This course is designed to provide the student with a working knowledge of automotive electrical systems. Principles of electricity, basic electronics, system designs, storage battery, ignition systems, operating principles, components, test equipment, and service will be covered. Emphasis will be placed on basic electricity, wiring diagrams, troubleshooting, component removal and replacement, test equipment, and systems testing. The student will troubleshoot, test, diagnose, remove, repair and replace components of ignition systems, starting and charging systems, and other electrical systems. Prerequisite: TIAM 1400 and 1401 or consent of the Department Chair.

TIAM 2407 Automotive Steering and Suspension Systems 1416 2-6-4
This course provides the student with a working knowledge of automotive steering and suspension systems. It includes operating principles, components and their function, diagnosis, related tools and equipment, service of wheels, manual and power steering systems, and suspension systems. Emphasis will be placed on computerized four wheel alignment and service of steering and suspension system components. Prerequisite: TIAM 1400 and TIAM 1401 or TIAB 1400 or consent of the Department Chair.

TIAM 2408 Automotive Standard Power Trains 2413 2-6-4
This course is designed to provide the student with a working knowledge of standard power trains. Theory of gears and torque, operating principles, troubleshooting, service of clutches, standard transmissions, transfer cases, drive lines, differential, and axles will be covered. Emphasis will be placed on operating principles, components, diagnostics, and service. The student will disassemble, clean, inspect, and reassemble clutches and transmissions. Prerequisite: TIAM 1400 and TIAM 1401 or consent of the Department Chair.

TIAM 2409 Automotive Automatic Power Trains 2425 2-6-4
This course is designed to provide the student with a working knowledge of automatic power trains. Operating principles, troubleshooting, and service of torque converters, transmissions will also be covered. Emphasis will be placed on transmission service. The student will disassemble, clean, inspect, test and reassemble an automatic transmission. Prerequisite: TIAM 1400, 1401, and 2408 or consent of the Department Chair.

TIAM 2410 Automotive Engine Service 1419 3-4-4
This course is designed to provide the student with a working knowledge of automotive engine service procedures. It includes engine diagnostics, cylinder head service, and engine short block procedures. The student will service engine valve trains and use valve service equipment to service valves, guides, and cylinder heads. Prerequisites: TIAM 1303, 1400, and 1401 or consent of the Department Chair.

TIAM 2511 Automotive Computer Systems 1472 3-6-5
This course provides the student with a working knowledge of automotive computer systems. It includes principles of operation, components and function, tools and test equipment, diagnosis, and service and repair of automotive computerized systems. Prerequisite: TIAM 2410 or consent of the Department Chair.

TIAM 2512 Automotive Engine Diagnosis, Tune-Up and Emissions 2434 3-6-5
This course provides the student with a working knowledge of diagnosis, tune-up, and emission system service procedures. Emphasis will be placed on diagnosis and troubleshooting procedure and use of diagnostic equipment and engine analyzers. The student will troubleshoot, diagnose, and service automotive engine and emission systems, and perform engine tune-up. Prerequisite: TIAM 2511 or consent of the Department Chair.

(TIBT) Building Maintenance Trades
see also Degree Plan (MTNT)

TIBT 1400 Basic Shop Skills 3-3-4
This course covers shop safety precautions, use of hand and power tools, measuring tools, common fasteners, and basic blueprint reading.

TIBT 1401 Basic Masonry and Concrete Applications 2-7-4
This course covers safety procedures in working with concrete, brick, and block in installation and repair. Included in the course is a working knowledge of mixing concrete materials, form construction, and foundation layout. Prerequisite: TIBT 1400 or consent of the Department Chair.

TIBT 1402 Basic Carpentry 3-3-4
This course covers the types and uses of lumber and other building materials and teaches basic framing methods. Prerequisite: TIBT 1400 or consent of the Department Chair.

TIBT 1403 Carpentry and Insulation 3-3-4
This course covers thermal and acoustical insulation and interior and exterior construction and repair. Prerequisite: TIBT 1402 or consent of the Department Chair.

TIBT 1404 Roofing and Floors CNBT 1416 2-5-4
This course covers types of roofing materials, flashing, preparation of areas, application of materials, and finishing work. Also included are the proper and safe use of tools used in the installation of different types of floor coverings and proper methods of floor installation and repair. Prerequisite: TIBT 1403 or consent of the Department Chair.

TIBT 1405 Cabinets I WDWK 1413 2-5-4
This course covers cabinet design, construction, installation of cabinets, cabinet repairs, and the installation of formica. Prerequisites: TIBT 1400 and 1402 or consent of the Department Chair.

TIBT 1406 Cabinets II WDWK 2451 3-3-4
This course is a continuation of TIBT 1405 (Cabinets I). Emphasis is placed on custom cabinets. It includes design, materials, material estimating, construction, installation, finish, repair, and refinishing. Prerequisites: TIBT 1400 and 1405.

TIBT 1407 Paint/Wall Covering 3-3-4
This course covers preparation of work areas and surfaces, application of paints and finishes, application of wall coverings, and repair of paint and wall coverings. Prerequisite: TIBT 1400 or consent of the Department Chair.

TIBT 1408 Basic Wiring 2-6-4
This course covers safety codes, the use of electrical tools and materials, blueprint symbols, locating electrical problems, and making electrical repairs. Prerequisite: TIBT 1400 or consent of the Department Chair.

TIBT 1409 Plumbing Repairs I 3-3-4
This course covers safety rules and practices and the use and care of plumbing tools. It also introduces plumbing codes and the use of plastic, copper, steel, and iron pipes and fittings. Prerequisite: TIBT 1400 or consent of the Department Chair.

TIBT 1410 Plumbing Repairs II 3-3-4
This course covers the types and uses of cast iron soil pipe and fittings. It also covers repair of the water supply, drainage, and hot water systems. Prerequisites: TIBT 1400 and 1409 or consent of the Department Chair.

(TIDM) Diesel Technican
see also Degree Plan (DIEM)

TIDM 1302 Diesel Engine Fundamentals and Operating Principles DEMR 1406 2-4-3
This course is designed to provide the student with a working knowledge of the fundamentals of diesel engines, the development, uses, advantages/disadvantages, design components, operating principles 2, and 4-stroke cycles), diesel fuels, and the combustion process and exhaust emissions will be covered. Emphasis will be placed on operating principles and component function. The student will perform pre-operational services, start and stop diesel engines, and identify engine components and systems and explain their functions. Prerequisite: TIDM 1401 or consent of Department Chair.

TIDM 1401 Shop Procedures, Tools & Equipment DEMR 2-6-4
This course introduces the student to shop safety, basic first aid, OSHA and Hazardous Communications Act, shop mathematics and the Customary U.S. and Metric measuring systems. Emphasis is placed on the proper use of common hand tools, power tools, precision measuring devices, special purpose tools and diagnostic tools and test equipment, and electrical test equipment. It also includes diesel terminology, service publications and shop work requests, cleaning methods and those items that are common to the diesel mechanics trade (gears, bearings, fasteners, belts, pulleys, fuels, lubricants, fluids, and lines and fittings). 1401

TIDM 1404 Diesel Engine Support Systems 3-3-4
This course is designed to provide the student with a working knowledge of diesel engine air induction and exhaust systems, cooling systems and lubrication systems. System designs, operating principles, components, test equipment, and service will be covered. Emphasis will be placed on turbo-chargers, blowers, trouble-shooting, component removal and replacement and systems testing. The student will troubleshoot, test, diagnose, remove, repair and replace auxiliary system components. Prerequisite: TIDM 1405 or consent of Department Chair.

TIDM 1405 Diesel Electrical Systems DEMR 1405 2-7-4
This course is designed to provide the student with a working knowledge of diesel engine electrical systems. Principles of electricity, basic electronics, system designs, operating principles, components, test equipment and service will be covered. Emphasis will be placed on basic electricity, wiring diagrams, troubleshooting, component removal and replacement, test equipment and systems testing. The student will troubleshoot, test, diagnose, remove, repair and replace components of starting and charging systems and other electrical systems. Prerequisite: TIDM 1302 or consent of the Department Chair.

TIDM 1406 Diesel Fuel Injection Systems (TIDM 1505) 1471 2-7-4
This course is designed to provide the student with a working knowledge of mechanical and electronic diesel engine fuel injection systems operating principles, service, and repair. System designs, fuel metering, governor types and operating principles, fuel supply systems, and troubleshooting will be covered. Emphasis will be placed on operating principles, design, troubleshooting, and repair. The student will troubleshoot and diagnose diesel fuel injection systems and remove, service, and install fuel injectors, nozzles and pumps. Prerequisites: TIDM 1401 and TIDM 1302 or consent of the Department Chair.

TIDM 2307 Diesel Cylinder Head Repair 1411 2-4-3
This course is designed to provide the student with a working knowledge of diesel engine cylinder head service. Design, component testing, measurements, test equipment, and service equipment will be covered. Emphasis will be placed on diagnostics, valve, seat, guide service, and injector tube replacement. The student will remove, clean, service, and reinstall a cylinder head. Prerequisite: TIDM 2407 or consent of the Department Chair.

DEMR 2434

TIDM 2407 Diesel Engine Troubleshooting (TIDM 2506) 2-7-4
This course is designed to provide the student with a working knowledge of service procedures for mechanical and electronic diesel engines.. Emphasis will be placed on diagnosis and troubleshooting, engine tune-up, governor and rack adjustment, valve and injector timing, and using service manuals. The student will perform diagnostics and tune-ups on various diesel engines. Prerequisite: TIDM 1406 or consent of Department Chair.

1416

TIDM 2408 Industrial Hydraulics Technology 2-6-4
This course is designed to provide the student with a working knowledge of hydraulics. Hydraulic principles, pumps, valves, circuits, fluids, cylinders, and troubleshooting will be covered. Emphasis will be placed on hydraulic principles, basic control systems, and troubleshooting. The student will disassemble, clean, inspect, and reassemble hydraulic pumps, valves, and cylinders. The student will use hydraulic trainers to perform numerous practical exercises on hydraulic principles, control systems, and trouble-shooting. Prerequisite: TIDM 1401 or consent of the Department Chair.

1421

TIDM 2409 Heavy-Duty Standard Power Trains 2-6-4
This course is designed to provide the student with a working knowledge of heavy-duty standard power trains. Theory of gears and torque, operating principles, troubleshooting, service of clutches, standard transmissions, transfer cases, drive lines, differential carriers, and axles will be covered. Emphasis will be placed on operating principles, components, diagnostics, and service. The student will disassemble, clean, inspect, and reassemble clutches and transmissions. Prerequisite: TIDM 1401 or consent of the Department Chair.

1447

TIDM 2410 Heavy-Duty Automatic Power Trains 2-6-4
This course is designed to provide the student with a working knowledge of heavy-duty automatic power trains. Operating principles, troubleshooting and service of torque converters, transmissions, retarders and hydrostatic drives will be covered. Electronic controlled transmissions will also be covered. Emphasis will be placed on transmission service. The student will disassemble, clean, inspect, test and reassemble an automatic transmission. Electronic automatic transmissions will also be covered. Prerequisites: TIDM 1401, 2408, and 2409 or consent of the Department Chair.

1417

TIDM 2411 Brake Systems 2-6-4
This course introduces the student to the basics of standard and heavy-duty brake systems by covering fundamentals and principles, related tools and equipment, and basic brake services to include the air, hydraulic, parking brake, and power assist systems. It also includes instruction on the diagnosis and repair of each system. Electronic automatic brake systems will also be covered. Prerequisite: TIDM 1401 or consent of Department Chair.

1330

TIDM 2412 Steering and Suspension Systems 2-6-4
This course introduces the student to the basics of standard and heavy-duty steering and suspension systems. It includes fundamentals, related tools and equipment, basic services, and individual system components. It also provides the student with skills to perform diagnostics and minor and major services on the chassis, front suspension, and manual and power steering systems. Electronic systems will also be covered. Prerequisite: TIDM 1401 or consent of Department Chair.

1449

TIDM 2413 Diesel Engine Rebuild (TIDM 2513) 2-7-4
This course is designed to provide the student with a working knowledge of diesel rebuild procedures. Engine diagnostics, disassembly, cleaning, component inspection and measurements, special tools, reassembly, basic tune-up and run-in, and the use of dynamometers will be covered. Updated technology will be included as it becomes available. Emphasis will be placed on rebuild procedures, component inspection and measurement and basic tune-up and run-in. The student will rebuild a diesel engine. Prerequisite: TIDM 2307 or consent of Department Chair.

(TIHI) Medical Records
see also Degree Plan (TIOA)

TIHI 1301 Medical Office Orientation 1-5-3
Course includes introduction to activities and personnel in health care facilities. Covers basic receptionist skills such as telephone etiquette, mail processing, and appointment scheduling. Emphasizes the importance of human relations skills and interaction with other employees and patients. Students learn to recognize and solve various conflicts and problems which they may encounter in a medical environment. Requires students to think critically and make decisions in solving problems.

TIHI 1302 Medical Terminology and the Human Body 1-6-3
Course includes terminology study of human body systems with terms from musculoskeletal, digestive, reproductive, respiratory, circulatory, nervous, endocrine, lymphatic, and integumentary systems. Student utilizes reading, comprehension, and visualization skills in study of terminology relating to anatomy. Student utilizes listening, visualization, and proofreading skills during the transcription of authentic medical reports and other documents. Prerequisite: TIOA 1310 or consent of the Department Chair.

TIHI 1303 Medical Terminology in Radiology and in the Laboratory 1-6-3
Introduction to terminology relating to radiology, including radiological studies of the head, chest, breast, abdomen, and skeletal system. Introduction to study of terminology relating to scientific laboratory including pathology and oncology. Practical use of terminology in medical transcription from radiology and pathology. Student utilizes reading, comprehension, and visualization skills in study of terminology relating to radiology, pathology, and oncology. Student utilizes listening, visualization, and proofreading skills during the transcription of authentic medical reports and other documents. Prerequisite: TIHI 1302 or consent of the Department Chair.

TIHI 1304 Specialized Medical Terminology 1-6-3
Study of terminology relating to general surgery including equipment, instruments, procedures, and anesthesiology. Student progresses to terms from pediatrics, psychology, psychiatry, plastic and thoracic surgery, urology and cardiology. Special section on dental terminology. Practical use of terminology in authentic medical transcription of reports from these medical specialties. Student utilizes reading, comprehension, and visualization skills in study of terminology relating to specialized medical practice. Student utilizes listening, visualization, and proofreading skills during the transcription of medical reports and other documents. Prerequisite: TIHI 1303 or consent of the Department Chair.

TIHI 1306 Medical Records Technology 1-5-3
Course introduces the student to the health information management department including the personnel and their functions. Course explains the arrangements and use of logs, indexes, and registers used in the department. Introduction to public laws and their impact on health care; includes utilization review, medical audit and quality assurance. Course reviews medical and legal aspects of information release and preparation of birth and death certificates. Course further studies the necessity for and the methods of collecting relevant health care data. Also includes statistical reporting. Uses reading, comprehension, analytical, and mathematical skills. Prerequisite: TIHI 1301 and 1302 or consent of the Department Chair.

TIHI 1307 Classification Systems 1-5-3
Course explains methods for coding inpatient and outpatient health records and gives practical experience in coding records from surgical and diagnostic procedures, circulatory system disorders, neoplasms, V codes, pregnancy and childbirth, injuries and E codes, poisons and drugs. Uses reading, comprehension, and analytical skills. Prerequisite: TIHI 1302, (1303 and 1304) or (TIHI 1313) or consent of the Department Chair.

TIHI 1308 Health Information Practicum I 2-7-3

Course includes actual work experience in a medical office environment utilizing the skills acquired in the medical secretary/transcriptionist program of study. Student will demonstrate entry level knowledge and competence in performing routine medical secretary and transcriptionist duties. Prerequisites: Completion of all other courses in medical secretary/ transcriptionist program or consent of Department Chair.

TIHI 1309 Health Information Practicum II 2-7-3

Course provides work experience in an actual health information management environment utilizing the skills acquired in the medical record clerk program. Student will demonstrate entry level knowledge and competence in health information/medical record job skills. Prerequisites: Completion of all other courses in medical record clerk program or consent of Department Chair.

TIHI 1310 Computerized Medical Office Practice Management 1-5-3

Course introduces and simulates situations in a health care practice using a popular medical administration software. Included is the input of patient information, scheduling of appointments and the handling of billing. Various lists, reports, and insurance claims are produced on forms and electronically. Designed to acquire skills readily transferable to any medical administration software with a minimum of training. Along with reading and comprehension, student uses creativity, organization, and proofreading skills.

TIHI 1311 Medical Insurance 1-5-3

This course introduces the student to the life cycle of the various insurance claim forms from patient to payment. The medical terminology, basic anatomical systems and coding categories involved in filing insurance claims are covered in detail. The student performs indepth practice using a computer based program to learn how to accurately transfer simple, moderate and complex case histories onto insurance forms and then how to file the forms in order to obtain maximum benefits, minimize collection problems and avoid legal complications.

TIHI 1312 Health Information Practicum III 2-7-3

Course includes work experience in a medical office environment utilizing the skills acquired in the medical office specialist program. Student will demonstrate entry level competence and knowledge of general medical office functions and practices. Prerequisites: Completion of all other courses in medical office specialist program or consent of the Department Chair.

TIHI 1313 Intermediate Medical Terminology 1-6-3

Course continues student's study of medical terminology with terms relating to radiology, the scientific laboratory including pathology and oncology, pediatrics, psychology, psychiatry, plastic and thoracic surgery; urology, cardiology, and dentistry. Student utilizes reading comprehension, listening, and visualization skills in the course of study. Prerequisite: TIHI 1302 or consent of the Department Chair. (NOTE: This course is designed for the student who does not intend to pursue the medical secretary transcriptionist field. There is no transcription.)

(TIOA) Office Information Systems

TIOA 1301 Fundamentals of Keyboarding 1-6-3

Basic keyboarding course using WP5.1 touch typewriting for mastery of keyboard and familiarity with software. Special emphasis on speed development, with an introduction to letter writing, tabulating, and preparing simple reports. Develops reading, comprehension, and analytical skills. Utilization of mathematical skills in formatting simple centering exercises. Emphasis on proofreading. Keyboard mastery to 30 WPM.

TIOA 1302 Business Office Orientation 1-5-3

This course introduces the student to the basic activities of the office and basic secretarial functions. It covers basic secretarial courtesies, telephone techniques, managing time and office activities, and procedures for processing business communications. The importance of human relations in an office information system is an integral part of this course. Students learn to recognize and solve various office conflicts resulting from personality problems and poor human relations skills. Requires students to think critically and make decisions in solving personnel problems

TIOA 1303 Beginning Word Processing 1-6-3

This course presents a study of concepts and functions of the microcomputer. Students will be introduced to such DOS functions as FORMAT, COPY, DISKCOPY, and DELETE. Utilizing WP5.1, the student will keyboard by touch as well as format various forms of business and medical communications to include letters, reports, and interoffice communications. Typing mastery to 40 WPM.

TIOA 1305 Business Correspondence 1-5-3

This course covers principles and practices of writing effective business letters including letters of inquiry and request, goodwill, acknowledgment, claims and adjustments, employment, and memorandums. A study of reference materials used in the preparation of business and medical correspondence and reports in an integral part of this course. It also includes the writing of a formal research paper of interest to the student. Enhances reading, writing, problem solving, and creative thinking skills. Prerequisite: TIOA 1314 or consent of the Department Chair.

TIOA 1306 Applied Business Mathematics 1-5-3

In this course, students use the electronic calculator to perform mathematical operations. Emphasis will be placed on fundamental operations, fractions, percentages, purchasing and pricing of merchandise, earnings and payroll deductions, interests, taxes, financial statements, and bank reconciliation statements. Speed and accuracy in performing mathematical operations are emphasized.

TIOA 1307 Word Processing and Transcription 1-6-3

Course introduces Microsoft Windows and windows concepts to develop skills in the use of a mouse and other pointing devices. Using WP6.1 for Windows, it focuses on typing copies from script, rough draft, and machine dictation; proofreading, centering, and typing different letter styles to include technical, medical, and federal correspondence. Emphasizes such software features as macros, merge, document assembly, text columns, footnotes, outlining, and graphics. Focuses on developing creativity, proofreading skills, decision making, and visualization skills in the processing of mailable documents. Typing mastery to 50 WPM. Prerequisite: TIOA 1303 or consent of the Department Chair.

TIOA 1308 Bookkeeping I 1-6-3

A study of the accounting cycle in its simplest form is presented. The course material covers the basics of preparing journals, ledgers, and statements. Data processing and its influence and use in accounting are studied. Prerequisite: TIOA 1306 or consent of the Department Chair

TIOA 1310 Fundamentals of Medical Terminology and Transcription 1-5-3

This course introduces the student to medical terminology through a study of prefixes, suffixes, root words, and abbreviations as well as terms ranging from anatomical to surgical. Study includes formation of plurals and abbreviations, surface anatomy, surgical positions, medications, and general anatomy. Introduction to transcription of medical dictation and proofreading. Student utilizes listening, visualization, and proofreading skills during the transcription of medical reports and other documents. Prerequisite: TIOA 1301 or consent of the Department Chair.

TIOA 1311 Legal Terminology and Transcription 1-5-3
Provides a general introduction to the law and covers such areas as courts and the legal systems, litigation procedures, civil actions, criminal law, probate, contracts and leases, and domestic relations. Emphasis on legal terminology and the preparation of legal documents and reports. Student enhances listening, visualization, and proofreading skills in the transcription of legal reports and other documents. Prerequisite: TIOA 1301 or consent of the Department Chair.

TIOA 1313 Advanced Word Processing 1-6-3
Utilization of microcomputer with WP6.1 for Windows to format more advanced correspondence. Continuation of document merging and assembly, macros, graphics, multiple columns, and sorting. Introduces desk top publishing and multimedia features, spreadsheet and data import, and styles and style sheets. Focuses on developing creativity, proofreading skills, decision making, and visualization skills in the processing of mailable documents. Keyboard mastery to 60 WPM.

TIOA 1314 Business English Fundamentals 1-5-3
This course begins with the fundamentals of grammar, punctuation, spelling, capitalization, and usage. Includes sentence construction and analysis. Develops reading, writing, and comprehension skills. Develops effective study skills in learning grammar rules and applying them to the construction of sentences and paragraphs.

TIOA 1315 Integrated Software Applications 1-6-3
This course enhances the use of Microsoft Windows and a mouse. Using organization, creativity, and proofreading skills, students learn how to plan, build, edit, and enhance business information documents to include word processing, spreadsheet charting, database, telecommunication, and draw features, as well as integration capabilities.

TIOA 1316 Information & Records Management 1-5-3
This course starts with the basic principles and procedures of records storage and control. Also included are records storage methods, procedures for the operation and control of manual and automated storage systems, and the selection of records equipment and supplies. Concepts of database and database structures are utilized in the management of automated records systems. Focuses on developing decision making skills, sound reasoning, and problem solving skills in the selection of records storage procedures and equipment.

TIOA 1317 Principles of Accounting ACNT 1325 **1-6-3**
Elementary principles of accounting to include journal entries, posting, financial statements, special journals, subsidiary ledgers. Special emphasis is placed on small business accounting systems to include sole proprietorships and partnerships.

TIOA 1318 Office Information Systems Practicum 2-7-3
This course includes actual entry-level work experience in a business environment utilizing skills acquired in program of study. Students will demonstrate competencies and knowledge of basic office functions and procedures. Prerequisite: Completion of all other courses in Office Information Systems program or consent of the Department Chair.

TIOA 1319 Office Systems Technology Practicum 2-7-3
This course includes actual entry-level work experience in a business environment utilizing skills acquired in program of study. Students will demonstrate competencies and knowledge of basic office technology, functions, and procedures. Prerequisite: Completion of all other courses in Office Systems Technology program or consent of Department Chair.

TIOA 1320 Automated Accounting ACNT 1311 **1-6-3**
In this course, students will use software packages to perform accounting functions. Areas of focus include journalizing, posting, statements of accounts, special journals, and subsidiary ledgers. Emphasis will be placed on small business accounting systems to include sole proprietorships and partnerships.

TIOA 1321 Office Procedures and Applications 1-5-3
A finishing course for the general office secretary. Includes decision making, critical thinking, and office management skills. Also included are travel arrangements, itineraries, and assisting in meetings and conferences. In-basket simulations which mirror activities in legal, technical, medical, federal, and accounting offices will be utilized. Job seeking skills to include resume writing and participating in actual interviews will be an integral part of this course.

TIOA 1322 Intermediate Information Processing 1-6-3
Course introduces Microsoft Windows and windows concepts, with emphasis on use of a pointing device (mouse). Course focuses on learning software features including macros, document merging and assembly, editing, tables, use of multiple columns, footnotes/endnotes, outlining, and graphics. Practical use of software application includes preparation of letters, reports, tables, and graphics from general business and medical settings. Focuses on developing creativity, proofreading skills, decision making, and visualization skills. Typing mastery to 40 WPM. Prerequisite: TIOA 1303 or consent of the Department Chair. (Note: This course is designed for the student who will not pursue advanced keyboarding and will give a broader view of windows concepts, but less of a typing speed mastery.)

TIOA 1323 Customer Service and Organizational Ethics 1-6-3
This course emphasizes the significance of customer service to the success of today's businesses. Students learn how to achieve customer satisfaction and how to apply proper techniques to solve business-related problems. This course also focuses on the importance of ethical behavior within the business environment and the role of management and personnel in setting and maintaining ethical standards.

TIOA 1324 Microsoft Office Applications 1-6-3
Using Microsoft Office software package, students learn how to use Word, Excel, PowerPoint, and Access separately and then together to create useful business documents. This course starts with the basics of each application software and proceeds to more advanced integrative features utilizing word processing, spreadsheet, database, and presentation concepts. Prerequisite: TIOA 1301 or consent of the Department Chair.

(TIPT) Graphics and Printing Technology
see also Degree Plan (GRPH)

TIPT 1401 Basic Shop Skills, Layout, Design and Composition GRPH 1405 **2-7-4**
This course covers identification and use of tools, safety, reproduction, legal restrictions, math applications, layout camera operations, stripping processes, master preparation, and plate processing for use on an offset press. This course also includes the mechanics for producing the composed type for reproduction.

TIPT 1402 Desk Top Publishing I GRPH 1322 **2-7-4**
This course covers basic desk top publishing principles and practices. The student will learn the operation of equipment for typesetting, designing, and formatting jobs for layout. Prerequisite: TIPT 1401 or consent of the Department Chair.

TIPT 1403 Offset Press Operations I GRPH 1309 **3-3-4**
This course covers the paper transport system, preparation of the water and ink system, and end of press run activities to include clean up of the AM 1250 press with chute and chain delivery systems. Prerequisite: TIPT 1402 or consent of Department Chair.

TIPT 1404 Advanced Camera 3-3-4
This course is a continuation of TIPT 1401. It covers advanced camera operation, platemaking, and stripping. It includes producing half-tone negatives and half-tone PMTs, producing paper plates using the silver master plate unit, and stripping multicolor flats for plates. Prerequisite: TIPT 1403 or consent of the Department Chair.

TIPT 1405 Offset Press Operations II 3-4-4
This course covers multicolor printing on a single and multicolor AM 1250 press and single and multicolor printing on the AM 1850 press. Prerequisite: TIPT 1404 or consent of the Department Chair.

TIPT 1406 Offset Press Operations III 3-3-4
This course covers the paper transport system, preparation of water and ink system, and end of press run activities to include clean up of the A.B. Dick 360 press. Prerequisite: TIPT 1405 or consent of the Department Chair.

TIPT 1407 Offset Press Operation, Preventive Maintenance and Bindery Operations 3-3-4
This course covers preventive maintenance of the offset printing press. It also includes bindery operations such as paper characteristics and identification, proper paper jogging and padding procedures, figuring paper cuts, and paper cutter operations. Prerequisite: TIPT 1406 or consent of the Department Chair.

TIPT 1408 Advanced Bindery 3-3-4
This is a continuation of TIPT 1407. It covers the operation of the perfect binder, folder, stitcher, and the operation of the one- and three-hole drills. Prerequisite: TIPT 1407 or consent of the Department Chair.

TIPT 1409 Print Shop Applications 3-4-4
This course allows the student to put all the skills learned in previous courses to practice by performing the functions of a print shop employee. It includes paper selection and cutting, darkroom functions, platemaking, ink selection, press running, bindery operations, storing flats and plates, and equipment maintenance and repair. Prerequisite: All previous TIPT courses or consent of the Department Chair.

TIPT 1410 Desk Top Publishing II 2-7-4
This course is a continuation of TIPT 1402. It provides the student with additional "hands-on" training in the use of desk top publishing equipment to perform pre-press operations associated with the printing industry. Prerequisite: TIPT 1402 or consent of the Department Chair.

(TIWL) Welding Technology
see also Degree Plan (WLDG)

TIWL 1300 Basic Shop Practices 2-3-3
This course covers safety, basic first aid, OSHA, basic mathematics, U.S. Customary and Metric measuring systems, precision measuring tools, the use of hand tools, power tools, blueprints, and welding symbols.

TIWL 1302 Oxyacetylene Welding/Cutting Procedures 2-4-3
This course is an introduction to the oxygen-acetylene welding/cutting equipment and safety practices. The student will be shown and practice the safe use of the welding and cutting equipment. Special emphasis is placed upon a strict safety exam. Prerequisite: TIWL 1401 or consent of the Department Chair.

TIWL 1303 Introduction to Arc Welding 2-3-3
This course is an introduction to the principles of arc welding. The student will be shown how to identify electrodes and set-up the shielded metal arc welding machine, and how to prepare the surface to be welded. Prerequisite: TIWL 1302 or consent of the Department Chair.

TIWL 1304 Arc Welding, AWS Position 1G 2-4-3
This course covers welding in the flat position with E6010 or E6011 electrodes and the use of E7018 electrodes in accordance with the American Welding Society (AWS) standards, position 1G. Prerequisite: TIWL 1303 or consent of the Department Chair.

TIWL 1305 Arc Welding, AWS Position 2G 2-4-3
This course covers welding in the horizontal position using E6010, E6011, and E7018 electrodes in accordance with AWS standards, position 2G. Prerequisites: TIWL 1304 or consent of the Department Chair.

TIWL 1306 Arc Welding, AWS Position 3G 2-4-3
This course covers welding in the vertical position using E6010, E6011, and E7018 electrodes in accordance with AWS standards, position 3G. Prerequisite: TIWL 1305 or consent of the Department Chair.

TIWL 1307 Arc Welding, AWS Position 4G 2-4-3
This course covers welding in the overhead position using E6010, E6011, and E7018 electrodes in accordance with AWS standards, position 4G. Prerequisite: TIWL 1306 or consent of the Department Chair.

TIWL 1401 Occupational Blueprint Reading 3-4-4
This course introduces the student to blueprint reading as it applies to the welding industry. The student will learn to read and use welding blueprints, interpret welding symbols, identify sizes and shapes of metals, and use terms and abbreviations used in the welding industry. The student will prepare welding blueprints using AWS procedures. Prerequisite: TIWL 1300 or consent of the Department Chair.

TIWL 1402 Industrial Shop Welding Procedures 2-7-4
This course provides practical and safe welding/cutting procedures for industrial shop applications necessary in the repair, fabrication, and modification of equipment and facilities. Course content includes welding safety, flame cutting, light metal welding, brazing and soldering, wire welding (GMAW), and basic shielded arc welding (SMAW). Prerequisites: Consent of the Department Chair.

TIWL 1408 Gas Metal Arc Welding (GMAW) (MIG) 3-4-4
This course introduces the student to the principles and practices of gas metal arc welding (GMAW/MIG). Emphasis is placed on safety, equipment use, the different types of metal transfer, shielding gases, and welding in positions 1G, 2G, 3G, and 4G. Welding performance will be in accordance with AWS standards and codes. Prerequisite: TIWL 1307 or consent of the Department Chair.

TIWL 2409 Gas Tungsten Arc Welding (GTAW) (TIG) 3-4-4
This course introduces the student to the principles and practices of gas tungsten arc welding (GTAW/TIG). Emphasis is placed on safety, equipment use, and welding of aluminum, mild steel and stainless steel in positions 1G, 2G, 3G, and 4G. Welding performance will be in accordance with AWS standards and codes. Prerequisite: TIWL 1408 or consent of the Department Chair.

TIWL 2410 Beginning Pipe Welding 3-4-4
This course introduces the student to pipe welding. Emphasis is placed on welding in positions 1G, 2G, and 5G (vertical up) using E6010 and E7018 electrodes in accordance with the American Society of Mechanical Engineers (ASME) codes. Prerequisite: TIWL 2409 or consent of the Department Chair.

TIWL 2411 Advanced Pipe Welding 2-7-4
This course is a continuation of Beginning Pipe Welding. It includes welding in positions 5G (vertical down) and 6G (45 degrees) using E6010 and E7018 electrodes in accordance with ASME codes. Emphasis is placed on design and use of pipe templates and pipe certification. Prerequisites: TIWL 2410 or consent of the Department Chair.

TIWL 2412 Welding Applications WIDG 2435 **3-4-4**
This course provides the student with practical "hands-on" experience in welding applications. The student will select a steel welding project, draw the necessary blueprints to AWS standards, and perform layout and welding operations to complete the project. Prerequisite: TIWL 2411 or consent of the Department Chair.

(TMTH) Technical Mathematics

TMTH 1301 Technical Mathematics **3-0-3**
This course includes a study of algebra, trigonometric functions, graphs of trigonometric functions, solution of triangles, and plane and solid geometry. Prerequisite: DSMA 0303 or consent of the Department Chair.

(TRAN) Transportation

(Not Offered in Texas)

TRAN 1301 Introduction to Transportation **3-0-3**
Provides the history and development along with a broad overview of the transportation industry. Includes a basic knowledge of the various modes of transportation (air, motor, rail, water and pipeline), and an introduction to transportation law.

TRAN 1302 International Trade **3-0-3**
This course considers the relation of foreign trade to domestic trade. It covers the operation of import and export business including organization, marketing, terminology, documents, financial procedures, credits and collection, and communications. The basic principles and practices of world trade are studied.

TRAN 1303 Economics of Transportation I **3-0-3**
This is a general introduction to the economics of transportation and includes a study of the principles of economics and economic theory applicable to transportation, the principles of marketing and how they relate to transportation, a general survey of government transportation regulation, and a survey of business organizations and their financing.

TRAN 1304 Interstate Commerce Law and Practice **3-0-3**
This is a general review of the statutory law, leading court decisions, and government regulations and practices. It shows that the effect and purpose of federal regulation of transportation including a review of the respective spheres of federal and state regulations.

TRAN 2301 Economics of Transportation II **3-0-3**
This is a study of the general services performed by the various types of transportation instrumentalities including organization, operation, and practices. It also presents a review of the economics of freight rates from the viewpoint of the shipper, carrier, and regulatory bodies.

TRAN 2302 Transportation Law and Regulation **3-0-3**
This course covers the major laws of the United States and state laws which provide for regulation of domestic land and water transportation by for-hire carriers.

TRAN 2303 Traffic Management I **3-0-3**
This introductory course provides the student with the basic principles of traffic management. The course will cover organization of an industrial traffic department, carrier selection, routing, classification and rating, packaging, and warehousing.

TRAN 2304 Traffic Management II **3-0-3**
This is a continuation of Traffic Management I. It provides the student with the knowledge and understanding necessary to function as the supervisor or traffic manager of either an industrial traffic department or a for-hire carrier's traffic department. Prerequisite: TRAN 2303.

TRAN 2307 Highway Transportation **3-0-3**
This is the study of motor carrier rates and practices including instruction in diversified rate problems including both interstate and intrastate tariffs.

TRAN 2309 Airline Freight Transportation I **3-0-3**
This is an introduction to the airline transportation industry and includes the study of freight by transport aircraft, air express, air freight forwarders as well as the regulation and economics of commercial air transportation.

TRAN 2310 Airline Freight Transportation II **3-0-3**
A continuation of Airline Freight Transportation I. This is an advanced course in airline freight transportation. Prerequisite: TRAN 2309.

TRAN 2311 Transportation Marketing **3-0-3**
This course covers the basic sales principles and techniques involved with selling transportation to include personal appearance, communications, development and use of product knowledge, why and how people buy, how to prospect for customers, and how to prepare a presentation.

(WLDG) Welding
see also Skills Center (TIWL)

WLDG 1413 Introduction to Blueprint Reading for Welders (WELD 1406) (TIWL 1401) **3-3-4**
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. Prerequisite: INDU 1400 or consent of the Department Chair.

WLDG 1417 Introduction to Layout and Fabrication (WELD 2406) **3-3-4**
A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction. Prerequisite: WLDG 1413 and 2443 or consent of the Department Chair.

WLDG 1425 Introduction to Oxy-Fuel Welding and Cutting (WELD 1401) (TIWL 1302) **3-3-4**
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. Prerequisite or Corequisite: INDU 1400 or consent of the Department Chair.

WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW) (WELD 1402) (TIWL 1303) **3-3-4**
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. Prerequisite or Corequisite: WLDG 1425 or consent of the Department Chair.

WLDG 1430 Introduction to Gas Metal Arc (MIG) Welding (WELD 2408) (TIWL 1408) **3-3-4**
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. Prerequisite: WLDG 1428 and 2439 or consent of the Department Chair.

WLDG 1434 Introduction to Gas Tungsten Arc (TIG) Welding (WELD 2407) (TIWL 2409) **3-3-4**
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. Prerequisite: WLDG 1428 and 2439 or consent of the Department Chair.

Add
WIDG 2403 = TIWL 1300
~~WLDG 1413 = TIWL 1401~~
WIDG 2413 = TIWL 1402
WIDG 2435 = TIWL 2412
2447 NEW
2451 NEW

WLDG 1435 Introduction to Pipe Welding (WELD 2402) (TIWL 2410) 3-3-4

An introduction to welding of pipe using the shielded metal arc welding process, including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes. Prerequisite: WLDG 1457 or consent of the Department Chair.

WLDG 1457 Intermediate Shielded Metal Arc Welding (SMAW) (WELD 1403) (TIWL 1304) 3-3-4

A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. Prerequisite: WLDG 1428 or consent of the Department Chair.

WLDG 2439 Advanced Oxy-Fuel Welding and Cutting (WELD 1405) 3-3-4

A study of all position welding on ferrous and nonferrous metals using oxy-acetylene welding process including welding and cutting, brazing, and soldering operations. Prerequisite: WLDG 1425 or consent of the Department Chair.

WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW) (WELD 2401) (TIWL 1306) 3-3-4

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. Prerequisite: WLDG 1457 or consent of the Department Chair.

(TIWL 2411)

WLDG 2453 Advanced Pipe Welding (WELD 2404) 3-3-4

Advanced topics involving welding of pipe using the shielded metal arc welding process. Topics include electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 5G and 6G using various electrodes. Prerequisite: WLDG 1435 or consent of the Department Chair.

WLDG 2488 Internship - Welder/Welding Technologist (WELD 2409) 1-18-4

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 achieved 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. Prerequisite: Consent of the Department Chair.

(WOPO) Word Processing

WOPO 1101 MS-DOS: An Introduction 1-0.5-1

A 24-hour basic introduction to the structure and operation of IBM and IBM compatible microcomputer systems. For professional, managerial, administrative, and clerical personnel who will use but are not familiar with IBM and IBM compatible microcomputer systems. Instruction consists of short lecture/demonstrations and hands-on practice with actual equipment. Topics include IBM microcomputer system components and operating/controlling the system with MS-DOS.

WOPO 1102 WordPerfect: An Introduction 1-0.5-1

A 24-hour course for professional personnel, word processing operators, writers, editors, and publishers. Hands-on experience with minimum lecture, this course includes demonstration, discussion/question/answersessions. Topics covered include the basic WordPerfect program; document formatting, text entry, spell check, thesaurus, outlining, footnoting, merging letters, document saving, retrieving and editing; WordPerfect directory/files management; printer/font selection and control; and printing documents.

WOPO 1103 Microsoft Word: An Introduction 1-0.5-1

A 24-hour course for professional personnel, word processing operators, writers, editors, and publishers. Hands-on experience with lecture, this course includes demonstration, discussion/question/answersessions. Topics covered include an overview of word processing; structure of the Microsoft Word program; document formatting, text entry, retrieving, editing and printing document files; directory/files management; merging and printer/font selection and control.

WOPO 1104 LOTUS 1-2-3: An Introduction 1-0.5-1

A 24-hour course introducing participants to the worksheet and graphics capabilities of LOTUS 1-2-3 applications software. For professional, managerial, administrative, or financial analyst personnel with prior microcomputer experience who need budgetary, financial, or other computer database supported information portrayal/analysis capabilities. Instruction consists of short lecture/demonstrations and hands-on practice. Includes discussion/ question/answersessions using practice exercises and examples. Topics include LOTUS operating menus, worksheet design, creation, mathematical functions, protecting, storage, retrieval, moving, copying, editing, data manipulation, graphics development, LOTUS macros, on-line helps, tutorials and references.

WOPO 1106 Enable: An Introduction 1-1-1

A 30-hour course for professional, managerial, administrative, and financial analyst personnel having no prior microcomputer experience. A hands-on, minimum lecture approach using actual equipment. Includes discussion/ question/answer sessions based upon instructor-furnished practice exercises and examples. Topics include microcomputer system components, operation, and care; integrated software, the ENABLE applications modules; spreadsheet concepts, database management and word processing; graphics; and telecommunicationsoperations.

WOPO 1107 Spreadsheet Applications 1-0.5-1

A 24-hour course introducing participants to the worksheet and graphics capabilities of spreadsheet applications software. For professional, managerial, administrative, or financial analyst personnel with prior microcomputer experience who need budgetary, financial, or other computer database supported information portrayal/analysis capabilities. Instruction consists of short lecture/demonstrations and hands-on practice. Includes discussion/ question/answersessions using practice exercises and examples. Topics include spreadsheet operating menus, worksheet design, creation, mathematical functions, protecting, storage, retrieval, moving, copying editing, data manipulation, graphics development, spreadsheet macros, on-line help features, tutorials and references.

WOPO 1108 Word Processing Applications 1-0.5-1

A 24-hour course for professional personnel, word processing operators, writers, editors, and publishers. Hands-on experience with minimum lecture; includes demonstration, discussion/question/answersessions. Topics include: overview of word processing structure of word processing program: defining files; document formatting, text entry, retrieving, and editing and printing documents files; directory/files management; merging and printer/font selection and control.

WOPO 1109 Data Base Applications 1-0.5-1

A 24-hour course introducing participants to the capabilities of a database structure. Hands-on with minimum lecture; includes demonstration, discussion/question/answersessions. Topics include how to create, edit, browse, sort, search, and delete entries within a database structure. In addition, participants will learn how to modify an existing structure, create a report, and how to change or replace fields using search criteria

WOPO 1303 Beginning Keyboarding/Data Entry 2-4-3

A beginning course in the fundamentals and techniques of keyboarding and data entry on personal computers. Special emphasis on speed development, including an introduction to letter writing, tabulating, and preparing manuscripts.

WOPO 1304 Intermediate Information Processing Applications 2-4-3

A continuation of WOPO 1303. Additional skills in terms of accuracy and speed will be evidenced by students in utilizing personal computers. Composition and typing of business letters, tabulations and manuscripts of more demanding content will be instructed. Prerequisite: WOPO 1303 or consent of the Department Chair.

WOPO 1305 Applicational Software 2-4-3

A course for professional, managerial, administrative, and financial analyst personnel having no prior microcomputer experience. A hands-on lecture/lab approach using actual equipment. Includes discussion/ question/answer sessions based upon instructor-furnished practice exercises and examples. Topics include microcomputer system components, operating/controllingthe system with MS-DOS; spreadsheet operating menus, worksheet design and creation, mathematical functions, graphics development, spreadsheet macros, and data manipulation; overview of the word processing program's structure, defining files, document formatting, text entry, retrieving, editing and printing document files, merging, printer control, and font selection.

WOPO 1307 Word Processing/Transcription 2-4-3

This course is designed to train students in the theory of word processing. It introduces the student to word processing facilities and equipment. It also provides hands-on experience with word processing equipment to include processing, editing, storing information, printing devices, formatting, type style, and paragraphing. Transcribing machines are utilized in conjunction with information creation. Suggested typing skills of 35 WPM. No timed writings are required.

WOPO 1401 Word Processing Cooperative Training I 1-21-4

This course consists of on-the-job word processing training that utilizes the principles, skills, and knowledge gained in the setting of the classroom. The student is employed at an approved work site under the supervision of Office Administration Department personnel.

WOPO 2302 Advanced Information Processing Applications 2-4-3

This course includes advanced work in such specialized production as desk top publishing and computer graphics. Personal computers and applicable software are used extensively in preparing students to be highly productive office employees. Prerequisites: WOPO 1304 or equivalent.

WOPO 2303 Office Automation 2-4-3

The students will work with advanced problems utilizing hands-on experience with information processing facilities and equipment. Hands-on experience includes the following: editing, storing, printing, formatting, computing and networking. A thorough study of present and future systems, i.e., interchangeability and adaptability of software. Prerequisite: 6 WOPO hours or equivalent.

WOPO 2304 Automated Accounting 2-4-3

Review of principles of accounting, such as journalization, posting, statements, special journals; subsidiary ledgers will be studied utilizing software packages. Special emphasis is placed on personal, family and small business accounting systems. Prerequisite: OADM 2304 or equivalent.

WOPO 2306 Information Systems and Applications 2-4-3

This course is designed to give secretarial, clerical, management, and word processing students insight into the present and future office environment with regard to the current trend towards automation. Through class discussion, individual and/or group projects, research and input from various speakers from related areas of private industry, students will become aware of the impact of current trends toward automation in the office as well as related business fields. Prerequisite: 12 WOPO hours or equivalent.

WOPO 2308 Information System Internship I 2-4-3

The student will be provided a combination of occupationally related classroom instruction and on-the-job training in cooperation with offices within the Office Administration Department. Actual work training will be available in following areas: information processing, filing, duplication, telephone use, correspondence preparation, voice transcription machine, record keeping, proofreading, etc. Departmental approval required.

WOPO 2309 Information System Internship II 2-4-3

Students will be provided a combination of occupationally related class work instruction and on-the-job training in cooperation with offices within the Office Administration Department. Students will demonstrate advanced competencies with work experiences in the following areas: information processing, letter composing, telephone procedures, filing work, scheduling, financial calculating, duplication, transcribing from dictation equipment, etc. Departmental approval required.

WOPO 2310 Word Processing Center Management 3-0-3

This course covers the factors that influence work efficiency and human behavior in the information processing center environment. This course includes a consideration of systems limitations and capabilities, work flow, system security, scheduling, managerial theories, system evaluation, human relations, and supervision. Prerequisite: Sophomore standing or the consent of the Department Chair.

WOPO 2401 Word Processing Cooperative Training II 1-21-4

This course is a continuation of Word Processing Cooperative Training I. Prerequisite: WOPO 1401.

Personnel

William C. Alexander, Dean, Guidance and Counseling
Lois A. Anderson, Dean, Continental Campus
Jose Aponte, Coordinator, Disability Support Services
Gordon D. Bacon, Director, Child Care Center
James D. Barton, Director, Accounting
Laurel Baumberger, Coordinator, U.S. Embassy Programs
Carolyn Beadle, Director, TDCJID and Gatesville
B. W. Beebe, Director, Business Services
Stan Benoit, Assistant Director, Financial Aid
Ramsey Boland, Director, Army Learning Centers, Fort Hood Campus
Betty Bowling, Project Director, Single Parent Support Services
Betty Broadhurst, Director, Evaluation Services
Olivia Bruno, Supervisor, Payroll
Wauneta Cannon, Manager, Accounts Payable
Laurelyn Carlisle, Dean, Instructional Services
Al Castillo, Director, Technical Services
Suzzette Chapman, Director, Distance Education and Education Technology
Mary Civello, Director, Employment Services
Valerie Coddington, Director, Continuing Education
G. Robert Criswell, Dean, Student Services
Douglas Enterkin, Director, Student Services, Gatesville
Susanna Eppes, Coordinator, Learning Disability Services
George Erskine, Director, Testing Services
Tuesday Etheridge, Supervisor, Residence Hall
Brigitte Flynt, Coordinator, Records & Registration, Central Campus
Robert D. Garvin, Coordinator, Institutional Research
Lorrie Hammer, Manager, Financial Reporting
Debbie Hansen, Coordinator, Evaluations
Lois Hanson, Director, College Programs, Fort Hood Campus
Monica Hull, Coordinator, Community Relations & Marketing
Bob Kamstra, Director, Materials Management
Daniel Karppi, Director, Student Life Activities
Gary Kindred, Associate Dean, Continental Campus
Doretha King, Director, Adult Education, Service Area Campus
Lisa Kramer, Director, FAST Program, Fort Hood Campus
Lillian Kroeger, System Registrar
Billie Kunkel, Director, Payroll Services
Maxine Lettman, Contract Administrator
Mary Levandovsky, Director, Student Support Services
Shelia Lewis, Training Coordinator
Robert W. Liberty, Assistant Comptroller
Jim Lindley, General Counsel
Loria Lofton, Vocational Advisor
Guadalupe Lopez, Manager, MOS Programs, Ft. Hood Campus
Peg Lyons, Assistant Director, Library Services
Don Martin, Dean, Pacific Far East Campus
JoAnn Maxon, Manager, Reprographics
David McClure, Director, Career Planning and Placement
Arnetta Melvin, Manager, Accounts Receivable
Martin O. Menn, Director, Data Processing
Mark Meverden, Coordinator, Transfer Evaluations
Don Mikles, Dean, Central Campus
Margaret Morris, TASP Coordinator/Vo-Tech Advisor, Central Campus
Ted Muenter, Director, NCO Lead, Fort Hood Campus
NayRine Neal, Coordinator, Affirmative Action/EEO
Niccole Neal, Coordinator, Air Force Programs
Traudi Nicholson, Site Representative, Fort Hood Campus
James C. Nixon, Dean, Fort Hood and Service Area Campuses
Jim O'Brien, Director, Facilities Management
Terri K. O'Connor, Manager, Computer Operations
David Orwig, Chief, Campus Police
Fred J. Ostertag, Dean, Europe Campus
William Perkinson, Director, College Development
Mark Plasterer, Director, Audio-Visuals
Mark A. Pollett, Director, Community Education, Service Area Campus
Sherry L. Pollett, Bursar
Marky Price, Director, Recruitment and Retention
Georgia Pullen, Director, Student Services, Fort Hood Campus
Elaine Riley, Director, Skills Center Counseling
Madeline Rivera, Recruiter/ACAD Advisor, Central Campus
Judyann Robinson, Coordinator, Risk Management
Max Rudolph, General Manager, KNCT
Bernice Seawood, Coordinator, Married Student Housing
Noel H. Schnitz, Dean, Library Services
Annabelle L. Smith, Director, Offices of Student Financial Assistance/Veteran Services
Suanne Stroup, Director, Community Relations & Marketing
Carole Tyler, Director, Substance Abuse Resource Center
Maria C. Arevalo-Vargas, Director, International Student Services
Michael Ulinski, Coordinator, Mathematics Resource
Annette Vassaur, Director, Project PASS
Johnelle Welsh, Dean, American Preparatory Institute
Leo Welsh, Director, Human Resources Management Division
Bill Wheeler, Director, Pension Plan
Ted Woehl, Comptroller
Jim M. Yeonopolus, Assistant Deputy Chancellor, Campus Operations/Dean, Navy Campus
Lillian I. Young, Director, Institutional Effectiveness
Linda Young, Coordinator, Student Activities

Faculty

Figures in parentheses indicate date of first appointment on the Central Texas College staff and date of appointment to present position, respectively.

Wynona W. Alexander, Department Chair (1969,1974)
Art/Music/Fine Arts
B.A., East Texas State University
M.A., East Texas State University
Ph.D., North Texas State University

Exzelia O. Alfred (1985)
Nursing - *Associate Degree Nursing*
Diploma, Harlem Hospital School of Nursing
B.S.N., Hunter College
M.A., Teachers College, Columbia University
M.Ed., Teachers College, Columbia University

Mary V. Alfred (1982)
Office Administration - *Office Information Systems*
B.S., University of Central Texas
M.S., University of Central Texas
Ph.D., University of Texas at Austin

Tom Allen (1993)
Social & Behavioral Sciences - *Philosophy*
B.S., North Texas State University
M.Th., Harding University

Janice R. Anderson (1980, 1993)
Developmental Studies - *English as a Second Language/ Intensive English*
B.S., University of Georgia
M.Ed., East Stroudsburg University
Additional graduate study, University of Georgia

Gordon D. Bacon, Department Chair (1985)
Early Childhood Professions
B.A., Montana State University
M.A., University of Montana

Gayle J. Blum (1980)
Nursing - *Associate Degree Nursing*
Diploma: Hillcrest School of Nursing
B.S.N., University of Mary Hardin-Baylor
M.S.N., Texas Woman's University

Johnny H. Boardman (1988)
Aviation Science
A.A.S., Central Texas College
B.S., University of Central Texas
M.S., University of Central Texas

Beth Bodkin (1984)
Nursing - *Associate Degree Nursing*
Diploma: St. Elizabeth Hospital
B.S.N., University of Texas at Austin
M.S.N., University of Texas at Austin
Additional graduate study, Texas A&M University

John W. Brewer, Department Chair (1978)
Air Conditioning
B.S., University of Central Texas
M.S., University of Central Texas

Ruby Brown (1988)
Nursing - *Associate Degree Nursing*
A.S.N., Galveston College
B.S.N., University of South Carolina
M.Ed., Southern University A&M College
M.S., Texas Woman's University

Richard M. Carey (1990)
Physical Education
B.S., Southwest Texas State University
M.A., Southwest Texas State University

Naomi Carroll (1994)
Associate Degree Nursing
B.S.N., California State College
M. N., University of California
Additional graduate study, University of Texas at Austin

Bobby F. Chaney (1987)
Office Administration
B.A., Oglethorpe University
M.S., Ed., University of Southern California

Elizabeth L. Cheatham (1974)
Office Administration
B.A., Louisiana Tech University
M.B.A., Louisiana Tech University

Donna Chummey (1990)
Science - *Chemistry*
B.S., Tarleton State University
M.S.T., Tarleton State University

Charles C. Clark (1982)
Industrial Technology - *Diesel Mechanics*
A.A.S., Central Texas College

Jerrie Kellar Cleaver (1983, 1992)
Office Administration
B.A., Baylor University
M.S., University of Central Texas

Nancy Cody (1992)
Nursing - *Vocational Nursing*
B.S.N., University of Arkansas
M.S., Central Michigan University

David L. Coleman (1995)
Computer Science
A.A.S., Central Texas College
B.S., University of Central Texas
M.S., University of Central Texas

B. J. Cummings (1982)
Industrial Technology - *Auto Body*
A.A.S., Central Texas College

Susan Davis (1991)
Nursing - *Associate Degree Nursing*
B.S.N., Texas Woman's University
M.S., Texas Woman's University

Yolanda F. Davis (1996)
Developmental Studies - *Math*
B.A., Kentucky State University
M.S., University of Mississippi

Richard Diller (1984)
Computer Science
A.A.S., Central Texas College
B.S., U.S. Military Academy
M.S., U.S. Naval Post Graduate School

Patricia Donahue (1991)
Nursing - *Associate Degree Nursing*
Diploma: Los Angeles County Medical Center
B.S.N., University of Mary Hardin-Baylor
M.S., Texas Woman's University
Additional graduate study, University of Texas at Austin

Donald Donaldson, Department Chair (1985)
Industrial Technology-*Automotive/Auto Body/Building Trades/Maintenance Technology/Barber/Cosmetology/ Diesel/Fire Protection/Graphics and Printing/ Professional Truck Driving/Small Gas Engine Repair/ Welding*
A.A.S., Central Texas College

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Nursing - *Associate Degree Nursing*
B.S.N., University of Mary Hardin-Baylor
M.S., University of Central Texas

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Office Administration
A.A.S, Central Texas College
B.S., University of Central Texas

Stanford P. Dyer (1992)
Social and Behavioral Sciences - *History/Government*
B.A., Louisiana Tech
M.A., Louisiana Tech
Ph.D., Texas A&M University
Additional graduate study, Sam Houston State University

Paul G. Engelkirk (1992)
Science - *Microbiology*
B.A., New York University
M.S., Michigan State University
Ph.D., Michigan State University

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Nursing - *Vocational Nursing*
Diploma: St. Joseph's College of Nursing
A.S., Solano Community College
B.S., Sonoma State University
M.H.A., Colorado University

Mary C. Feild (1973)
Office Administration
B.A., Lamar University
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Industrial Technology - *Automotive*
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Harriet Foster (1983)
Nursing - *Vocational Nursing*
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John R. Frith, Department Chair (1984, 1994)
Business Administration and Legal Services
Business/Hospitality/Legal Assistant/
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B.B.A. University of Georgia
M.B.A. Auburn University
M.S. Troy State University
Additional graduate study, Nova University, Southeastern University

James D. Gebhardt, Chief Flight Instructor (1978, 1981)
Aviation Science
A.A.S., Central Texas College
B.A.S., University of Mary Hardin-Baylor
M.S., University of Central Texas

Curtis Gibson, Department Chair (1981, 1987)
Aviation Science
A.A.S., Central Texas College
B.S., University of Central Texas
M.S., University of Central Texas

Jane M. Gibson (1979)
Communications - *Foreign Language*
B.A., Abilene Christian University
M.A.T., Southwest Texas State University

Martha T. Gibson (1997)
Computer Science
A.A.S., Central Texas College
B.S., University of Central Texas

Robert W. Grazinski, Department Chair (1984, 1995)
Computer Science
A.A., University State of New York
A.A.S., Central Texas College
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Dawn Green (1994)
Mental Health Services
B.A., Saint Leo College
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Science - *Biology*
B.S., Stephen F. Austin State University
M.S., Stephen F. Austin State University

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Electronics
B.S., Lamar State University
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Timothy R. Hall, Department Chair (1969, 1974)
Mathematics
B.A., Oklahoma State University
M.S., West Texas State University

William G. Handorf (1969, 1976)
Social and Behavioral Sciences - *Psychology/Sociology*
A.A., Morton Junior College
B.A., Northwestern University
M.A., Northwestern University
Ed.D., American University

Elaine E. Hayes, Department Chair (1986)
Nursing - *Associate Degree Nursing*
B.S., Louisiana College
M.S.N., University of Texas at Austin
Ed.D., Texas A&M University

John L. Henderson (1970)
Communications - *English*
B.A., West Texas A&M University
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Jerry L. Herrick (1979, 1989)
Social and Behavioral Sciences - *Psychology*
B.A., Jacksonville State University
M.A., University of Georgia
C.A.G.S., Boston University
Ed. D., Boston University

Patrick K. Hidy (1976)
Science - *Physiology*
A.A.S., Phillips County Community College
B.S., East Texas State University
M.S., East Texas State University
Ed.D., Texas A&M University

Jerry D. Hill
Industrial Technology - *Printing Technology*
Certificate of Completion, Oklahoma State University

Joseph Hogan, Department Chair (1984, 1996)
Criminal Justice
A.A.S., Central Texas College
B.G.S., Chaminade University of Honolulu
M.C.J., University of Central Texas

Christine N. Holden (1990)
Physical Education/Intramural Sports
B.S., Southwest Texas State University
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Anna R. Holston (1988)
Communications - *English*
B.A., Paine College
M.A., Pepperdine University
M.A., Baylor University

David F. Hubbell (1991, 1996)
Communications - *English*
A.A., Temple Junior College
B.A., Stephen F. Austin State University
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Jami J. Hughes (1991, 1994)
Communications - *Speech/Theater*
B.F.A., Sam Houston State University
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Linda K. Hurst (1995)
Developmental Studies - *Mathematics*
B.S., Angelo State University
M.S., Baylor University
Additional graduate study, University of Texas at Austin

Kay D. Insogna (1989)
Mathematics
B.S., Stephen F. Austin State University
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Nancy Isett (1985)
Fine Arts - *Art*
B.A., University of Texas at Austin
B.F.A., University of Texas at Austin
M.F.A., University of Texas at Austin

Ray S. Ivans (1993)
Business Management -*Business/Real Estate*
B.S., University of New Mexico
M.B.A., Tarleton State University

Jaqueline Jones (1995)
Science - *General Biology/General Zoology*
B.S.E., University of Mary Hardin-Baylor
M.S.T., Tarleton University

Jeanette Jost (1978, 1992)
Mental Health Services/Nursing
Diploma: Scott and White Memorial Hospital School of Nursing
B.S.N., University of Mary Hardin-Baylor
M.S., University of Central Texas
M.S.N., University of Texas at Austin

Jack L. Kinn (1980)
Computer Science
B.G.S., University of Nebraska at Omaha
M.S.B.A., Boston University

Peter W. Knightes (1982)
Science - *Geology/Geography/Astronomy*
B.S., SUNY Oneonta
M.Ed., Texas A&M University
Additional graduate study, Texas A&M University
Additional graduate study, University of Texas at Austin

Billie J. Laney (1970)
Social and Behavioral Sciences - *Psychology/Sociology*
B.A., Southern Methodist University
M.A., East Texas State University
Ph.D., East Texas State University
Additional graduate study, University of Central Texas

Robert R. Leffel
Social Studies - *Economics*
Mathematics
B.S., North Texas State University
M.Ed., North Texas State University
Ed.D., Texas A&M University

Barbara Littlefield (1988)
Nursing - *Vocational Nursing*
Diploma: St. Joseph's Hospital, Phoenix, Arizona

Cynthia D. Long (1995)
Office Administration
B.B.A., Tarleton State University
M.B.A., Tarleton State University
M.L.S., Sam Houston State University

Gloria L. Lyons (1974)
Nursing - *Associate Degree Nursing*
B.S.N., Winston Salem University
M.S.N., Texas Woman's University

Jacqueline Mackey (1992)
Nursing - *Associate Degree Nursing*
A.A.S., Central Texas College
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M.S., University of Central Texas

Herbert J. Maglietta, Department Chair (1974)
Associate Dean, Vocational/Technical Programs (1995)
Drafting & Design
B.S., Southwest Texas State University
M.Ed., Southwest Texas State University

Kaye Marfell (1992)
Nursing - *Vocational Nursing*
B.S.N., South Dakota State University
M.A., Webster University

Judy Marshall, Director (1986)
Early Childhood Professions
B.S., Howard Payne University

Wilbur McBryde (1991)
Science - *Biology*
B.A., Sul Ross University
M.A., Sul Ross University
Additional graduate study, University of Texas at Austin

Roger Miller (1995)
Industrial Technology - *Automotive Technology*
A.A.S., Central Texas College

John W. Moffitt, Department Chair (1967, 1989)
Developmental Studies - *Mathematics*
B.A., Southwest Texas State University
M.A., Southwest Texas State University
Graduate Study, University of Texas at Austin
Additional graduate study, Nova University

Susanne D. Morales (1993,1994)
Developmental Studies - *Writing*
B.A., Southwest Texas State University
B.A., California State University, Sacramento
Guest studentship, Paedagogische, Hochschule, Flensburg
M.Ed., Southwest Texas State University
Additional graduate study, Texas A&M University

Richard D. Morizen, Hospitality Director (1995)
Business Administration and Legal Services
Hospitality Management/Culinary Arts
B.A., Chapman College
B.A.S., University of Rhode Island
M.B.A., University of Phoenix
Certified Culinary Educator
Certified Executive Chef
Certified Food Executive (CEF)

Edwin Mott II (1996)
Computer Science
B.A., The Citadel
M.A., Webster University
Additional graduate study, Nova University,
Southeastern University

Marilynn Neumann (1990)
Nursing - *Associate Degree Nursing*
B.S.N., University of Michigan
B.S., Southwest Texas State University
M.S., University of Michigan
M.A., University of Michigan

Robin Oaks (1992)
Computer Science
A.A.S., Temple College

Keith A. Oswalt (1990)
Industrial Technology
Building Trades/Maintenance Technology
A.A.S., Central Texas College

Donna Poteet, Director, Phlebotomy Program/Medical Laboratory Technician Program (1988)
Science - *Medical Laboratory Technician*
B.S., University of Texas Medical Branch at Galveston
M.A., University of Houston/CLC

Syed G. Rabbani (1991)
Science - *Physics*
B.SC., University of Dacca
M.SC., University of Dacca
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Central Texas College Around the World as of June 1997

Central Campus
Killeen

Fort Hood & Service Area Campus
Brady
Burnet
Fort Hood
Gatesville
Hamilton
Lampasas
Mason
San Saba

Continental Campus
Alaska
Fort Greely
Fort Richardson
Fort Wainwright
California
Camp Pendleton
District of Columbia
Bolling AFB
Georgia
Fort Stewart
Hunter Army Airfield
Hawaii
Fort Shafter
Schofield Barracks
Tripler Army Medical Center
Kansas
Fort Riley
Kentucky
Fort Knox
Louisiana
Fort Polk
Missouri
Fort Leonard Wood
New Mexico
Holloman AFB
North Carolina
Fort Bragg
Pope AFB
Virginia
Fort Lee
Washington
Fort Lewis
Honduras
Soto Cano Air Base
Panama
Fort Clayton
Fort Kobbe
Fort Sherman

U.S. Embassies Worldwide

Ships at Sea Worldwide

Navy Campus
California
Lemoore NAS
San Diego
Connecticut
New London
Florida
Jacksonville
Mayport
Pensacola
Hawaii
Pearl Harbor
Illinois
Great Lakes
Pennsylvania
Philadelphia
Rhode Island
Newport
South Carolina
Charleston
Virginia
Norfolk
Washington
Bangor
Bremerton
Whidbey Island
Cuba
Guantanamo Bay
Iceland
Keflavik
Italy
Sigonella
Puerto Rico
Fort Buchanan
Roosevelt Roads
Sabana Seca
Spain
Rota

Europe Campus
Bosnia
Bedrock
Colt
Commanche
Demi
Dobol
Guardian Base
Tuzla
Belgium
NATO
SHAPE
Croatia
Slavonski Brod
Egypt
Sinai-North Camp
Sinai-South Camp
Germany
Ansbach
Babenhausen
Bad Kreuznach
Bamberg
Baumholder
Buedingen
Darmstadt
Dexheim
Friedberg
Geissen
Grafenwoehr
Hanau
Heidelberg
Hohenfels
Illesheim
Kaiserslautern
Kitzingen
Mannheim
Ramstein
Schweinfurt
Schwetzingen
Spangdahlem
Stuttgart
Vilseck
Vogelweh
Wiesbaden
Wuerzburg
Greece
Souda Bay
Holland
AFCENT
Hungary
Taszar
Iceland
Keflavik
Italy
Aviano
Livorno
Naples
Sigonella
Vicenza
Kuwait
Camp Doha
Macedonia
Able Sentry
Spain
Rota
Turkey
Incirlik
Izmir
United Kingdom
Alconbury
Croughton
Lakenheath
London
Mildenhall

Pacific Far East Campus
Indian Ocean
Diego Garcia, BIOT
Japan
Akizuki
Atsugi NAS
Camp Zama
Iwakuni Mcas
Misawa Air Base
Sasebo NB
Yokosuka NB
Yokota Air Base
Johnston Island
Korea
Camp Bonifas
Camp Carroll
Camp Casey
Camp Colbern
Camp Edwards
Camp Essayons
Camp Greaves
Camp Henry
Camp Hovey
Camp Howze
Camp Humphreys
Camp Jackson
Camp Kyle
Camp La Guardia
Camp Liberty Bell
Camp Long
Camp Page
Camp Pelham
Camp Red Cloud
Camp Sears
Camp Stanley
Camp Stanton
Camp Walker
K2 Air Base
K16 AAF
Kunsan Air Base
Osan Air Base
Pusan
Suwon Air Base
Yongsan Main Post
Yongsan S. Post
Okinawa
Camp Butler
Camp Courtney
Camp Foster
Camp Hansen
Camp Kinser
Camp Lester
Camp McTureous
Camp Schwab
Camp Shields
Futenma
Kadena Air Base
Torii Station

1997
1999

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