

# CENTRAL TEXAS COLLEGE

## Central Texas College District Continental and International Campuses Catalog Sixteenth Edition • 2004-2005

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#### Accredited by

Central Texas College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501) to award 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  
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Back row (standing) left to right: Mr. Don Armstrong, Mr. Jimmy Towers, Dr. James R. Anderson, Dr. Jimmie Don Aycock, and Mr. Elwood Shemwell. Front row (seated) left to right: Mrs. Barbara Weaver, Mr. Charles Baggett, and Mrs. Mari Meyer.

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From left to right:  
 Mr. Robert C. Farrell, Dr. James R. Anderson,  
 Mr. Jim Yeonopolus, and Mr. Ben H. Wickersham

# Chancellor's Message

For more than 35 years, Central Texas College has been committed to the mission of providing students from the local area and around the world with quality education. By entering this institution, you have taken an important step in realizing your educational goals. The Board of Trustees, faculty and staff will do our best to ensure that your college experience is fulfilling, rewarding, and inspiring.


CTC's faculty strives to provide quality instruction with individual attention while serving a culturally diverse and mobile student population. Our faculty and staff share a common commitment to the personal development of each student. Most of CTC's instructors hold advanced degrees in their areas of specialization and continually seek further education and professional development. By staying abreast of the latest changes in their fields, they help give you a competitive edge in today's rapidly changing workplace.

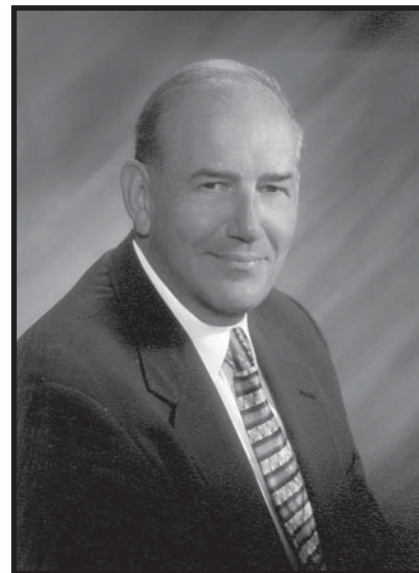
CTC constantly seeks improvement by building new facilities and upgrading existing structures. In 2003, we completed construction of a new \$8.5 million, 64,000 square foot Technology Complex & Planetarium. The largest building on CTC's campus, the facility houses state-of-the-art classrooms, an operations center for distance learning, and the 184-seat Mayborn Planetarium and Space Theater that hosted nearly 16,000 visitors in its first four months of operation. Using innovative design and projection technologies, the planetarium presents planetarium sky shows, laser light shows and large format films on a giant 60-foot dome.

Central Texas College continues to adapt to meet the needs of students, illustrated by the explosive growth of distance learning. Today, the college offers over 100 Internet courses, eight associate degrees and three certificates of completion entirely online. Extensive online, offline access and CD-ROM courses allow students who otherwise could not enroll to take CTC courses.

CTC is evolving and expanding its role to meet the changing needs of the local, national and military communities. We are honored by your choice of Central Texas College to pursue your education and the trust you placed in us to achieve your goals. On behalf of the institution, I pledge that we will continue to work hard and do our best to provide you with the highest quality education.

Thank you,

  
James R. Anderson, Ph. D.  
Chancellor



# History

In 1965, the citizens of Central Texas joined together to authorize the building of a community college that would serve the western section of Bell County; Burnet, Coryell, Hamilton, Lampasas, Llano, Mason, Mills, and San Saba counties; portions of McCulloch and Williamson counties; as well as Fort Hood and the state 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 issue. 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 have 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 1969, and was reaffirmed most recently in December 1994.

CTC initiated on-site programs on Fort Hood in 1970 and 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 U.S. 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.

In 1970, CTC began to offer broadcast telecourses to the citizens of Central Texas. College credit classes were first delivered by video conference in the Service Area in 1994 and from the Central Campus in 1996, enabling area high schools and other colleges in the geographical region to receive CTC courses. At the same time, Central Campus faculty began to enrich traditionally taught courses with professionally produced multimedia materials and with materials selected from the Internet. CTC taught its first online course in 1998. In 1998, CTC was invited to list its online courses in the inventory of the Electronic Campus of the Southern Regional Educational Consortium. CTC's membership in the Sloan Consortium was approved in 1999. In 2000, the PricewaterhouseCoopers firm invited CTC to become an educational partner in the new Army University Access Online project for the soldiers in the United States Army, eArmyU. Entire associate degrees were available online for the first time in the spring of 2001.

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, civilians, 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 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 nontraditional 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, leadership skills, foreign language skills, and occupational skills programs.

# Term Calendar for Continental and International Campus, 2004-2005

The term calendar lists the college's official term dates. Contact your Central Texas College representative for the start and end dates of courses offered at your location. Most courses offered at the Continental and International (C&I) locations are taught over eight weeks. Distance learning courses delivered from the Central Campus in Killeen start almost every month, with eight-, ten-, twelve-, and sixteen-week courses. Visit the web site at [www.ctcd.edu](http://www.ctcd.edu) to view distance learning course offerings.

## Term Calendar

### 2004-2005

Term 1	August 15, 2004	through	October 15, 2004
Term 2	October 16, 2004	through	December 17, 2004
Term 3	December 18, 2004	through	March 11, 2005
Term 4	March 12, 2005	through	May 13, 2005
Term 5	May 14, 2005	through	August 12, 2005

## Our Mission and Purpose

### Institutional Mission Statement

At Central Texas College, we identify and serve our unique, global community needs and provide quality teaching through an accessible learning environment.

### Institutional Purpose

Central Texas College is a two-year, open admissions institution which provides educational opportunities to students locally, nationally, and internationally. The purpose of CTC, as set forth in Section 130 of the Texas Education Code, is to provide:

- technical programs up to two years in length leading to associate degrees and/or certificates.
- vocational programs leading directly to employment in semi-skilled and skilled operations.
- freshman and sophomore level courses in arts and sciences.
- continuing adult education programs for occupational or cultural upgrading.
- compensatory education programs designed to fulfill the commitment of an admissions policy allowing the enrollment of disadvantaged students.
- a continuing program of counseling and guidance designed to assist students in achieving their individual educational goals.
- workforce development programs designed to meet civilian and military community needs.
- adult literacy and other basic skills programs for adults.
- library services.
- a wide variety of public service needs.

### Strategic Planning

Central Texas College has established a standing Research Committee that has the responsibilities to revise a strategic plan and periodically review the institution's mission and purpose statements. The committee has developed a vision statement and has established broad goals that center on instruction, research, public service, and institutional support and ancillary operations. Specific objectives that are measurable have been developed for all institutional goals. The committee has been assigned the responsibility to annually assess the institution's progress on meeting the goals and objectives. Results of the assessment are used to develop strategies to be implemented by the departments and units. During the annual budget process, resources are identified and committed in order to implement the strategies. Copies of the current Strategic Planning document are available in the Office of Institutional Effectiveness and in the Oveta Culp Hobby Memorial Library on the Central Campus.

# General Information

## Continental and International Programs

Central Texas College serves military personnel and their family members throughout the world. The Central Campus is located in Killeen, Texas. Programs of study vary with each location and not all programs are available at every location. This Catalog provides information concerning the policies, procedures, and programs applicable to locations operated outside the state of Texas. Individuals interested in programs which are not locally available should consult with the local Education Services Officer (ESO), Navy College Office Representative (NCO), Education Specialist, or Central Texas College representative.

## 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 to state or federal laws, and tuition or fee changes.

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

CTC also publishes a Texas Campuses Catalog for students attending in the state of Texas or enrolled in distance learning courses.

## 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 and when authorized under the military contract or memorandum of understanding for the specific C&I site or campus. Central Texas College further reserves the right to adjust course scheduling, including class cancellation, when enrollment or other circumstances require this action. There is no guarantee that a specific course will be offered at any given time. It is the student's responsibility to complete the required courses when offered.

## 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, gender, or veterans status 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 Veterans' 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 Mr. Jim Yeonopolus, Deputy Chancellor for Continental and International Campuses; the designated coordinator for employment of faculty and staff is Ms. Holly Jordan, 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 academic 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 CTC official representative or the Campus Dean at your CTC location.

## 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 appropriate Campus Dean. Faculty and staff should contact the Human Resources Department at (254) 526-1391.

## 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. This legislation requires that all students with disabilities be guaranteed a learning environment that provides equal access to all programs and services. If you have a documented disability, please contact your CTC official representative or the Campus Dean at your location.

## Approvals and Authorization

Central Texas College is approved to offer specific programs and courses at military installations around the world according to the contract, agreement, or memorandum of understanding for that campus or location.

Distance learning programs and courses adhere to the rules and regulations of the Texas Higher Education Coordinating Board, the Texas Education Agency, and the SACS Principles as stated in the *Distance Education: Definition and Principles: A Policy* by the Commission on Colleges, Southern Association. The distance learning programs are guided by the Principles developed by the Western Interstate Commission on Higher Education (WICHE) and the Principles of Good Practice developed by the American Council on Education.

Central Texas College is authorized by the Washington Higher Education Coordinating Board and meets the requirements and minimum educational standards established for degree-granting institutions under the Degree Authorization Act. This authorization is valid until July 25, 2006, and authorizes Central Texas College to offer the following degree program: Associate of General Studies. Any person desiring information about the requirements of the Act or the applicability of those requirements to the institution may contact the board office at P.O. Box 43430; Olympia, WA 98504-3430. In addition, Central Texas College is authorized to offer college programs in Alaska, California, Georgia, Hawaii, Kentucky, Louisiana, Missouri, New Mexico, North Carolina, Virginia, and Washington, D.C.

Central Texas College's programs are approved for individuals who wish to attend and receive benefits under the Veterans Readjustment Benefits Act of 1966, Post-Vietnam 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.

## Distance Education

In addition to classes offered at CTC locations around the world, CTC offers a wide range of Internet courses delivered from the Central Campus in Killeen, Texas. Faculty teaching distance learning classes must meet the academic and professional preparation criteria of regional accreditation, the standards established by the Texas Higher Education Coordinating Board rules and regulations, and licensure and approval requirements of applicable regulatory boards. Both DANTES and the Servicemembers Opportunity Colleges have approved CTC as a provider of distance learning courses. CTC is an educational provider of distance learning through the Southern Regional Electronic Campus (SREC), and the Sloan Consortium.

## Student Services

Distant learners have access to the same support services as campus-based students. These services may be obtained by email or by phone or through any of the CTC campus locations. Services provided to distant learners include but are not limited to, financial aid, veterans' benefits, career planning, career advisement, library, bookstore, and special assistance. The Distance Learning web site contains web-based tools as well as points of contact for all student services.

## Academic Policies

In addition to the standard academic policies of the College as outlined in the Texas Campuses Catalog, CTC has established academic policies specific to online learning. These policies cover courseware use, plagiarism and academic honesty, course participation, rights and privacy, and others. All academic policies are presented at the College and Distance Learning web sites.

## Degrees and Certificates

Students may choose to complete entire degrees and certificates or individual courses online. CTC continuously adds to the degrees, certificates, and courses available through distance learning. All distance learning courses

- may be used to satisfy resident credit requirements.
- contain the same content, outcomes, and requirements as campus-based courses.
- use the same texts and materials as campus-based courses.
- require proctored examinations.
- involve continuous communication with faculty and collaboration with other students in the class.

For a complete listing of programs, certificates, and courses offered through distance learning at CTC, go to the CTC Distance Learning web site.

Additional information on distance learning may be found in the Central Texas College General Catalog.

## Articulation Agreements, Distance Learning Programs

Central Texas College holds articulation agreements with several educational institutions that offer online bachelor degree programs. These agreements allow the eligible CTC student a seamless transition into an online bachelor's degree program.

Baker College  
 Bellvue University  
 Capella University  
 Columbia College of Missouri – Extended Studies  
 Franklin University  
 Kaplan College  
 Northcentral University  
 Saint Joseph's College of Maine  
 United States Open University  
 Upper Iowa University – Extended University

Additional information may be found at the CTC web site or obtained through an academic advisor.

## 2 Plus 2 Agreements, Traditional Classroom Instruction

Central Texas College holds 2 Plus 2 Agreements with several colleges and universities in the state of Texas. These agreements allow CTC students to “lock in” to a four-year degree at the time they register at CTC. Students are guaranteed that every course they take at CTC will transfer to the senior institution, and that degree requirements will not change once their 2 Plus 2 degree plans are signed. These agreements are available to students who plan to relocate to Texas and wish to continue their education beyond an associate degree, through traditional classroom instruction. Students must meet the state's residency requirements for tuition purposes, meet admission requirements of the educational institution, and meet state TSI requirements unless exempt or waived.

For a list of approved 2 Plus 2 programs offered by the senior universities listed below, refer to the CTC website. Contact an academic advisor for specific degree requirements.

Tarleton State University, Central Texas - Killeen, Texas  
 Prairie View A&M University - Prairie View, Texas  
 Tarleton State University - Stephenville, Texas  
 University of Mary Hardin-Baylor - Belton, Texas



# Admissions and Registration

## General Admission Information

Students wishing to attend Central Texas College should visit the local Education Center or Navy College office to consult with the ESO or NCO about educational goals. Education Center and Navy College offices provide diagnostic, aptitude, and placement testing to assist students in selecting programs of study and educational goals. Once you have identified and chosen an appropriate degree and program of study, the admission and registration process may begin.

Central Texas College is a comprehensive community college that maintains an open-door admissions policy to ensure that all persons who may benefit from postsecondary education have the opportunity to enroll. New students will be admitted to Central Texas College providing all admission requirements are met. Admission to Central Texas College does not guarantee admissions to specific programs and courses. Departmental approval is required to register for certain courses as published in the college catalog and schedule bulletins.

Personnel not sponsored in the overseas command by the U.S. Armed Services are not normally permitted to attend Central Texas College classes. Applicants may attend classes if local policy permits, but they must receive approval from the local ESO or NCO for necessary military and governmental approval before being permitted to file an application for admission. Active duty personnel will have priority when enrolling for all classes.

## General Admission Requirements For All Students in Credit Programs

An individual who has graduated from a high school to include an accredited public or private school; who has successfully completed a nontraditional secondary education program in a nonaccredited private school setting to include a home school; or who has earned a general educational development (GED) certificate will be admitted to Central Texas College. All individuals will be required to follow the regular admissions process.

Adults, veterans, and military personnel 18 years or older who have not completed a high school program may be admitted on an “Individual Approval” basis if the individual can demonstrate the ability to benefit from instruction. Applicants wishing to be admitted under individual approval must complete a “Request for Waiver” form available through the Student Services office of the appropriate CTC campus. The applicant must show evidence of successful experiences which reasonably predict his or her ability to make satisfactory progress at the college. The Dean of Student Developmental Services will review the request with the appropriate department chair/faculty or the Campus Dean, and then make a recommendation to the Systems Registrar for final approval.

Early admission offers the opportunity for high school students to earn college credits while concurrently enrolled in high school or during the summer. Early admission is open to high school students who are classified as juniors or seniors and are in good academic standing. Permission to enroll in CTC must be granted by the student’s parent or legal guardian, and endorsed by the high school principal, counselor, or designated representative. Concurrently enrolled high school students must adhere to the requirements of CTC and their high school. Generally, high school students may take only one course per semester or two courses during the summer. In no case will the student be allowed to take more than six courses in a year. Credentials must be resubmitted each semester for early admission.

**NOTE** Central Texas College assumes no responsibility for loss of Interscholastic League eligibility of high school students enrolled in the early admissions program. Credits earned before high school graduation may not transfer to some colleges.

Students applying for Financial Aid must have a high school diploma or GED. Non-high school graduates should contact the Office of Student Financial Assistance at (254) 526-1508 for further details.

## Admission Procedures, College Credit Programs

CTC has an open-door admissions policy. However, you are encouraged to complete the admissions process prior to registration. Visit the CTC representative at your location for information on admissions, registration, and program and course selection. If you are interested in enrolling in distance learning courses and there is not a CTC representative at your location, the CTC web site at [www.ctcd.edu](http://www.ctcd.edu) includes a list of student services and distance learning personnel who can assist you. Listed below are the general admission requirements for students located outside of Texas. All students who do not meet the departmental prerequisites to enroll in English and mathematics courses must take placement exams in writing and mathematics for course placement purposes.

All active duty military personnel must visit their local Education Center or Navy College Office representative to determine their eligibility to enroll in college courses and use military tuition assistance.

### New CTC Students, First-Time Students

All new college students seeking a degree or certificate from CTC are required to:

1. Complete a CTC Application for Admission form.
2. Submit an official high school transcript or General Educational Development (GED) scores demonstrating high school graduation or equivalency.
3. Meet with the designated CTC representative at your location to discuss program and course selection.

All first-time new students are encouraged to complete a Free Application for Federal Student Aid (FAFSA) to determine if they may be eligible for student financial assistance.

### Transfer Students

Students who have previously attended another college or university prior to applying for admission to CTC are required to:

1. Complete a CTC Application for Admission form.
2. Submit an official high school transcript or General Educational Development (GED) scores demonstrating high school graduation or equivalency.
3. Submit official transcripts from each accredited college or university previously attended.
4. Meet with the designated CTC representative at your location to discuss program and course selection.

Students on academic probation or suspension at the transfer institution will be admitted on probation to Central Texas College and must earn a grade point average of 2.0 during their first semester in attendance at CTC. Students in this category who do not achieve a grade point average of 2.0 will be suspended for one sixteen-week semester, two eight-week terms, or both summer semesters.

### Former CTC Students, Readmissions

If it has been at least one year since you have been a student at CTC, follow the steps below.

1. Complete a new CTC Application for Admission form.
2. If you have attended other colleges or universities since last enrolled with CTC, request that official transcripts be sent to CTC.
3. Meet with the designated CTC representative at your location to discuss program and course selection.

### Transient Students

If your intent is to attend CTC to earn credits to transfer into a degree program at another college or university, you do not need to submit educational records from previously attended colleges or universities unless required for Veterans Services, Financial Aid, or to document earned requirements. Records will be required if you later elect to seek a certificate, degree, or award of credit. You are required to:

1. Complete a CTC Application for Admission.
2. Meet with your local CTC representative for additional information and assistance in course selection.
3. Contact the advisor at your college or university to ensure course transferability. If your school is a member of the Servicemembers Opportunity College (SOC), SOC handbooks that include transfer guarantee articulations are available at local Education Centers, Navy College Offices, and CTC locations, and may be used as references. Handbooks are also available online at [www.soc.aascu.org](http://www.soc.aascu.org). Final responsibility for acceptance of transfer credits lies with the student's parent school.

## Distant Learners

Students enrolling in distance learning programs must meet general institutional admissions requirements.

Distant learners outside Texas who are bona fide Texas residents receiving in-state tuition rates

- must meet the Texas Success Initiative (TSI) requirements unless TSI exempt or waived; and
- complete the Core Residency Questionnaire, sign the oath of residency, and submit substantiating documents as may be needed.

In addition, students should possess the computer and technical skills as well as learning skills needed to succeed in online learning. Information on these skills and assessments to determine your readiness are available at the CTC Distance Learning web site.

Students enrolled in online courses must provide their own computers, or have access to computers, have Internet access and email accounts. Please refer to the Academic Policies of this catalog for information on course loads.

Distant Learners may register online through the Student Online Access to Records (SOAR) or by telephone (254) 526-1651. To determine if you may register in person at a CTC location outside Texas, visit or call the CTC site office. If you cannot register at a local CTC office, contact the CTC Online Help Desk. You will be referred to an online mentor who will assist you with admissions and registration. An online counselor will determine your TSI status and assist you with your program and course selection. CTC offers online courses with term lengths of 8, 10, 12 (CD ROM) and 16 weeks. Classes generally start each month.

Visit the CTC web site at [www.ctcd.edu](http://www.ctcd.edu) for course offerings and certificate and degree programs that are available online.

## Early Admission, High School Students

Early admissions is available to selected high school students who are in good academic standing and classified as juniors or seniors. To apply for early admission:

1. Complete an Early Admissions Application signed by the high school principal or counselor and parent or legal guardian.
2. Complete CTC's Application for Admission.
3. Provide an official high school transcript.
4. Accepted high school students are usually allowed to take only one course per semester or two courses during the summer. In no case will the student be allowed to take more than six courses in a year. Credentials must be resubmitted each semester for early admission.

**NOTE** Official transcripts must be sent directly to CTC from the issuing higher education institution. You may be conditionally admitted pending receipt of official high school, college and university transcripts. Falsification of information will result in disciplinary action and may result in dismissal from Central Texas College.

## CTC Out-of-State Students Who Move to Texas

While you are attending CTC out of state, you are not subject to certain in-state requirements. If you move to Texas and continue your studies with Central Texas College, you are required to:

1. Complete a CTC Application for Admission.
2. Complete the Core Residency Questionnaire, sign the Oath of Residency and submit substantiating documents as may be needed. Nonresident active duty members of the U.S. Armed Forces assigned to duty in Texas and their family members are entitled to pay resident tuition rates. To qualify, the student must submit a completed Military Verification form at least once a year and a valid military I.D. card.
3. Take the Texas Higher Education Assessment (THEA) Test or the ASSET test unless TSI exempt or waived. To determine if you are TSI exempt or waived review the Testing and Placement section of the Texas Campuses Catalog and contact an online counselor at the Central Campus in Killeen. The Texas Campuses Catalog is available on the CTC web site. Effective May 2001 active duty military in the U.S. Armed Forces are TSI exempt. (Special conditions apply to reservists.) Active duty military family members must meet TSI requirements unless TSI exempt or waived.
4. Verify that your high school transcript, GED scores and/or official transcripts from accredited colleges or universities previously attended are on file. If not, request that official transcripts from each school be sent to CTC.
5. Visit with an academic advisor.
6. Make arrangements to attend the new student orientation.

## International Students

Although local and third country national students are not permitted to attend Central Texas College without permission from the Education Center or Navy College Office representative and the appropriate Military Command, local nationals who receive permission are required to take the Test of English as a Foreign Language (TOEFL). A score of 520 on the paper-based test or 190 on the computer-based test is required for admission into the college credit program. Students native to countries whose official language is English, and whose education has been in English, are not required to take the TOEFL. Students with either an F-1 or M-1 academic visa are only authorized to attend CTC Central Campus. Contact [ctc.international@ctcd.edu](mailto:ctc.international@ctcd.edu) for more information.

## Transfer Credits

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,” “C,” or “CR” will not be accepted in transfer in major program area 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 of Applied Science Degree or Certificate of Completion 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 over five years before you entered the Central Texas College program of study. This also applies to returning students when vocational/technical courses that are applicable to your 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 you have marketable skills for the degree/certificate pursued.

## Records Required

### Transcripts

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. CTC must receive all transcripts before the end of the first regular semester or second eight-week term of enrollment.

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

If transcripts of previous education are issued to Central Texas College in your former name and without a social security number, CTC cannot be responsible for properly identifying the document.

## The Texas Success Initiative (TSI)

Although students enrolled in courses taught outside Texas are not required to meet TSI requirements, students who do not meet the course prerequisites to enroll in English and mathematics courses must take one of the approved TSI exams such as the ASSET to determine enrollment eligibility. Students should contact their local CTC representative for more information on placement testing.

## Registration

Typically, Central Texas College assigns a representative to each Education Center or CTC office where a program is conducted. Information on registration, term dates, evaluations, programs offered and related questions should be directed to the local Central Texas College representative at the Education Center, Navy College Office, or to the local Central Texas College office.

## Registration Periods

Central Texas College conducts an academic year beginning and ending in August. It is based on terms and varies considerably at different locations to meet military schedules. Course lengths are four, six, eight, ten, and twelve weeks. Varying course lengths or the special needs of the community may alter the generally established registration period at any given site. The Education Center publicizes registration periods, term dates, and course offerings. Consult your local schedule for times and dates of registration and classes.

Check with your local CTC representative to determine if online registration is available at your location. Registration for distance learning (online) courses is processed by the CTC Admissions and Records Office on the Central Campus in Killeen, Texas. Distance learners may register online through SOAR or mail/ fax admissions and registration documents. Because tuition and fee rates vary by military contract or memorandum of understanding, check with your local CTC representative to determine costs.

## Registration Requirements

Official registration with Central Texas College is required before you may begin coursework. The following must be completed before you will be officially registered:

1. Application for Admission/Class Registration (required each time you register).
2. Payment of fees and tuition.

**NOTE** Step 2 may include providing completed military tuition assistance forms or third-party sponsorship forms if this method of financial assistance is chosen to pay for coursework.

All forms necessary for registration are available from the Central Texas College representative at each location or the CTC web site.

## Late Registration

Late registration is permitted for a limited time after class begins. Consult local schedules for exact dates. Students who complete registration after classes begin are not excused from meeting attendance or academic requirements and must arrange with the instructor to make up missed classes. No student will be permitted to register after the scheduled late registration period ends. Late registration is not permitted for online courses.

## Adding or Dropping Classes

During the official add/drop period, you may add and drop courses based upon institutional and military guidelines. You may not add a distance learning course without special permission. To add/drop courses, have the amendments made on the CTC registration form and applicable military tuition assistance forms. Classes missed will be counted as absences, and you will be required to make up any assignments.

If you are a financial aid student, contact the Office of Student Financial Assistance for your location prior to making a schedule change. VA students must have schedule changes approved at the CTC VA Office serving your location. It is your responsibility to meet with a financial aid advisor or VA representative prior to dropping a course.

## Official Enrollment

To gain admission to classes, you must complete the published registration procedure each term, including payment of all tuition and fees. No one is officially enrolled until all tuition and fees 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.

## Uniform Application of Standards

The standards of Central Texas College's academic and student policies are uniform at all locations served by CTC. The subsequent sections of this Catalog provide information required and unique to Continental and International Campuses.

## Distance Learning Programs and Courses

Distance learning programs and courses adhere to the rules and regulations of the Texas Higher Education Coordinating Board, the Texas Education Agency and SACS Principles as stated in the *Distance Education: Definition and Principles: A Policy* by the Commission on Colleges, Southern Association of Colleges and Schools. The distance learning programs are guided by the Principles developed by the Western Interstate Commission on Higher Education (WICHE) and the Principles of Good Practice developed by the American Council on Education.

# College Costs

## Tuition

Tuition for classes at Central Texas College locations outside the Central Campus varies with the government contract or memorandum of understanding through which the institution operates. Therefore, both tuition and fees may be adjusted, based on government contracts and local conditions, during the period this Catalog is in effect. Costs of classes to students will vary with the level of support being provided by the sponsoring agency at each campus or site.

Obtain information about current tuition, fees and costs of classes from the Education Officer, Navy College Officer, or the Central Texas College representative.

## Fees \*

The following fees are required or applicable. Normally, fees are nonrefundable. However, a refund for overpayment of transcript/record fees will be made upon written request from the student.

Returned Check Fee .....	\$25
Graduation and Diploma Replacement .....	\$25
Transcript and Records by mail (per copy) .....	\$3
Transcript and Records, walk-in less than 24 hours service (per copy) .....	\$5
Course Challenge .....	\$50
Instructional Materials (as required by contract, per credit hour)(nonrefundable) .....	\$30-\$40

## Tuition and Fees - Noncredit Courses

Tuition and fees for Continental and International locations are determined by contracts and agreements.

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

## Refunds

Tuition refunds are made only in the case of class cancellation or official withdrawal from CTC or from a course. For students receiving military tuition assistance, the effective date of withdrawal is the date the Application for Withdrawal/Refund is signed by the designated Education Center or Navy College Office representative. The instructor must sign the withdrawal form before or after the effective withdrawal date.

For self-pay students refunds are computed from the date the Application for Withdrawal or Refund is filed with the CTC Records Office or designated CTC Student Services office. Special conditions apply to students who receive federal, state, and/or institutional financial aid; and the refund is generally calculated based upon the student's last date of attendance.

Although the following refund schedule is provided, refunds for tuition and fees are based upon the contract or memorandum of understanding for which the College operates. Students enrolled in distance learning courses delivered from the Central Campus in Killeen, Texas, should refer to the Texas Campuses Catalog.

100%	Withdrawal before the first class day.
75%	Withdrawal if not more than 1/8 of the total class meetings have elapsed.
50%	Withdrawal if not more than 1/4 of the total class meetings have elapsed.
0%	Withdrawal if more than 1/4 of the total class meetings have elapsed.

- 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.
- Prior to the census date, Central Texas College will allow hours to be dropped and re-added without penalty to the student if the exchange is an equal one and the exchange occurs simultaneously as a single transaction. When the charges for dropped hours are greater than for hours added, the refund policy outlined above is to be applied to the net charges being dropped. If the charges for hours being added exceed the charges for hours being dropped, the student must pay the net additional charges.

Charges for hours that are dropped without concurrently added hours will be refunded in accordance with the refund policy outlined above. Charges for hours added at a later time will be applied based on the current approved tuition and fee schedule and will not offset the charges for prior drops.

- Tuition and fees paid directly to the Institution by the 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.

## Withdrawals, Student Responsibilities

It is the student's responsibility to officially withdraw from a course. The instructor cannot initiate a withdrawal based upon a student's request. Rather, students must initiate the withdrawal with the designated education center or navy college representative, or through the CTC Records or Student Services Office.

Students who do not officially withdraw and cease to attend or participate in the class may be administratively withdrawn from the course by the instructor. In such cases, the instructor may assign the student a grade of "W" or "F" for non-attendance.

## Textbooks

Textbook prices are based on publishers' prices and may vary from term to term. Prices are available from the Central Texas College representative. Textbook costs are nonrefundable unless the class is cancelled by CTC. For cancelled classes, the book must be returned unused, unmarked, and if shrink wrapped unopened to the Central Texas College representative.

**NOTE** Students are responsible for any additional amounts owed to CTC resulting from post-enrollment audits and corrections, including all fees and waivers: e.g., registered assessing errors, dropping or adding classes, invalid employment, or third-party waivers. CTC will accept tuition assistance/sponsor agreements in lieu of payments at time of registration, but students will be responsible for all amounts owed if the sponsoring agency does not remit payment in full.

## Determining Residence Status

Students enrolled in courses at CTC locations outside Texas pay the tuition and fee rates based upon the applicable military contract or memorandum of understanding. Bona fide Texas residents enrolled in online courses delivered from the Central Campus in Killeen may be eligible for in-state tuition rates. Certain conditions apply. Refer to the Texas Campuses catalog, which is available on the CTC web site at [www.ctcd.edu](http://www.ctcd.edu).

Nonresident active duty military attending CTC outside Texas and who plan to retire or separate from the U.S. military and move to Texas are encouraged to review the residency information in the Texas Campuses catalog. State of Texas rules and regulations on changing your permanent residence to Texas are provided. Although state requirements for establishing residency are complex and prospective students should refer to their particular circumstance, most action to change your permanent residence to Texas must be done at least 12 months prior to moving to Texas. See the Texas Campuses catalog for specific information.

# 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 plan to participate in the various programs for financial aid, you must 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 Texas Campuses Catalog. Texas Campus deadlines to apply for financial aid are:

Fall (August):	July 1
Spring (January):	November 1
Summer (June):	April 1

Applications will be accepted and processed after these dates, but you will 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. Scholarship deadlines differ. Contact the Office of Student Financial Assistance at the Central Campus in Killeen, Texas, for more information.

## Steps to Apply for Financial Assistance

To be considered for financial aid, you must complete the steps below.

1. Complete the [Free Application for Federal Student Aid \(FAFSA\)](#). Application may be completed online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) or a packet may be picked up at the Office of Student Financial Assistance.
2. Have the Federal PELL Grant Student Aid Report sent to CTC by entering the CTC FICE Code 004003 on the FAFSA when you file. If you completed the FAFSA for another college or university, and then decide to attend CTC, you must correct your FAFSA adding Central Texas College's code, and resubmit to the Department of Education.
3. Complete a CTC Application for Admission and declare a CTC certificate or degree program.
4. Provide substantiating documentation for verification as may be required by the CTC Office of Student Financial Assistance and/or Department of Education and complete all other institutional requirements.

Students must apply for financial aid each school year by filing a new FAFSA and submitting required documentation.

## 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.

## Academic Eligibility Requirements

You are required to make satisfactory progress toward a degree or certificate objective to remain eligible to receive financial aid. CTC has developed standards to measure a student's academic standing and progress toward a degree or certificate objective. Even if you are eligible for financial aid, you may not receive aid based upon your academic standing or degree progress. Refer to the Satisfactory Progress Standards and Academic Probation, Suspension, and Dismissal Policies sections of this Catalog for detailed information.



## Deficit Hours

Financial Aid recipients are expected to complete 75 percent of enrolled credit hours. If you do not complete 75 percent of all hours attempted, you will be placed on Financial Aid Probation for one semester. This action could result in the loss of Federal Aid for the following semester. Eligibility for financial aid may be reinstated after you have completed the number of credit hours you are deficit or through an appeal within the Financial Aid system.

## Drops and Withdrawals

Students who receive Title IV financial aid and drop, withdraw, or are administratively withdrawn from courses during the financial aid year may be required to repay financial aid received and may be placed on financial aid probation or suspension. Repayment is based upon the student's last date of attendance. Detailed information is provided in the Return/Repayment of Title IV Funds section of this Catalog.

## Satisfactory Progress Standards, Financial Aid Students

If you are receiving financial aid, you are required to make adequate progress toward a degree or certificate objective in order to remain eligible for continued enrollment and/or to receive financial aid. Refer to the section "Satisfactory Progress Standards" in the Academic Policies section of this Catalog for specific requirements.

## Federal PELL Grant

To be considered for the federal PELL Grant, a student must complete the FAFSA.

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.

## Loans

### Federal Stafford Loans

Undergraduate students may borrow up to \$2,625 during their freshman year (0 but less than 30 credit hours on the student's Central Texas College degree plan) and \$3,500 during their sophomore year (30 to 72 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. For subsidized loans the government will pay the interest charged 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.

### Loan Counseling

Students must undergo loan counseling at Central Texas College. CTC has a loan default management plan in effect. Copies of this plan are available through the Office of Student Financial Assistance - Loan Officer.

### Repayment

Loans must be repaid. Students who are awarded Stafford Loans 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.

## Return/Repayment of Title IV Funds

The 1998 Re-authorization of the Higher Education Act requires an institution to have a fair and equitable Title IV Funds return/repayment 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 return/repayment policy is defined as:

1. Students who withdraw from all courses before completing 60 percent or more of the current term must return/repay a portion of the Title IV Funds (PELL and Supplemental Education Opportunity Grant) disbursed. Federal Loans are repaid in accordance with the terms of the loan. The amount of funds to be returned repaid will be calculated using the following formula:  
Total amount Disbursed (PELL Grant and SEOG)
  - Amount of Institutional Cost Returned by School (if any)
  - Amount of aid earned by student
  - Amount of Aid to be returned/repaid by the student X 50 percent
2. When a student withdraws/drops from courses, the student must ensure a Last Date of Attendance is recorded on the withdrawal/drop request. This Last Date of Attendance is the date used to determine how much Title IV Aid was earned and unearned. Failure to obtain a Last Date of Attendance may result in additional funds to be paid by the student. Before withdrawing/dropping any course, financial aid students are encouraged to visit the Financial Aid Office to speak with a Financial Aid Counselor.
3. If, after withdrawing/dropping from a course, a student desires to re-enroll in the same course during the same semester/term the following will apply:
  - a. The student must obtain written permission from the instructor.
  - b. The student must sign a written declaration stating he or she will complete the course.
  - c. If the student fails to complete the course, the initial withdrawal date will be used to calculate the amount of aid to be returned/repaid.
4. Students will be notified in writing of the amount of Title IV Funds that must be returned/repaid. Students must ensure their current address is on file with the Records Office. Students will have 45 days from the date of the letter to pay CTC in full. If the account is not paid, CTC turns it over to the Department of Education (DOE). The student can make payment plan arrangements with DOE to repay within two years.
5. Students may inquire at the Financial Aid Office, Central Campus for answers to questions concerning Return/Repayment of Title IV Funds. Students may email [michael.oliver@ctcd.edu](mailto:michael.oliver@ctcd.edu).

**NOTE** Federal, state and institutional rules and regulations regarding financial aid are subject to change.

## 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 before 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 a copy of their DD214. Chapter 35 dependent first-time students must present a copy of their birth certificate on their initial enrollment.

You must provide an approved, signed certificate/degree plan to the Veteran Services Office before 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 previous 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.

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

## Central Texas College Foundation

For those students attending classes at campuses outside the College tax district, the Central Texas College Foundation has 24 scholarships which give some 38 awards to competitively selected students every year. One application will place a student in consideration for all of these awards. A student must file an application for selection with the Foundation office when the award cycle is announced. The announcement usually occurs between January and March of each year and will be for awards available in the fall semester. Students, including international students, may apply for any Foundation scholarship for which they are otherwise eligible. There are specific requirements for eligibility that apply to individual scholarships and the student is advised to read the Foundation's Scholarship Guidelines when it is announced each year. In making application for these scholarships, the applicant must have applied to attend CTC, have official transcripts from previous colleges attended on file with CTC, and completed the Free Application for Student Financial Assistance (FASFA) as verified by the CTC Student Financial Assistance office. Foundation Scholarships with the campuses they serve are listed below according to the Academic Department they support.

### Academic Department Supported Scholarship Name

### Campus Served

#### Any Department

The Michael Davidson Alexander Memorial Scholarship	World-Wide
The Dr. James R. Anderson, Chancellor, Endowed Scholarship	World-Wide
The Roy Jason Crawford Endowed Memorial Scholarship	World-Wide
The William A. Crawford Endowed Memorial Scholarship	World-Wide
The CTC Alumni & Friends Association Scholarship	World-Wide
The Guinn & Darlene Fergus Memorial Endowment	World-Wide
The Horace Grace African-American Studies and Research Endowed Scholarship	World-Wide
The James R. and Bernice Lindley Endowed Scholarship	World-Wide
The Leonard E. Meyer Memorial Scholarship	Ft. Leonard Wood, MO.
The Morgan Keegan, Inc. Excellence in Teaching Award Endowment	World-Wide
The Dr. Luis Morton, Jr. Endowed Academic Scholarship	World-Wide
The Major Andrea A. Nielsen, USAF (Ret) Endowed Scholarship for Women	World-Wide
The Pacific Far East Campus Scholarship	Pacific Far East
The Retired Sergeant Majors Association Scholarship	World-Wide
The Eugene Rorie Memorial Endowed Scholarship	World-Wide
The Sallie Mae Education Trust Endowed Scholarship	World-Wide
The Helga Shelton Endowed Scholarship	World-Wide
The Texas Firefighters Foundation Scholarship Fund	World-Wide
The Two J's Computer Company Endowed Scholarship	World-Wide

#### Business Administration

The Lewis C. & Margie E. Shine Family Business Administration Scholarship	World-Wide
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#### Mathematics

The Moon-Young Song Endowed Scholarship in Mathematics	World-Wide
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#### Medical Laboratory Technician

The Medical Technicians Scholarship	World-Wide
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#### Nursing

The Dennis & Kandace Eakin Endowed Scholarship	World-Wide
The Genevieve K. Shemwell Endowed Scholarship	World-Wide

## Distance Education, General

Distance Education courses provide students with opportunities to pursue their educational goals in a student-centered learning environment that is flexible and conducive to learning. Distance education courses are a viable alternative for students whose work schedules, family responsibilities, and/or physical location may not allow them to enroll in traditional CTC classes. Tuition and fees for distance learning classes vary according to the residency status of the student and/or the specific contract or agreement through which the institution operates.

Distance education courses are designed to be equivalent to the same course taught in a classroom. They have the same course descriptions, course objectives, and learning outcomes of a traditional classroom course.

CTC offers 10 to 12 terms a year. Online courses of varying term lengths to include 8, 10, 12 (CD ROM) and 16 weeks are offered. Students have a large selection of courses from which to select. Students may visit the CTC web site and view the courses currently available. CTC online counselors and mentors are available to help students with course selections and provide academic advisement.

Officially enrolled distance learning students receive a welcome confirmation email, instructions for accessing the course, along with username and password. Please refer to the General Information, Admissions and Registration, Student Services, and Academic Policies sections of this catalog for additional information on distance learning.

## Military Education Benefits

Active duty military personnel may wish to attend Central Texas College under the Military Tuition Assistance Program, which currently pays 100 percent of tuition and fees. Information and applications for Military Tuition Assistance are available through Military Education Centers or Navy College Offices.

## Department of Defense Civilian Tuition Assistance

The applicant is responsible for securing tuition assistance from the employer. Forms and procedures for requesting tuition assistance vary with each branch of service. Please consult the local ESO, NCO, or Civilian Personnel Office.

Provide one copy of the approved tuition assistance form to Central Texas College when you register.

# Student Services

## Guidance and Counseling

Central Texas College maintains a staff of academic advisors at various locations throughout the world. Visit your local CTC representative for program and course selection, or the designated Education or Navy College Office representative. If you do not have a designated representative at your location, contact the Student Services Office located on the Central Campus in Killeen, Texas. For students enrolled in distance learning programs, there are several CTC distance learning advisors who can help you with course selections. Refer to the Personnel section of this catalog for points of contact.

## Transcripts

Student records are confidential. Convenient forms for ordering transcripts are available from the local CTC representative and the CTC web site at [www.ctcd.edu](http://www.ctcd.edu). 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 \$5 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 requests will not be honored. Facsimile (FAX) requests will be honored if credit card information is included with the request. CTC will send a facsimile (FAX) transcript if requested. Service is only available within the United States to include Alaska and Hawaii. There is an additional \$5 charge for the first page and \$1 for each additional page. It is the decision of the receiving institution to accept the transcript as official or not. Refund for overpayment of transcript and record fees will be made only upon written application of the student. When making payment by credit card, please include: exact name as it appears on the credit card, complete credit card number, expiration date, billing address of card, your current mailing address, email address if available, and a phone number.

The transcript of college work bearing the Central Texas College seal and official signature is an official copy of your permanent record. You should request transcripts directly from other colleges attended, when applicable.

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.

## Testing Services

The Central Texas College Testing Office provides an extensive testing program, which supports traditional classroom instruction and online coursework.

### Placement Tests for English and Mathematics

Students must take placement tests to determine their eligibility to enroll in English and mathematics courses or otherwise meet prerequisites through traditional coursework. Acceptable placement tests are the ASSET, the ACT Accuplacer, the COMPASS, the SAT, the ACT, and the Texas Higher Education Assessment (THEA). Online screening exams in English and mathematics are available for students who are unable to take one of the designated placement tests. Test scores are valid for five years.

An unofficial score report may be used for initial placement purposes, but the official score report must be received before added to your student record. Score reports considered official are:

- Score reports sent directly from the testing company to CTC at the student's request.
- Scores reported on an official institutional transcript or an addendum to the transcript certified by an appropriate institutional official. Examples: ACT and SAT scores posted to an official high school transcript.
- For the ASSET, score reports sent directly from one institution to another.
- For students who take the ASSET at a local education center, a score report submitted by the authorized testing official or center.

Score reports hand carried by student even if marked “official scores” will not be considered official. ASSET and institutional placement test scores should be sent directly to the CTC Testing Office. All other official score reports or transcripts should be sent to the CTC Student Services Office, Incoming Transcripts, located on the Central Campus in Killeen, Texas.

CTC provides several online tutorials to assist you in preparing for the English and math placement tests. Additional information may be found in the Project PASS and Tutoring section of this catalog.

## **Proctored Testing for Distance Learners**

CTC requires proctored testing for all distance learning courses. It is the student’s responsibility to locate a suitable test proctor, make testing arrangements, and immediately provide the CTC Testing Office with the proctor information or changes to the original proctor. You may submit proctor information using the Test Proctor Submission Form available on the CTC web site, or by sending an email to the Testing Services Office on the Central Campus in Killeen.

To locate a proctor, military students should check with their Education Center or Navy College Office, the installation’s testing center, library, or learning center. Other students may locate a proctor at a local college, library, high school, or other suitable facility. You may also contact the CTC Testing Office to request testing site options and to request information about persons who qualify as proctors.

Most tests are available online. The CTC Distance Learning Online Testing Office advises your proctor of the availability of the tests and provides the proctor with access information at the beginning of the course. If your proctor has not received this information, he or she should contact the CTC Testing Office.

## **Testing, eArmyU Students**

The CTC Testing Office will provide your Education Center’s testing office with test availability and access information at the beginning of the course. This information is provided to the Education Center at the military installation, which is listed on your admission application at the time of course enrollment.

If your duty assignment changes or you are temporarily deployed to another location, it is your responsibility to locate a proctor or make arrangements with the military testing center at your new location, and to notify the CTC Testing Office as soon as possible with your new proctor information.

## **Proctor Information**

To ensure exam availability from an approved testing facility, provide the CTC Testing Office with the following information:

- Your name.
- Your social security number or student ID number.
- Your location and testing site.
- Testing site’s mailing address, telephone number, and fax number.
- Name and email address of the testing site’s point of contact.
- Course in which you are enrolled.
- Date course began.
- Instructor’s name.

## **Student Responsibilities**

The CTC Testing Office cannot be responsible for test delays due to lack of or incomplete test proctor information if not provided in a timely manner. If you find yourself in this situation, contact your course instructor immediately. The instructor makes the final decision on whether to allow an extension on a test.

## Institutional Challenge Examinations

Students may request permission to take challenge examinations for certain courses. An application for challenging a course must be submitted with the nonrefundable fee through the Campus office serving the student's location to the CTC Testing Office in Killeen, Texas. The student coordinates with the local CTC representative for the time and place to take the examination. Students are eligible to take a challenge exam once they have completed six semester hours with a "C" or higher with CTC. To obtain credit, the student must pass the examination with a minimum grade of "B." Retesting is not permitted, and the fee is forfeited. Credit awarded for successful completion of the challenge exam cannot be used to satisfy CTC residency requirements.

## Evaluation of Previous Education and Training

### Nontraditional 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 nontraditional 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 nontraditional 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 nontraditional methods usually considered applicable toward a degree at Central Texas College are:

- Defense Activity for Nontraditional Educational Support (DANTES) Subject Standardized Examinations.
- College Level Examination Program (CLEP), both the General and Subject Examinations.
- Excelsior College Examinations (ECE).
- Defense Language Proficiency Tests (DLPT).
- American College Testing Program (ACT).
- Scholastic Assessment Test (SAT).
- College Board Advanced Placement.
- Military Service Schools, Military Occupational Specialties (MOSSs), Ratings, and other Military Job Training and Experience as recommended by the American Council on Education (ACE).
- Civilian Education and Training as recommended in *The National Guide to Education Credit for Training Programs*.
- Correspondence courses and other forms of distance education offered by regionally accredited institutions.
- Automotive Service Excellence Tests.
- American Welding Society Certification Program.
- Others to include certain types of civilian training, specialized training, and work experience.

### Evaluation Procedures

Curriculum plans outlining accepted transfer and nontraditional credit as well as remaining requirements are available from CTC upon your written request or submission of evaluation documents.

Evaluation and final certificate and degree plans are provided upon receipt of all official transcripts and documents following successful completion ("C" or "P" grade or higher) of a minimum of six semester credit hours earned in the Central Texas College system. Students on financial or academic hold are not eligible for final evaluation of nontraditional educational experiences until the financial or academic hold is cleared. Students pursuing a technical/vocational program may be required to repeat major field of study courses if the degree program is not completed within five years.

To apply for evaluation and a final certificate and degree plan, submit an Evaluation Request form to Evaluations, Central Texas College, or at the administrative office serving your area. Addresses are listed in 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 Colleges (SOC)

Because of its efforts to serve the educational needs of servicemembers and their family members, Central Texas College has been designated a Servicemembers Opportunity College. As a member of the Servicemembers Opportunity Colleges Associate Degree (SOCAD-2, SOCNAV-2, SOCMAR-2, SOCCOAST-2) programs, 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.
- Flexibility of programs and procedures particularly in admissions, counseling, credit transfer, course articulations, recognition of nontraditional 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 the degree programs of the servicemembers and their family members.
- Requires only 25 percent of CTC coursework applied to the degree for residency requirements.
- Recognizes as study in residence all credit coursework offered by CTC, regardless of location or delivery method.
- 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*.
- 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 nontraditional learning assessment programs.

### SOCAD-2/SOCNAV-2/SOCMAR-2/SOCCOAST-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 Colleges. 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/SOCCOAST-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. Agreements 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  
Attn: Evaluations  
P.O. Box 1800  
Killeen, TX 76540-1800  
(800) 792-3348, Extension 1298  
email: student.services@ctcd.edu

Students completing certificate/degree requirements utilizing credits from other institutions should contact the above address for advanced approval of specific courses. Students must provide the course number, title, and description of the course they wish to take. Please allow at least 10 days for approval.



## **Career Planning and Placement Services**

The Career Planning and Placement Services Office located on the Central Campus in Killeen, Texas, provides career planning and employment assistance services for distant learners and alumni. CTC students around the world may access the online Central Texas College Career Services for information and assistance on job searches or contact the Director of Career Planning and Placement Services.

## **Student Support Services**

Student support services are provided to students who need assistance with academic tutoring, and who have documented disabilities. Students should contact the designated campus representative at their location. The CTC web site provides contact information for services supported through the Central Campus.

## **Project PASS (Partners in Academic Success Services)**

Project PASS provides academic support for CTC declared major students enrolled in Internet-delivered distance learning courses. Online tutoring is available in English and mathematics.

## **Tutorials, Online Resources**

The CTC Distance Learning web site provides links to several online tutorials for students who need to refresh their English and mathematics skills before taking the CTC placement tests, to review after taking the English or mathematics placement exams, or for help while enrolled in an English or mathematics course.

## **Disability Support Services**

Disability Support Services provides assistance to distance learners with a documented learning or physical disability. Appropriate documentation of the disability is required in order to access services/course accommodations. Students should register with the Learning Disability/Physical Disability Support Services counselors at least ten days before the course start date.

# Campus Life

## Alumni and Friends Association

The CTC Alumni and Friends Association is open to any individual or group that wants to help the association achieve its mission to develop and maintain the love and loyalty of graduates, former students, and community members for CTC. Current objectives include:

- Keeping in touch with former and returning students.
- Fostering a spirit of loyalty and good will toward the College.
- Encouraging student enrollment.
- Developing a corps of alumni who serve as CTC ambassadors.

In addition to assisting current and future CTC students achieve their goals through the Association's scholarship program, members also receive the following benefits:

- Free career placement services.
- Notice of College activities and special alumni events.
- Go on record as a CTC booster.
- An Alumni Membership Card.

To learn more about the Alumni and Friends Association, visit the CTC web site.

## Bookstore

The Campus Bookstore, located in the Student Center on the Central Campus, carries new and used textbooks, supplies, trade books, and general merchandise. Distance learning students may purchase textbooks online. Students enrolled in traditional classroom courses taught outside of Texas will generally purchase their textbooks through their local CTC representative, and should check with the CTC representative for the appropriate campus refund policy.

### Refund Policy, Textbooks Purchased Through the Central Campus Bookstore

A cash register receipt and a drop/add slip is required to obtain a refund or exchange. Refunds are available only during the first 12 days from the class start date for 16-week courses. Refunds are only available during the first six days from the class start date for courses taught in the summer session, other courses less than 16 weeks in length, and for distance learning courses. No refunds will be given after the deadlines.

1. A full refund will be given if the book is in the original sale condition, including shrink wrap. Do not open packaged books before verifying with the instructor that you have purchased the correct course materials.
2. A 50 percent refund if you write in a new textbook or remove the packaging.
3. No refunds will be given on optional books, study guides, and workbooks. Do not purchase these books unless you are certain you want them.
4. Refunds will be made to the credit card account for books purchased by credit card.
5. Supplies, trade books, clothing, and gifts are nonrefundable.
6. Reminder: Refunds start from first class day, not when you buy your book.

You are responsible for checking to ensure that you have the correct book and correct edition. Check the course syllabus or contact the department or instructor to verify that you have the correct course materials.

Buybacks are held three times a year, at the end of each Central Campus fall and spring semesters and in August after the summer semesters. Study guides, workbooks, and optional texts are not bought back. Several factors affect the price you receive. Books that have no wholesale or resale value will not be bought.

Distance learning students can mail in books only during the week of buy-back. Distance learners should try to sell their textbooks at a local university or college bookstore if there is one in their vicinity. The CTC Bookstore only buys back books that are needed at a projected amount for a semester. The CTC Bookstore buys back books from students as a service to the students.

The Bookstore buy-back policy is subject to change. Students should refer to the CTC Bookstore Buy-back Policies and Procedures on the CTC Bookstore web site for the most current information.

## **Library Services**

The Central Campus library serves Continental and International campus students through the library's web page at [www.ctcd.edu/pg-lib.htm](http://www.ctcd.edu/pg-lib.htm). Students can access periodical citation indexes, full-text periodical articles, reference resources, legal documents, ebooks, and the online card catalog. Students can check out books, request photocopies of periodical articles from the library's holdings, consult a Reference Librarian, and participate in how-to-use the library tutorials. In addition, library services are available at on-site libraries at most locations.

# Academic Policies

## Academic Load

You are responsible for determining the academic load you may successfully complete during each semester. A normal load is 15 to 18 semester hours per long semester. Central Texas College reserves the right to limit the course load carried by any student. It is recommended that students who work full-time should enroll on a half-time basis only. Typical course loads are as follows:

- Full Time
  - 12 or more semester credit hours during the 16-week fall or spring semester.
  - 8 or more semester credit hours during the 10-week summer session.
  - 6 semester credit hours per 8-week term.
  - 4 or more semester credit hours per 5 1/2 week summer session.
- Three-Quarter Time
  - 9 to 11 semester credit hours during the 16-week fall or spring semester.
  - 5 semester credit hours per 8-week term.
- Half Time
  - 6 to 8 semester credit hours during the 16-week fall or spring semester.
  - 3 to 4 semester credit hours per 8-week term.

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

## Maximum/Minimum Load

Except as stipulated in the program of study, no student will be permitted to enroll in six academic courses or more than 18 semester hours in any combination of terms within a 16-week semester without the approval of the Campus Dean. The maximum load for a 5 1/2-week summer session is eight semester hours. The maximum credit a student can earn during the entire summer session is 14 semester hours.

## Satisfactory Progress Standards

All students enrolled at Central Texas College are required to make adequate progress toward degree or certificate objectives for continued enrollment and/or to remain eligible to receive financial aid. The maximum time frame for completion of a degree program is the equivalent of six 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 following Satisfactory Progress standards are applicable to all students.

- The time frame for students enrolled full-time (12 or more semester credit hours) shall be no more than six 16-week semesters of full-time enrollment to complete a degree program.
- Three-quarter time students (enrolled in 9 to 11 semester credit hours) shall have eight 16-week semesters of three-quarter time enrollment to complete a degree program.
- Half-time students (enrolled in 6 to 8 semester credit hours) shall have twelve 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 academic advisor or counselor for further details regarding their specific academic program.

## 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.

### 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, grades of “FN” or “XN” 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.

### 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/term 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 excused absence. Regardless of the reason for the absence, you are responsible for completing all coursework covered during any absence.

### Excessive Absences/Unsatisfactory Progress

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 or a student who is not making satisfactory progress may be withdrawn from the course at the discretion of the instructor.

If you have not attended class by the 12th class day of a 16-week semester class or the 6th class day of an 8-week class, 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 or fall semester or three class meetings for an eleven-week, eight-week, or six-week term; and in the opinion of the instructor, you cannot satisfactorily complete the course. In an online environment, constant communication is essential from the very beginning of a distance learning course. You may be administratively withdrawn if you do not submit the course contract within two weeks from the start of a 16-week course, and within one week of an 8-week course. The final decision rests solely with the instructor.

In an online course, the last date of attendance is the last activity by the student in the course. If the instructor cannot determine the last date of student’s activity, then the last date of attendance is the first day of the course.

### Failure to Maintain Satisfactory Progress

Readmissions or enrollment may be denied at any time a student fails to maintain satisfactory progress following an academic review by the Campus Dean and the designated Student Services campus official. If by concurrent action of the Campus Dean and Student Services official, a student is determined to be ineligible for continued enrollment or re-enrollment at Central Texas College, the student will be notified in writing of the action taken. A student denied enrollment may appeal the decision of the Campus Dean and the Student Services campus official. The appeal must be submitted in writing within seven (7) working days of notification. The appeal must be submitted to the office of the Deputy Chancellor, Educational Program and Support Services, for students enrolled in Internet distance learning courses. For students enrolled in traditional classes taught at one of the Continental and International Campuses, the student must submit his appeal to the Deputy Chancellor, Continental and International Campuses. The decision of the Deputy Chancellor will be final.

## 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 on or after the first scheduled class meeting, file an Application for Withdrawal and, if during the refund period, an Application for Refund with the CTC Records/Business Offices or with the CTC representative at your location. The first scheduled class meeting of an online course is the first day of the online semester/term, which is usually Monday.

- You must sign a withdrawal form.
- Applications for Withdrawal for Internet distance learning courses 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. The withdrawal period for courses taught outside Texas generally follows the same schedule.
- 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 before withdrawing. Military Tuition Assistance students should visit their Military Education Center or Navy College Office. You must withdraw in person after receiving financial aid, Military Tuition Assistance, or Veterans Assistance approval.
- If you are a distance learner, contact your local CTC representative. If you do not have a CTC representative in your area, contact the Registration and Records Office at the Central Campus.
- eArmyU students should contact their Student Services representative through the portal and their Education Center before withdrawing.
- You may not withdraw from a class for which the instructor has previously issued a grade of “F,” “FI,” “FN,” “X,” or “XN” for nonattendance.

During the official add/drop period, which is through the 12th class day for a 16-week course or the 6th class day for an 8-week course, a student may use a schedule change request form to drop a course.

## Student Classification

- Freshman** Less than 30 semester hours of college-level credit recorded on your permanent record.
- Sophomore** At least 30 semester hours, but no more than 72 semester hours of college-level credit recorded on your permanent record.
- Unclassified** More than 72 hours with no associate or higher degree earned.

## Resident Credit

At least 25 percent of the semester credit hours required for the degree or certificate program must be taken with Central Texas College to establish residency. 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. Both classroom and distance learning courses offered at all Central Texas College campuses meet the same academic standards and carry the same resident credit. Residency credits may be earned at any time during your degree program. To be eligible for a second degree or certificate, an additional 25 percent residency is required. The additional 25 percent must be in coursework that was not used for the first degree or certificate.

## 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.

### Maximum Hours for Transfer To Other Colleges

As a general rule, senior colleges and universities will accept a maximum of 66 hours of academic (not workforce education) lower-division coursework in transfer toward a bachelor’s degree. If you accumulate more than 66 semester credit hours, it is unlikely that the additional hours will apply to a bachelor’s degree. If your goal is to transfer to a four-year college or university and obtain a bachelor’s degree, please contact a CTC academic advisor for your location. The advisor can assist you in making appropriate decisions.

## Taking a Course Out of Sequence

If you, for scheduling reasons, find it desirable to take an advanced course before completing the prerequisite, you must secure approval from the department advisor before registering for the course. Approval does not release you from final responsibility for satisfactorily completing all course requirements. It is the student's responsibility to ensure he or she has the required prerequisites. Students who register for a course without the required prerequisite or departmental permission to do so may be administratively withdrawn from the course. The College is under no obligation to refund tuition fees, or other costs associated with a student who fails to satisfy a course prerequisite.

## Grading Policy

### Grade Reports

Grades are assigned by faculty members based on attendance, class and laboratory performance, test scores, and other departmental academic requirements. Final grades for Internet distance learning courses are available by:

- Telephone (254) 526-1651 on the Friday following the week of finals.
- SOAR, accessed through the CTC web site.

Continental and International (C&I) students should make arrangements with the instructor or the local CTC representative to obtain their final grades. In addition, C&I students who take traditional courses may view their grades through SOAR, once grades have been received from the instructor. Students should allow at least ten days for grade posting. Records are available online for students who have been enrolled during the last 12 months. Students who are unable to access their student records through SOAR should contact the SOAR help desk, [soar@ctcd.cc.tx.us](mailto:soar@ctcd.cc.tx.us), at the Central Campus.

### 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
FN	Nonattendance	0
FI	Failure, nonremoval of incomplete	0
IP	Incomplete, in progress (except developmental)	Not Computed
N	No Credit	Not Computed
P	Completed	Not Computed
W	Withdrawal	Not Computed
XN	Nonattendance, Incomplete for developmental	Not Computed

### 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 the Associate of Arts, Science, Applied Science degree, or certificate programs.

#### “F”

Failure may be awarded for lack of academic progress (F), failure due to non-attendance (FN), or failure to complete remaining course requirements (FI). “F” grades may not be overridden with “W” or “I” grades. If you elect to repeat a course for which you have received an “F,” you must re-register, pay full tuition and fees, and repeat the entire course.

**“IP” Incomplete, Course in Progress (for non-developmental courses)**

An “IP” grade may be assigned by an instructor if a student has made satisfactory progress in a course with the exception of a major quiz, final exam, or other project. The “IP” grade may also be assigned for extenuating circumstances beyond a student’s control such as personal illness, death in the immediate family, military orders, or in the case of distance learning courses, technology failures and mail delays. Notice of absences with supporting documentation may be required by the instructor. Students should notify instructors in advance of absences whenever possible. The instructor makes the final decision concerning the granting of the incomplete grade. The instructor may set a deadline for completing the remaining course requirements. In no case will the deadline exceed 120 days after the scheduled end of the class. It is the student’s responsibility to arrange with the instructor for the assignment of work necessary to complete the course and to change the “IP” within the time specified. An “IP” grade cannot be replaced by the grade of “W.” If a student elects to repeat the course, the student must register, pay full tuition and fees, and repeat the entire course. The IP grade became effective in the fall of 2001.

At the end of the 120 days if the student has not completed the remaining coursework as required by the instructor, the “IP” will be converted to an “FI” and appear as an “F” on the student’s official transcript.

Special conditions may apply to students enrolled in courses paid through financial aid, scholarships, and VA benefits; military tuition assistance; or other third-party contractual agreements due to agency requirements. Students should contact the appropriate agency for specific requirements.

**“I” Incomplete (for non-developmental courses)**

The “I” grade was discontinued after the summer of 2001. In calculating the grade point average for graduation or other purposes, the “I” grade was calculated as an “F.”

**“N”-No Credit**

The grade of “N” is reserved for use with some developmental and designated nontraditional, 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 some developmental and designated nontraditional, 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 nontraditional, 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.

**Grade Point Averaging**

Your grade point average (GPA) is calculated by dividing the total grade points by the total attempted semester hours. Grades of “W,” “N,” “P,” “IP,” and “X” are not included in these calculations. Grades from developmental courses are not calculated.

**Grades and Financial Assistance/Tuition Assistance/VA Benefits**

Special conditions may apply to students enrolled in courses paid through the military tuition assistance program; financial aid, scholarships, and VA benefits; or other third-party contractual agreements due to agency requirements. Students should contact the appropriate agency for specific requirements and possible obligations, particularly for grades of “F,” “IP,” “I,” “W,” “N,” or “X.”



## Change of Grades

Students who believe that a computational error occurred in grading should immediately contact the instructor of the course in question. Students must bring this matter to the attention of the instructor involved no later than 120 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. The first level course may not be repeated after you have passed the second or higher level course, except with permission of the department. Other colleges may compute the GPA in a manner different from Central Texas College. Repeating a course with a "C" or lower does not clear you to graduate with honors. Honors designation at graduation considers all grades, including repeated courses.

## Academic Standards

### Student Responsibility to Know GPA

You are expected to be aware of your grade point average. 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. 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.

## 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 the two consecutive eight-week terms that fall within a regular fall or spring semester and earn a grade point average of 3.5 or higher receive Honor Roll status.

## 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 degrees in Arts, Science, Applied Science and certificate programs require a "C" for each course in the major. Graduation GPA includes all Central Texas College grades and grades in transfer courses applied toward the degree or certificate. Students at Central Texas College must achieve a 2.0 cumulative GPA to maintain satisfactory progress toward graduation.

## Academic Probation, Suspension, and Dismissal

Academic standards of progress are monitored by the College to identify students who are having academic difficulty. To increase the likelihood that a student will succeed at CTC, the Guidance and Counseling advisors will limit a student's enrollment and course selection. Students are responsible for knowing their academic status at all times.

1. Students who fail to maintain a 2.0 cumulative grade point average (GPA) during their initial seven semester hours will be notified of their *Unsatisfactory Academic Progress* status, and provided a list of student support services available to them.
2. Students who fail to (a) maintain a 2.0 cumulative GPA after the first seven semester hours or (b) fail to achieve a 2.0 GPA during any term after the first seven semester status and have less than a 2.0 cumulative GPA will be placed on *Academic Probation* during the next term in which they register. Students will be notified of their status and referred to Guidance and Counseling or the designated Campus Student Services Advisor for academic advisement and assistance. Once students raise their cumulative GPA to 2.0, their status will be changed to *Academic Good Standing*. Students who fail to achieve a 2.0 GPA during their semester/term of probation and whose cumulative GPA is less than 2.0 will be placed on *Academic Suspension*. The mandatory suspension period is one sixteen-week semester, two eight-week terms, or both summer semesters.

- Suspended students who return after the required suspension, or who have successfully appealed the suspension through a college appeals process, will be readmitted on academic probationary status. Students will be required to regularly report to an academic advisor or Campus Student Services advisor for assessment and advisement during the term for which readmitted. Students readmitted after academic suspension who fail to achieve a 2.0 GPA during their semester of probation and whose cumulative GPA is less than 2.0 will be placed on *Academic Dismissal* for two long semesters or one long semester (Spring) and the following summer sessions (both).

Students on Academic Dismissal may petition for readmission only after they have been out for the required dismissal period. Students readmitted must meet with a College Counselor on a regular basis and participate in assessment and student support services. Students must also comply with registration restrictions established as a condition of readmission.

- Students readmitted after Academic Dismissal who fail to maintain a cumulative GPA of 2.0 or receive a “F,” “N,” or “XN,” will again be placed on Academic Dismissal for two long semesters or one long semester and both summer sessions. The same procedures for re-entry apply to repeated periods of Academic Dismissal.

Suspension/probation students who receive financial aid or VA benefits are reported to the Offices of Student Financial Assistance and Veteran’s Services, and must comply with VA and student financial aid requirements for satisfactory progress before 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 program. If more than one course must be repeated, VA benefits will not be approved for those courses.

## Obligations to the College

A student may be blocked from future registrations, not permitted to graduate, and/or administratively withdrawn from a class until the student’s obligations to the College are met. CTC is authorized to place holds on a student’s record under the following conditions, which include but are not limited to:

- Debt to the college, left unpaid.
- Failure to make good on a returned check.
- Failure to make payment on a promissory note or a financial aid overpayment.
- Failure to pay library or traffic fines.
- Failure to return materials from Project PASS or other departments.
- Ineligibility for aid, for which student registered; overdue loans; and failure to complete records.
- Failure to file required documents; enrolling under false pretenses.
- Failure to meet placement or assessment requirements.
- Rejected charges to a credit card.

## Academic Fresh Start

Section 51.931 of the Texas Education Code, allows a Texas resident who was enrolled in a postsecondary institution 10 or more years ago to seek admission to CTC without consideration of that academic coursework.

To take advantage of this option, you must request it prior to your first enrollment at CTC or upon initial re-entry if you are returning after 10 years. Request must be made in writing to the office of the Dean of Student Developmental Services. Applicants who choose to apply under this statute may not receive any course credit for courses taken 10 or more years prior to enrollment. This means courses taken previously

- cannot be used to fulfill the student’s new prerequisite requirements,
- cannot be counted towards the student’s new degree, and
- will not be counted in the student’s new grade point average calculations.

Academic Fresh Start clears only the student’s academic record. Prior credits earned will still be counted when determining a student’s eligibility for financial aid and Veterans Administration benefits.

## 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 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 CTC Records Office. Students are responsible for all communication mailed to the last address on file. Items mailed to the address on file are considered properly delivered by CTC.

### 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. Other documents that may be used include a U.S. Government issued military I.D. card and Social Security Administration Card. An affidavit must be provided before the name change will be processed. Submit name change documents and affidavits to the CTC Records Office.

### Family Educational Rights and Privacy Act of 1974, as Amended (FERPA)

In compliance with the Family Educational Rights and Privacy Act 1974, as amended, 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 before the 12th class day of the fall and spring semesters, the 6th class day of eight-week terms and the 4th class day of summer semesters. Your request may be accepted after these deadlines, but CTC will not be responsible for the release of Directory Information prior to receiving the request to withhold it. This statement of nondisclosure will remain on your records unless you cancel your request to withhold directory information. You may request on an item-by-item basis (such as a transcript release for employment purposes) the release of directory or non-directory information.

### Directory Information

Student’s name  
 Local address  
 Home address  
 Electronic mail address  
 Telephone number  
 Date and place of birth  
 Major field of study  
 Dates of attendance  
 Degrees, awards and honors received  
 Most recent previous educational agency or institution attended  
 Photographs  
 Classification (freshman, sophomore or unclassified)  
 Participation in officially recognized activities and sports  
 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** Using another's work as one's own, or 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, which may include suspension and expulsion.

## Alcohol and Other Drug Abuse

Students 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 disrupt 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.

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 actions, and health risks.

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

## Class Behavior

Generally, students attending Central Texas College are in class for intense personal and professional reasons. To facilitate instruction and learning, you are expected to maintain a mature, earnest and interested attitude in the classroom. CTC will not tolerate student behavior that disrupts the class or attempts to discredit the instructor, the course material or other students. Students who seek to disrupt classes or discredit the course, instructor, or other students will be asked to cease such disruptions. If the student fails to do so, the student will be dropped from the class with a grade of "F."

## 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.

For those few students who fail to understand and accept their role in an educational institution, Central Texas College has prescribed procedures for counseling and disciplinary action, which are designed to help the students in every way possible. In essence, the disciplinary procedures are a part of the learning process for students, and students will be suspended or expelled from Central Texas College only if they fail to respond positively to disciplinary actions.

Disciplinary action may be an oral or written reprimand, disciplinary probation, suspension, or expulsion from Central Texas College. Students on disciplinary probation may receive no honors from Central Texas College. The probation status is permanent unless the student earned the privilege of being released from disciplinary probation.

Request further information concerning disciplinary procedures from Central Texas College personnel.

### 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.

## Graduation

### Application for Certificate or Degree

Central Texas College awards certificates and degrees each year in May, August, and December. The CTC Application for Certificate or Degree with the appropriate nonrefundable fee must be submitted to the Central Texas College site representative. If you do not have a CTC representative at your location, mail the application and fee to the Student Services office in Killeen, Texas. Application and fee must be received by CTC no later than the dates listed below. The graduation fee is for processing of the degree/certificate only. The Application for Graduation is available on the CTC web site or may be obtained from your local CTC site representative.

	<b>Deadline</b>
Fall Semester for December Graduation	October 1
Spring Semester for May Graduation	February 1
Summer Semester for August Graduation	June 10

All CTC admissions and certificate/degree requirements must be completed prior to the award of the certificate or degree. Final CTC course grades, official high school transcripts or GED scores and official transcripts from previously attended colleges or universities must be on file in the CTC Records Office before issuance of the degree or certificate. A student who misses the filing deadline will be processed in the next degree order time frame.

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

### Replacing a Lost Certificate or Degree

If a certificate or degree has been lost, stolen, or damaged, a replacement may be obtained at the Office of the Dean of Student Developmental Services. An appropriate fee is required to replace a certificate or degree.

## Commencement

Central Texas College in Killeen, Texas, holds one consolidated graduation exercise annually in May. Students must complete certificate or degree requirements by the end of the spring semester in order to participate in the ceremony. Prospective graduates who attend CTC at any of its worldwide locations or complete degree requirements through distance learning may participate in the consolidated graduation ceremony. Students should contact the Office of the Dean of Student Developmental Services in Killeen, Texas, by March 15.

Some CTC sites also conduct an annual graduation ceremony in conjunction with the local military and Education Center representatives. Students should see their local CTC representative for more information. Students enrolled in CTC online distance learning courses may participate in graduation ceremonies at the nearest CTC C&I location.

## 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. Repeating a CTC course in which a “C” or lower grade was earned does not clear a student to graduate with honors.
- In any graduating class, the student(s) with the highest grade point average and who meet(s) 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 associate degree honors, students must have earned a minimum of 30 semester hours of traditional study with Central Texas College. Grades of “P” or developmental coursework will not be considered when determining the minimum 30 semester hour residency requirement.
- Certificates of Completion do not qualify for honors.

## Catalog and Completion of Degree/Certificate Program

Students may graduate in the program listed in the catalog that was in effect at the time they enrolled or subsequent catalogs if (1) the catalog is not more than five years old and (2) the student’s program has not been discontinued. Students generally have two years to complete programs before the program is officially deactivated. Additional information may be obtained from an academic advisor.

# Degree and Certificate Requirements

## Degrees Offered

Central Texas College confers the Associate of Arts, the Associate of Science, the Associate of Applied Science, or the Associate of General Studies degrees to students who have successfully completed the minimum and specific degree requirements for graduation. To earn an associate degree, you must complete the specific degree requirements in the curriculum plan for your major field of study as shown in the programs of study and meet minimum requirements for each degree. Each degree candidate must earn a minimum of 25 percent of the coursework in the degree from Central Texas College; have an overall 2.0 grade point average and a minimum CTC 2.0 grade point average; and meet state, institutional, licensure and other agency rules as applicable. All CTC courses completed at the time the degree is conferred are calculated in the CTC grade point average even if the courses were not used to meet specific degree requirements. You are responsible for applying and paying the appropriate graduation fee by the application deadline. Refer to the *Graduation* section in the catalog for information on filing the degree application.

To be eligible for a second associate's degree, a student must complete an additional 25 percent residency from Central Texas College and meet all other degree requirements above. The additional 25 percent residency must be in coursework that was not used for the first associate's degree.

## Developmental Studies

Developmental studies courses offered by Central Texas College are designed to provide a means for students to remove specific deficiencies or provide refresher coursework before 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.

**NOTE** Developmental studies courses may not be used to satisfy degree requirements, cannot be used to meet the 25 percent residency toward the degree and cannot be counted in the grade point average at Central Texas College.

## Certificates of Completion

CTC confers Level I and Level II Certificates of Completion to students who have successfully completed the minimum and specific certificate requirements. To earn a Certificate of Completion, you must earn a minimum of 25 percent of the coursework in the certificate from Central Texas College; have an overall 2.0 grade point average and a minimum CTC 2.0 grade point average; and meet state, licensing, third-party agency and institutional rules as applicable. You are responsible for applying and paying the appropriate graduation fee by the application deadline. Refer to the *Graduation* section in the catalog for information on filing the certificate application.

To be eligible for a second certificate of completion, a student must complete an additional 25 percent residency from Central Texas College and meet all other certificate requirements above. The additional 25 percent residency must be in coursework that was not used for the first certificate.

## Core Curriculum and Field of Study Curriculum

The *Core Curriculum* is the set of courses in liberal arts, humanities, sciences and political, social and cultural history that undergraduates of a public higher education institution in Texas are required to complete before receiving a bachelor's degree (Title 19, Chapter 5, Subchapter S, Rule 5.400). Students seeking a CTC Associate of Arts or Associate of Science degree are required to complete a 42-hour core curriculum. Students who successfully complete the core curriculum, may transfer the block of courses to another Texas public institution of higher education and substitute the block for the receiving institution's core curriculum. Students who do not complete the 42-hour core curriculum, may still transfer those courses successfully completed to another public college or university in Texas. They will generally be required to complete the remainder of the courses in the receiving institution's core curriculum.

When students successfully complete the 42-hour core curriculum at CTC, their transcripts will reflect "*Core Curriculum Completed.*" For a list of the courses in the core curriculum, refer to the Programs of Study section of this Catalog.

The *Field of Study Curriculum* is a set of courses that will satisfy the lower-division academic requirements for a bachelor's degree in a specific academic area at a general academic teaching Texas institution. The course credits of specific approved curricula will apply toward bachelor degree requirements, if the courses are a part of the student's degree requirements at the Texas senior institution.

To facilitate transfer of freshman- and sophomore-level core and field of study courses, a Texas Common Core Numbering System (TCCNS) exists. These lower-division courses have a TCCNS number and are listed in the *Lower-Division Academic Course Guide Manual*, an official publication of the Texas Higher Education Coordinating Board, Community and Technical Colleges Division.

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 before attaining sophomore standing at CTC. Each Texas public community college or university will accept TCCNS courses, provided such credits are within the approved transfer curriculum of the student's declared major field of study at the receiving institution. A change of major may result in loss of credits earned in a previous program.

## Program Listings

Curriculum plans for various degrees and certificates are on the following pages. Designations stated after each degree title reference the student's degree plan by major code. For example, Business Administration (Associate of Arts Degree), BUSS (major code). The reference facilitates student academic advising. 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 you 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 of Arts or an Associate of Science degree, refer to the degree requirements for the AS or AA degrees listed in this catalog.

**NOTE** 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.

## Prerequisite Courses

Be familiar with the course descriptions. If the course description indicates a prerequisite, the prerequisite should be met before registering for the advanced course. For example, you are required to successfully complete ENGL 1301 Composition I before registering for ENGL 1302 Composition II.

If you cannot schedule prerequisites, obtain prior approval to enroll in these courses from the Department Chair or the designated campus representative. 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 the: (a) hours per week the class meets for lectures, (b) number of laboratory hours required per week and (c) 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, BIOL 1406, General Biology 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.



# Programs of Study

AA	Associate of Arts Degree
AS	Associate of Science Degree
AAS	Associate of Applied Science Degree
AGS	Associate of General Studies Degree
CC	Certificate of Completion
CC*	Level I Certificate
CC**	Level II Certificate

Type of Degree	Program of Study	Page
	Core Curriculum for Associate of Science (AS) and Associate of Arts (AA)	44
<b>Associate Degrees in Science and Arts</b>		
AA	Art	48
AA	Business Administration	48
AS	Engineering	48
AS	Environmental Science	48
AS	Geology	49
AA	Interdisciplinary Studies	49
AA	Journalism/Communications	49
AS	Kinesiology (Physical Education)	49
AS	Mathematics	50
AA	Modern Language	50
AA	Social Science	50
<b>Associate of Applied Science Degrees and Certificates</b>		
<b>Applied Technology</b>		
AAS	Applied Technology	46
<b>Auto Collision</b>		
AAS	Auto Collision Repair	51
CC**	Auto Collision Repair Technician	52
CC*	Mechanical and Electrical	52
CC*	Painting and Refinishing	53
CC*	Structural/Non-Structural Analysis and Damage Repair	53
<b>Automotive Mechanic</b>		
AAS	Automotive Mechanic/Technician	54
CC**	Automotive Technician	55
CC*	Automotive System Specialist	56
CC*	Automotive Tune-Up Specialist Certificate	56

## Aviation Maintenance

AAS	Aviation Maintenance Technology	57
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## Business Management

AAS	Applied Management	58
AAS	Applied Management with Computer Applications	59
AAS	Applied Management - Military Science Specialization	60
AAS	Business Management	61
CC*	Business Management	62
CC*	Entrepreneurship	62
AAS	Business Management - Marketing and Sales Management Specialization	63
CC*	Business Management - Marketing and Sales Management	64
AAS	Business Management - Real Estate Specialization	65
CC*	Business Management - Real Estate Sales Agent	66

## Computer Science

AAS	Business Programmer Analyst	67
AAS	Information Technology	68
AAS	Network Systems Administrator	69
AAS	Computer Science - Webmaster Specialization	70
CC*	Network Specialist	71
CC*	Information Center Specialist	71

## Criminal Justice

AAS	Criminal Justice	72
AAS	Criminal Justice - Corrections Specialization	73
CC*	Criminal Justice Studies with Specialization	74
AAS	Criminal Justice - Law Enforcement Technology Specialization	75

## Diesel

AAS	Diesel Engine Mechanic and Repairer	76
CC**	Diesel Technician	76
CC*	Diesel System Specialist Certificate	77
CC*	Diesel Engine Specialist	77

## Drafting and Design

AAS	Computer-Aided Drafting and Design	78
CC*	Computer-Aided Drafting and Design	78

## Early Childhood Professions

AAS	Early Childhood Professions	79
CC*	Early Childhood Professions	80
CC*	Administrator's Credentials	80
CC*	Special Child Option	81

## Electronics

AAS	Communications Electronics Technology	82
AAS	Computer Electronics	83
CC*	Computer Electronics Technology	84

## Emergency Medical Technology

AAS	Emergency Medical Technology	85
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## Fire Protection

AAS	Fire Protection Technology	86
CC*	Fire Protection Technology	87

## General Studies

AGS	General Studies	88
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## Heating and Air Conditioning

AAS	Heating, Air Conditioning, and Refrigeration Mechanic and Repairer	89
CC**	Heating, Air Conditioning, and Refrigeration	90
CC*	Commercial Heating, Air Conditioning, and Refrigeration	90
CC*	Residential Heating, Air Conditioning, and Refrigeration	91

## Hospitality Management

AAS	Restaurant and Culinary Management	92
AAS	Hotel Management Specialization	93
CC*	Culinary Arts	94
CC*	Restaurant Skills	94
CC*	Rooms Division	95
CC*	Food & Beverage Management	95
AAS	Food & Beverage Management Specialization	96

## Legal Assistant (see Paralegal/Legal Assistant)

### Maintenance Technology

AAS	Maintenance Technology	98
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### Mental Health Services

AAS	At Risk Youth Specialization	99
CC*	At Risk Youth Specialization Advanced Certificate	100
AAS	Chemical Dependency Specialization	101
CC*	Chemical Dependency Specialization Advanced Certificate	102

### Office Technology

AAS	Executive Assistant	103
CC*	Administrative Support	104
CC*	Office Assistant	105
AAS	Office Management	106
CC**	Office Management	107
CC*	Office Management	107

### Paralegal/Legal Assistant

AAS	Legal Assistant	97
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### Small Gas Engine Repair

AAS	Small Engine Mechanic and Repairer	108
CC*	Small Engine Mechanic and Repairer	109

### Welding

AAS	Welding	110
CC**	Welding Technology	111
CC*	Welder	111

## Core Curriculum

In the spirit of accomplishing Central Texas College's mission, the core curriculum experience will prepare you to learn effectively through your college years so that you carry these aptitudes for learning into your 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 of becoming creative citizens. The core curriculum will also facilitate the transferability of lower division courses between Central Texas College and Texas universities and colleges.

## Associate of Arts and Associate of Science Degree Requirements

Requirements for the Associate of Science (AS) and Associate of Arts (AA) degrees

Core Area	Course Options	Semester Credit Hours
Communications (010) Speech (011)	ENGL 1301 and 1302 and 3 hours of Speech: SPCH 1315, 1318, 1321.	6 3
Mathematics (020)	MATH 1314, 1316, 1324, 1325, 1342, 2412, 2413, 2414, 2415.	3
Natural Science (030)	BIOL 1406, 1407, 1411, 1413, 1424, 2401, 2402, 2413, 2421, 2428. CHEM 1406, 1407, 1411, 1412, 2423, 2425. GEOL 1403, 1404, 1405. PHYS 1401, 1402, 1405, 1411, 1412, 1415, 2425, 2426. ENVR 1401.	8
Humanities (visual/performing arts)(050)	ARTS 1303, 1304, 1311, 1312, 1313, 1316, 1317, 2311, 2313, 2314, 2316, 2317, 2323, 2324, 2326, 2327, 2333, 2336, 2337, 2341, 2342, 2346, 2347, 2356, 2357, 2366, 2367. DANC 2303. DRAM 1310, 1320, 1321, 1351, 1352, 2336, 2366, 2367. MUSI 1162, 1165, 1181, 1182, 1183, 1184, 1192, 1193, 1216, 1217, 1301, 1304, 1306, 1307, 1311, 1312, 2311, 2312.	3
(literature, philosophy, and cultural studies) (040)	ANTH 2301, 2302, 2346, 2351. ENGL 2322, 2323, 2327, 2328, 2332, 2333. SPCH 2341. HUMA 1315. PHIL 1301, 1304, 1316, 1317, 2303, 2306, 2307.	3
Social/Behavioral Sciences		
U.S. History (060) Political Science (070)	HIST 1301, 1302. GOVT 2301, 2302.	12
(Other social/behavioral science) (080)	HIST 2301, 2311, 2312, 2381. GOVT 2304. PSYC 2301, 2308, 2314, 2315, 2316. SOCI 1301, 1306, 2301, 2319, 2336. ECON 1303, 2301, 2302. GEOG 1300, 1301, 1302, 1303.	3
Health, Wellness, Kinesiology (090)	PHED 1100-1104, 1106-1108, 1110, 1114-1116, 1118-1120, 1123-1126, 1129-1131, 1133, 1136, 1138, 1140-1144, 1151-1153, 1158-1160, 2155.	1
Total Core Requirements		42
Computer Technology/Skills (CTS) (Must meet skills required for basic use of computers)	(Successfully completed course or competency challenge exam) BCIS 1405, COSC 1300.	3-4
Transfer Course Selections Required	Transfer courses may vary depending on the major the student wishes to pursue. Courses must be university parallel, Texas common course numbered (TCCN) courses which will meet the bachelor degree requirements of the university to which the students plans to transfer. See individual curriculum plans for specific courses.	21-22
Total Semester Credit Hours		66-68

**NOTE** A course cannot count toward more than one requirement of the degree.

**NOTE** 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.

**The requirements for a CTC Associate of Arts degree are:**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/Kinesiology selection (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology selection .....	3 Semester Credit Hours
Foreign Language selection (FREN, GERM, SPAN, JAPN) .....	8 Semester Credit Hours
Specialization selection - University Parallel, Texas Common Course (TCCN) .....	10 Semester Credit Hours
<b>Total 66 Semester Credit Hours</b>	

**The requirements for a CTC Associate of Science degree are:**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/Kinesiology selection (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology selection .....	3 Semester Credit Hours
Mathematics selection (MATH) .....	3 Semester Credit Hours
Natural Science selection (BIOL, CHEM, PHYS, GEOL) .....	4 Semester Credit Hours
Specialization selection - University Parallel, Texas Common Course (TCCN) .....	11 Semester Credit Hours
<b>Total 66 Semester Credit Hours</b>	

**Additional Associate of Arts and Associate of Science Degree Requirements**

- A minimum of 25 percent of semester credit hours 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 grade point average of 2.0 (“C” average) with Central Texas College.
- Meeting all other Central Texas College and departmental requirements.

**Associate of 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 of 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.
- Three semester hours of mathematics, MATH 1314 or higher.
- HIST 1301 and 1302.
- GOVT 2301 and 2302.
- Three semester hours of computer instruction.
- Two semester hours of physical education from activity courses.
- If the major is music, journalism, commercial art, or television/radio broadcasting, all required courses in the major as listed in this Catalog must be completed.
- A minimum of 25 percent of semester hour credits earned within the Central Texas College System.
- A minimum overall grade point average 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 of General Studies Degree requirements when approved by the appropriate Department Chair.
- A minimum score on all sections of the THEA test or other state-approved TSI test unless TSI exempt or eligible for a waiver.

## Associate of 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 associate of applied science general education component must constitute a minimum of 15 semester credit hours drawn from and include at least one course from each of the following three required areas: Humanities/Fine Arts; Social/Behavioral; and Natural Science/Mathematics. If a student takes ENGL 1312, the student must complete an additional 3 semester hours from one of the three required areas.

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.
- Three semester hours of mathematics, MATH, except for the Associate Degree Nursing program, Early Childhood Professions and Emergency Medical Technology programs that require a science selection.
- Three semester hours of social or behavioral science.
- Three semester hours of computer instruction.
- A minimum of 50 percent of semester credit 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 minimum score on all sections of the THEA test or other state-approved TSI test unless TSI exempt or eligible for a waiver.
- 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 five years after courses are completed.

## Associate of Applied Science Degree of Applied Technology

To receive an Associate of Applied Science Degree in Applied Technology, students must complete a minimum of 64 semester hours which 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.
- Three semester hours of mathematics, MATH 1314, MATH 1324, MATH 1332, MATH 1342, or higher.
- Three semester hours of social or behavioral science.
- Three semester hours of computer instruction.
- Two semester hours of physical education from activity courses.
- 44-47 semester hours of major area courses related to a specific MOS, Rating, or Job Specialty Code.
- A minimum of 25 percent of semester credit hours earned within Central Texas College.
- Satisfy:
  - A minimum overall grade point average 2.0 (“C” average).
  - A minimum “C” on each course in the major area specialization.
  - A minimum grade point average of 2.0 (“C” average) with Central Texas College.

The associate of applied science general education component must constitute a minimum of 15 semester credit hours drawn from and include at least one course from each of the following areas: Humanities/Fine Arts; Social/Behavioral; and Natural Science/Mathematics. If a student takes ENGL 1312, the student must complete an additional 3 semester hours from one of these areas.

## 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. 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.

## Special Electives

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

### Humanities/Fine Arts Electives

ANTH	2351	Cultural Anthropology
ARTS		(all ARTS courses except ARTS 2313, 2314)
DANC	2303	Dance Appreciation I
DRAM	2366	Development of the Motion Picture I
Foreign Language courses		
GEOG	1302	Cultural Geography
GEOG	1303	World Regional Geography
HIST	2311 and 2312	Western Civilization I and II
HIST	2381	African-American History
HUMA	1315	Fine Arts Appreciation
Literature courses only (ENGL)		
Music courses (MUSI)		
Philosophy courses to include Religion (PHIL)		
SPCH	2341	Oral Interpretation

### Social/Behavioral Science Electives

AGRI	2317	Introduction to Agriculture Economics
ANTH	2301	Physical Anthropology
ANTH	2351	Cultural Anthropology
ECON	2301	Principles of Macroeconomics
ECON	2302	Principles of 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 Electives

Computer Science courses (IMED, ITNW, ITSC, ITSE, ITSW)

Selected POFI courses

AGRI	1309	Computers in Agriculture
CPMT	1403	Introduction to Computer Technology
CPMT	1449	Computer Networking Technology
CPMT	2437	Microcomputer Interfacing
DFTG	1409	Basic Computer-Aided Drafting
HAMG	1319	Computers in Hospitality

Courses taken at another college or university to satisfy special elective requirements must be freshman/sophomore level.

Other courses may satisfy the special electives.

# Associate of Arts and Associate of Science Degrees

## Art (ART)

### Associate of Arts Degree

**66 Total Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology .....	3 Semester Credit Hours
Foreign Language (FREN, GERM, SPAN, JAPN) .....	8 Semester Credit Hours
Specialization -University Parallel, Texas Common Course (TCCN) .....	10 Semester Credit Hours
ARTS 1303/04 Art History I & II, ARTS 1311/12 Design I & II, ARTS 1316/17 Drawing I & II, ARTS 2323/24 Life Drawing I & II, ARTS 2311 Design III, ARTS 2313/14 Design Communications I & II, ARTS 2316/17 Painting I & II, ARTS 2326/27 Sculpture I & II, ARTS 2333 Print Making I, ARTS 2336/37 Fiberarts I & II, ARTS 2341/42 Art Metals I & II, ARTS 2346/47 Ceramics I & II, ARTS 2356/57 Photography I & II, ARTS 2366/67 Watercolor I & II.	

## Business Administration (BUSS)

### Associate of Arts Degree

**68 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	2 Semester Credit Hours
Computer Technology .....	4 Semester Credit Hours
Foreign Language (FREN, GERM, SPAN, JAPN) .....	8 Semester Credit Hours
Specialization -University Parallel, Texas Common Course (TCCN) .....	12 Semester Credit Hours
ACCT 2301 Principles of Financial Accounting, ACCT 2302 Principles of Managerial Accounting, BUSI 1301 Business Principles, ECON 2301 Principles of Macroeconomics, ECON 2302 Principles of Microeconomics.	

## Engineering (ENGR)

### Associate of Science Degree

**74 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Computer Technology .....	4 Semester Credit Hours
Mathematics Selection (MATH 2413 and MATH 2414) .....	8 Semester Credit Hours
Engineering (Introductory) (ENGR 1305 or ENGR 2302) .....	3 Semester Credit Hours
Engineering Selection (ENGR 2301) .....	3 Semester Credit Hours
Specialization - University Parallel, Texas Common Course (TCCN) .....	14 Semester Credit Hours
MATH 2318 Linear Algebra, MATH 2415 Calculus III, ENGR 1201 Introduction to Engineering, ENGR 1304 Engineering Graphics I, PHYS 1411 Introductory Astronomy I, PHYS 1412 Introductory Astronomy II.	

## Environmental Science (ENVS)

### Associate of Science Degree

**66 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology .....	3 Semester Credit Hours
Mathematics Selection (MATH) .....	3 Semester Credit Hours
Natural Science Selection (BIOL, CHEM, PHYS, GEOL) .....	4 Semester Credit Hours
Specialization - University Parallel, Texas Common Course (TCCN) .....	11 Semester Credit Hours
BIOL 1406/1407 General Biology I & II, BIOL 1411 General Botany, BIOL 1413 General Zoology, CHEM 1411/12 General Chemistry I & II, ENVR 1403 Environmental Science, GEOL 1403 Physical Geology.	

In cases where lower division degree requirements of the receiving institution 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, Campus Dean, Dean of Student Developmental Services/Associate Dean of Guidance and Counseling, and/or receiving institution. It may be beneficial to complete additional coursework above the 66 semester credit hours with the appropriate approval.



## Geology (GEOL)

### Associate of Science Degree

**66 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology .....	3 Semester Credit Hours
Mathematics Selection (MATH) .....	3 Semester Credit Hours
Natural Science Selection (BIOL, CHEM, PHYS, GEOL) .....	4 Semester Credit Hours
Specialization - University Parallel, Texas Common Course (TCCN) .....	11 Semester Credit Hours
GEOL 1403 Physical Geology, GEOL 1404 Historical Geology, GEOG 1301 Physical Geography	

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

## Interdisciplinary Studies (IDST)

### Associate of Arts Degree

**66 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology .....	3 Semester Credit Hours
Foreign Language (FREN, GERM, SPAN, JAPN) .....	8 Semester Credit Hours
Specialization -University Parallel, Texas Common Course (TCCN) .....	10 Semester Credit Hours

## Journalism/Communications (COMM)

### Associate of Arts Degree

**66 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology .....	3 Semester Credit Hours
Foreign Language (FREN, GERM, SPAN, JAPN) .....	8 Semester Credit Hours
Specialization -University Parallel, Texas Common Course (TCCN) .....	10 Semester Credit Hours
COMM 1307 Introduction to Mass Communications, COMM 2311 News Gathering and Writing I, COMM 2315 News Gathering and Writing II, COMM 2389 Academic Coop in Humanities/Fine Arts.	

See also, Radio/Television Broadcasting, Associate of Arts Degree and Certificates of Completion in Radio Broadcasting and Radio and Television Broadcasting.

## Kinesiology (Physical Education) (PHED)

### Associate of Science Degree

**66 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology .....	3 Semester Credit Hours
Mathematics Selection (MATH) .....	3 Semester Credit Hours
Natural Science Selection (BIOL, CHEM, PHYS, GEOL) .....	4 Semester Credit Hours
Specialization -University Parallel, Texas Common Course (TCCN) .....	11 Semester Credit Hours
PHED 1301 Introduction to Physical Fitness and Sport, PHED (Team Sport), PHED (Individual Sport), PHED 1308 Sports Officiating I, PHED 1130 Physical Conditioning, PHED 1306 First Aid, PHED 1138 Rhythmic Aerobics.	

In cases where lower division degree requirements of the receiving institution 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, Campus Dean, Dean of Student Developmental Services/Associate Dean of Guidance and Counseling, and/or receiving institution. It may be beneficial to complete additional coursework above the 66 semester credit hours with the appropriate approval.

**Mathematics (MATH)**

**Associate of Science Degree**

**68 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology .....	4 Semester Credit Hours
Mathematics Selection (MATH 2413 and MATH 2414) .....	8 Semester Credit Hours
Natural Science Selection (BIOL, CHEM, PHYS, GEOL) .....	4 Semester Credit Hours
Specialization - University Parallel, Texas Common Course (TCCN) .....	7 Semester Credit Hours
MATH 2318 Linear Algebra, MATH 2412 Precalculus Math, MATH 2415 Calculus III.	

**Modern Language (FLAN)**

**Associate of Arts Degree**

**66 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology .....	3 Semester Credit Hours
Foreign Language (FREN, GERM, SPAN, JAPN) .....	8 Semester Credit Hours
Specialization -University Parallel, Texas Common Course (TCCN) .....	10 Semester Credit Hours
LANG 1411 Beginning Foreign Language I, LANG 1412 Beginning Foreign Language II, LANG 2311 Intermediate Foreign Language, LANG 2312 Intermediate Foreign Language.	

**Social Science (SOCI)**

**Associate of Arts Degree**

**66 Semester Credit Hours**

Complete Core .....	42 Semester Credit Hours
Health/Wellness/ Kinesiology (PHED Activity Courses) .....	3 Semester Credit Hours
Computer Technology .....	3 Semester Credit Hours
Foreign Language (FREN, GERM, SPAN, JAPN) .....	8 Semester Credit Hours
Specialization -University Parallel, Texas Common Course (TCCN) .....	10 Semester Credit Hours
ANTH, ECON, GEOG, GOVT, HIST, PSYC, SOCI.	

In cases where lower division degree requirements of the receiving institution 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, Campus Dean, Dean of Student Developmental Services/Associate Dean of Guidance and Counseling, and/or receiving institution. It may be beneficial to complete additional coursework above the 66 semester credit hours with the appropriate approval.

## Auto Collision Repair (ATCR)

### Associate of Applied Science Degree

#### First Year

First Semester			Credit
ABDR	1419	Basic Metal Repair	4
ABDR	1472	Auto Body Glass, Hardware and Trim	4
ABDR	1471	Advanced Auto Body Welding	4
ABDR	1431	Basic Refinishing	4
PHED		Physical Education	1

#### Second Semester

ABDR	2449	Advanced Refinishing	4
ABDR	1449	Automotive Plastic and Sheet Molded Compound	4
ABDR	1441	Structural Analysis and Damage Repair I	4
ABDR	1442	Structural Analysis and Damage Repair II	4
MATH		MATH 1314 or higher level	3

#### Second Year

First Semester			
ABDR	2435	Structural Analysis and Damage Repair IV	4
ABDR	2437	Structural Analysis and Damage Repair V	4
ELCT		Humanities/Fine Arts Selection	3
ENGL	1312	Business Writing	3
GOVT	2301/2302	American Government I/II	3

#### Second Semester

ABDR	2402	Auto Body Mechanical and Electrical Service	4
AUMT	1416	Suspension and Steering	4
ELCT		Computer Technology/Skills Selection	4
SPCH	1321	Business and Professional Speaking	3
AUMT	1410	Automotive Brake Systems	4
or			
ABDR	2488	Internship- Autobody/Collision and Repair Technology/Technician	
<b>Total Hours</b>			<b>72</b>

## Auto Collision

# Auto Collision Repair Technician (ATRT) Certificate of Completion

### First Year

First Semester			Credit
ABDR	1419	Basic Metal Repair	4
ABDR	1472	Auto Body Glass, Hardware & Trim	4
ABDR	1471	Advanced Auto Body Welding	4
Second Semester			
ABDR	1431	Basic Refinishing	4
ABDR	2449	Advanced Refinishing	4
ABDR	1441	Structural Analysis and Damage Repair I	4
ABDR	1449	Automotive Plastic and Sheet Molded Compound Repair	4

### Second Year

First Semester			
ABDR	1442	Structural Analysis and Damage Repair II	4
ABDR	2435	Structural Analysis and Damage Repair IV	4
ABDR	2437	Structural Analysis and Damage Repair V	4
ABDR	2402	Auto Body Mechanical & Electrical Service	4
Second Semester			
AUMT	1416	Suspension and Steering	4
AUMT	1445	Automotive Heating and Air Conditioning	4
AUMT	1410	Automotive Brake Systems	4
or			
ABDR	2488	Internship- Autobody/Collision and Repair Technology/Technician	
<b>Total Hours</b>			<b>56</b>

# Mechanical and Electrical (ATME) Certificate of Completion

			Credit
ABDR	1419	Basic Metal Repair	4
ABDR	2402	Auto Body Mechanical & Electrical Service	4
ABDR	1472	Auto Body Glass Hardware and Trim	4
AUMT	1416	Suspension and Steering	4
AUMT	1445	Automotive Heating and Air Conditioning	4
AUMT	1410	Automotive Brake Systems	4
or			
ABDR	2488	Internship- Autobody/Collision and Repair Technology/Technician	
<b>Total Hours</b>			<b>24</b>

## Painting and Refinishing (ATPR) Certificate of Completion

<b>First Semester</b>			<b>Credit</b>
ABDR	1419	Basic Metal Repair	4
ABDR	1472	Auto Body Glass, Hardware & Trim	4
ABDR	1471	Advanced Auto Body Welding	4
ABDR	1441	Structural Analysis and Damage Repair I	4
<b>Second Semester</b>			
ABDR	1431	Basic Refinishing	4
ABDR	2449	Advanced Refinishing	4
ABDR	1449	Automotive Plastic and Sheet Molded Compound Repair	4
or			
ABDR	2488	Internship- Autobody/Collision and Repair Technology/Technician	
<b>Total Hours</b>			<b>28</b>

## Structural/Non-Structural Analysis and Damage Repair (ASAD) Certificate of Completion

<b>First Semester</b>			<b>Credit</b>
ABDR	1419	Basic Metal Repair	4
ABDR	1472	Auto Body Glass, Hardware & Trim	4
ABDR	1471	Advanced Auto Body Welding	4
ABDR	1441	Structural Analysis and Damage Repair I	4
ABDR	1442	Structural Analysis and Damage Repair II	4
<b>Second Semester</b>			
ABDR	2435	Structural Analysis and Damage Repair IV	4
ABDR	2437	Structural Analysis and Damage Repair V	4
ABDR	1449	Automotive Plastic and Sheet Molded Compound Repair	4
ABDR	2402	Auto Body Mechanical and Electrical Service	4
or			
ABDR	2488	Internship- Autobody/Collision and Repair Technology/Technician	
<b>Total Hours</b>			<b>36</b>

## Automotive Mechanic/Technician (ATMT)

### Associate of Applied Science Degree

#### First Year

First Semester			Credit
AUMT	1405	Introduction to Automotive Technology	4
AUMT	2305	Theory of Automotive Engines	3
AUMT	1407	Automotive Electrical Systems	4
AUMT	2437	Automotive Electronics	4
MATH		MATH 1314 or higher level	3

#### Second Semester

AUMT	1472	Automotive Computer Systems	4
AUMT	1445	Automotive Heating and Air Conditioning	4
AUMT	1410	Automotive Brake Systems	4
AUMT	2413	Automotive Drive Train and Axles	4
ENGL	1312	Business Writing	3

#### Second Year

First Semester			
SPCH	1321	Business and Professional Speaking	3
AUMT	1416	Automotive Suspension and Steering Systems	4
ELCT		Computer Technology/Skills Selection	3
AUMT	1471	Automotive Fuel Systems	4
GOVT	2301/2302	American Government I/II	3

#### Second Semester

AUMT	2425	Automotive Automatic Transmission and Transaxle	4
AUMT	2434	Automotive Engine Performance Analysis II	4
ELCT		Humanities/Fine Arts Selection	3
ELCT		Elective	3
AUMT	1419	Automotive Engine Repair	4
OR			
AUMT	2488	Internship–Automobile/Automotive Mechanics Technology/Technician	
<b>Total Hours</b>			<b>72</b>

## Automotive Technician (ATTE) Certificate of Completion

### First Year

First Semester			Credit
AUMT	1405	Introduction to Automotive Technology	4
AUMT	2305	Theory of Automotive Engines	3
AUMT	1407	Automotive Electrical Systems	4
AUMT	2437	Automotive Electronics	4

### Second Semester

AUMT	1471	Automotive Fuel Systems	4
AUMT	1445	Automotive Heating and Air Conditioning	4
AUMT	1472	Automotive Computer Systems	4
AUMT	1410	Automotive Brake Systems	4

### Second Year

First Semester			Credit
AUMT	1416	Automotive Suspension and Steering Systems	4
AUMT	2413	Automotive Drive Train and Axles	4
AUMT	2425	Automotive Automatic Transmission and Transaxle	4
WLDG	2413	Intermediate Welding Using Multiple Processes	4

### Second Semester

AUMT	2434	Automotive Engine Performance Analysis II	4
AUMT	1419	Automotive Engine Repair	4
OR			
AUMT	2488	Internship–Automobile/Automotive Mechanics Technology/Technician	55
<b>Total Hours</b>			<b>55</b>

## Automotive Mechanic

### Automotive System Specialist (ATSS) Certificate of Completion

			<b>Credit</b>
AUMT	1405	Introduction to Automotive Technology	4
AUMT	2305	Theory of Automotive Engines	3
AUMT	1407	Automotive Electrical Systems	4
AUMT	2437	Automotive Electronics	4
AUMT	1445	Automotive Heating and Air Conditioning	4
AUMT	1410	Automotive Brake Systems	4
AUMT	1416	Automotive Suspension and Steering Systems	4
AUMT	2413	Automotive Drive Train and Axles and Transaxle	4
WLDG	2413	Intermediate Welding Using Multiple Processes	4
OR			
AUMT	2488	Internship–Automobile/Automotive Mechanics Technology/Technician	
<b>Total Hours</b>			<b>39</b>

### Automotive Tune-Up Specialist (ATTU) Certificate of Completion

			<b>Credit</b>
AUMT	1405	Introduction to Automotive Technology	4
AUMT	2305	Theory of Automotive Engines	3
AUMT	1407	Automotive Electrical Systems	4
AUMT	2437	Automotive Electronics	4
AUMT	1471	Automotive Fuel Systems	4
AUMT	1472	Automotive Computer Systems	4
AUMT	2434	Automotive Engine Performance Analysis II	4
AUMT	1419	Automotive Engine Repair	4
OR			
AUMT	2488	Internship–Automobile/Automotive Mechanics Technology/Technician	
<b>Total Hours</b>			<b>31</b>



# Aviation Maintenance Technology (AVMT)

## Associate of Applied Science Degree

(Offered at Pacific Far East Campus only)

The Associate of Science in Aircraft Maintenance degree combines a technical background in aircraft maintenance with a well-rounded academic program.

Central Texas College offers courses to students attending the Pacific Far East Campus who are experienced but un-licensed aircraft maintenance specialist. These courses deal largely with the theory and the concepts of all aspects of airframe and power plant maintenance; and with the problems, considerations and practices involved in maintaining aircraft in airworthy condition based upon the body of knowledge required of experienced aircraft maintenance specialists. The completion of these courses does not influence the determination by the FAA of an individual's eligibility to take the airframe and/or power plant examinations. The courses provide academic background information for the actual hands-on training the student obtains through military training courses and programs, and military experiences.

This program is not FAA approved for meeting the degree requirements to take the A&P Examinations (an alternative method for qualification in lieu of military experience). The information in the courses is provided to enhance the student's potential for successful testing based upon their military RATING/Military OCCUPATIONAL SPECIALTY (MOS). Only military members possessing applicable military operational specialty codes for US Army, US Air Force, US Navy, US Coast Guard, and US Marine Corps personnel as listed in FAA Circular AC 65-30 series may enroll in these courses.

NO IMPLICATION FOR FAA APPROVED COURSES IS IMPLIED OR STATED IN THIS DEGREE PROGRAM.

### First Year

#### First Semester

			Credit
ENGL	1312	Business Writing	3
PHYS	1405	Survey of Physics	4
AERM	1314	Basic Electricity	3
AERM	1203	Shop Practices	2
AERM	2351	Aircraft Turbine Engine Overhaul	3

#### Second Semester

MATH		MATH 1314 or higher level	3
AERM		Selected AERM Electives	2
AERM	1444	Aircraft Reciprocating Engines	4
AERM	1208	Federal Aviation Regulations	2
AERM	1210	Ground Operations	2

#### Third Semester

AERM		Selected AERM Electives	3
AERM	1452	Aircraft Sheet Metal	4

### Second Year

#### First Semester

ELCT		Humanities/Fine Arts Selection	3
AERM	1456	Aircraft Power Plant Electrical	4
AERM	2231	Airframe Inspections	2
AERM	2337	Landing Gear & Hydraulic Systems	3
AERM	2341	Power Plant & Auxiliary Power Units	3
AERM	1254	Aircraft Composites	2

#### Second Semester

AERM	1243	Aircraft Auxiliary Systems	2
AERM	1449	Hydraulic, Pneumatic & Fuel Systems	4
AERM	1205	Weight and Balance	2
AERM		Selected AERM Elective	2
AERM		Selected AERM Elective	2

#### Third Semester

AERM		Selected AERM Elective	3
ELCT		Social/Behavioral Science	3
<b>Total Hours</b>			<b>70</b>

## Business Management

# Applied Management (MGMT)

(Offered at locations outside of Texas under Military Contract Obligation)

### First Year

#### First Semester

			<b>Credit</b>
BUSI	1301	Business Principles	3
ENGL		English Selection	3
MATH		MATH 1314 or higher level	3
BMGT	1303	Principles of Management	3
HRPO	1311	Human Relations	3
PHED		Physical Education	1

#### Second Semester

BUSI	1307	Personal Finance	3
ENGL		English Selection	3
ELCT		BMGT/HRPO/BUSG	3
SPCH		Speech Selection	3
ELCT		Computer Science Selection	3
PHED		Physical Education	1

### Second Year

#### First Semester

ACCT	2301	Principles of Financial Accounting	3
HRPO	2301	Human Resource Management	3
BMGT	1301	Supervision	3
ELCT		Humanities/Fine Arts Selection	3
ELCT		BMGT/HRPO/BUSG	3
PHED		Physical Education	1

#### Second Semester

ELCT		Social/Behavioral Science Selection	3
BUSG	2305	Business Law/Contracts	3
MRKG	1311	Principles of Marketing	3
ELCT		BMGT/BUSG/HRPO or Approved Selection	3
ELCT		BMGT/BUSG/ITSW/ITSC/ITSE	3
PHED		Physical Education	1
<b>Total Hours</b>			<b>64</b>

## Applied Management with Computer Applications (MMRO)

(Offered at locations outside of Texas under Military Contract Obligation)

### First Year

First Semester			Credit
BMGT	1303	Principles of Management	3
ELCT		Computer Science Elective	4
ITSC	1409	Integrated Software Applications I	4
ENGL	1312	Business Writing	3
MATH		MATH 1324 or 1342	3
PHED		Physical Education	1

### Second Semester

BMGT	1301	Supervision	3
BMGT	1325	Office Management	3
ITSW	1404	Introduction to Spreadsheets	4
ITSW	1407	Introduction to Database	4
SPCH	1321	Business and Professional Speaking	3
PHED		Physical Education	1

### Second Year

First Semester			
BUSG	2305	Business Law/Contracts	3
HRPO	2301	Human Resource Management	3
ACCT	2301	Principles of Financial Accounting	3
ITSC	1405	Introduction to PC Operating Systems	4
Second Semester			
HRPO	1311	Human Relations	3
ELCT		Computer Science Elective	4
ACCT	2302	Principles of Managerial Accounting	3
ELCT		Humanities/Fine Arts Selection	3
ELCT		Social/Behavioral Science Selection	3
<b>Total Hours</b>			<b>65</b>

## Business Management

### Applied Management - Military Science Specialization (BUAMM)

(Offered at the Europe Campus under Military contract obligation)

#### First Year

##### First Semester

MTMS	1170	Military Science I	1
BMGT	1303	Principles of Management	3
ENGL		English Selection	3
MATH		MATH 1314 or higher level	3
HRPO	1311	Human Relations	3
ELCT		Computer Science Technology/ Skills Selection	3

##### Second Semester

ENGL		English Selection	3
SPCH		Speech Selection	3
MTMS	1270	Military Science II	2
MTMS	1271	Setting Goals and Objectives	2
MTMS	1272	Job Performance and Motivation	2
MTHO	1370	Historical Principles of War	3

#### Second Year

##### First Semester

HRPO	2301	Human Resource Management	3
BMGT	1301	Supervision	3
ELCT		Humanities/Fine Arts Selection	3
ACNT	1325	Principles of Accounting I	3
ELCT		BMGT/HRPO/BUSG/MT-	3
MTMS	2371	Management Problems	3

##### Second Semester

MTMS	2271	Military Science III	2
MTMS	2372	Ethics in Management	3
ELCT		Social/Behavioral Science Selection	3
ELCT		BMGT/BUSG/HRPO/MT-	3
MTMS	2370	Advanced Leadership	3
MTPE		Physical Activity Course	1

**Total Hours** **64**

## Business Management (BMGT)

### Associate of Applied Science Degree

#### First Year

First Semester			Credit
HRPO	1311	Human Relations	3
ENGL	1301	Composition I	3
ITSC	1409	Integrated Software Applications I	4
BUSI	1301	Business Principles	3
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1

#### Second Semester

BMGT	1325	Office Management	3
BMGT	1303	Principles of Management	3
MRKG	1311	Principles of Marketing	3
ELCT		BUSI/BMGT/RELE/ITSC/IMED/MRKG/BUSG	3-4
ELCT		BUSI/BMGT/RELE/MRKG/BUSG	3
PHED		Physical Education	1

#### Second Year

##### First Semester

MATH		MATH 1324, 1332, or 1342	3
ACCT	2301	Principles of Financial Accounting	3
ELCT		BMGT 2370, BMGT 2488, or RELE 2488	3-4
HRPO	2301	Human Resource Management	3
BUSG	2305	Business Law/Contracts	3
or			
BUSI	2301	Business Law	3
ECON		ECON 2301 or 2302	3

##### Second Semester

BUSG	2309	Small Business Management	3
ACCT	2302	Principles of Managerial Accounting	3
ELCT		Humanities/Fine Arts Selection	3
BMGT	1301	Supervision	3
ELCT		Elective	3
ELCT		BMGT 2371, BMGT 2489, or RELE 2489	3-4
<b>Total Hours</b>			<b>69-72</b>

## Business Management

### Business Management (BSMG) Certificate of Completion

#### First Year

First Semester			Credit
BUSI	1301	Business Principles	3
BMGT	1303	Principles of Management	3
HRPO	1311	Human Relations	3
ITSC	1409	Integrated Software Applications I	4
MRKG	1311	Principles of Marketing	3

#### Second Semester

HRPO	2301	Human Resource Management	3
BMGT	1301	Supervision	3
BUSG	2305	Business Law/Contracts	3
or			
BUSI	2301	Business Law	3
ELCT		BUSI/BMGT/BUSG/RELE/MRKG	3
ELCT		BMGT 2370, BMGT 2488, RELE 2488	3-4
<b>Total Hours</b>			<b>31-32</b>

### Entrepreneurship (BMEC) Certificate of Completion

#### First Year

First Semester			Credit
BUSG	2309	Small Business Management	3
POFT	1325	Business Math and Machine Applications	3
ITSC	1409	Integrated Software Applications	4
MRKG	1311	Principles of Marketing	3
ACCT	2301	Principles of Financial Accounting	3

#### Second Semester

HRPO	2301	Human Resource Management	3
BUSG	2305	Business Law/Contracts	3
or			
BUSI	2301	Business Law	3
ELCT		BUSI/BMGT/BUSG/RELE/IMED/MRKG	3-4
BUSG	1370	Small Business Accounting	3
BUSG	1371	Entrepreneurship and Business Plan Development	3
<b>Total Hours</b>			<b>31-32</b>

# Business Management

## Marketing and Sales Management Specialization (MGSM)

### Associate of Applied Science Degree

#### First Year

First Semester			Credit
HRPO	1311	Human Relations	3
ENGL	1301	Composition I	3
BUSI	1301	Business Principles	3
ITSC	1409	Integrated Software Applications I	4
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1

#### Second Semester

MATH		MATH 1324, 1332, or 1342	3
MRKG	1311	Principles of Marketing	3
BMGT	1325	Office Management	3
MRKG	1302	Principles of Retailing	3
ELCT		BUSI/BMGT/RELE/ITSC/IMED	3-4
PHED		Physical Education	1

#### Second Year

First Semester			
ELCT		BMGT 2370, 2488, or RELE 2488	3-4
ECON		ECON 2301 or 2302	3
ELCT		Humanities/Fine Arts Selection	3
ELCT		BMGT/BUSI/BUSG/RELE/HRPO	3
ELCT		BMGT/BUSI/BUSG/RELE	3
ACCT	2301	Principles of Financial Accounting	3

#### Second Semester

ACCT	2302	Principles of Managerial Accounting	3
BUSG	2305	Business Law/Contracts	3
or			
BUSI	2301	Business Law	3
MRKG	2333	Principles of Selling	3
or			
BUSI	1311	Salesmanship	3
ELCT		Elective	3
ELCT		BMGT/BUSI/BUSG/RELE	3
ELCT		BMGT 2371, BMGT 2489, or RELE 2489	3-4
<b>Total Hours</b>			<b>69-72</b>

## Business Management Marketing and Sales Management (MKSM) Certificate of Completion

### First Year

First Semester			Credit
HRPO	1311	Human Relations	3
BUSI	1301	Business Principles	3
ITSC	1409	Integrated Software Applications I	4
ELCT		BMGT/BUSI/BUSG/RELE/HRPO	3

### Second Semester

MRKG	1311	Principles of Marketing	3
MRKG	2333	Principles of Selling	3
or			
BUSI	1311	Salesmanship	3
ELCT		BUSI/BMGT/BUSG/RELE/MRKG	3
ELCT		BMGT 2370, BMGT 2488, or RELE 2488	3-4
<b>Total Hours</b>			<b>24-26</b>



## Business Management Real Estate Specialization (RLET) Associate of Applied Science Degree

### First Year

First Semester			Credit
HRPO	1311	Human Relations	3
ENGL	1301	Composition I	3
BUSI	1301	Business Principles	3
ITSC	1409	Integrated Software Applications I	4
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1

### Second Semester

MATH		MATH 1324, 1332, or 1342	3
MRKG	1311	Principles of Marketing	3
BMGT	1325	Office Management	3
MRKG	1302	Principles of Retailing	3
RELE	1406	Real Estate Principles	4
PHED		Physical Education	1

### Second Year

First Semester			Credit
RELE	2488	Internship-Real Estate	4
ECON		ECON 2301 or 2302	3
ELCT		Humanities/Fine Arts Selection	3
RELE	1311	Real Estate Contracts	3
RELE	2301	Law of Agency	3
ACCT	2301	Principles of Financial Accounting	3

### Second Semester

ACCT	2302	Principles of Managerial Accounting	3
BUSG	2305	Business Law/Contracts	3
or			
BUSI	2301	Business Law	3
MRKG	2333	Principles of Selling	3
or			
BUSI	1311	Salesmanship	3
ELCT		Elective	3
RELE	1315	Property Management	3
RELE	2489	Internship-Real Estate	4
<b>Total Hours</b>			<b>72</b>

**Business Management**

**Business Management  
Real Estate Sales Agent (REAA)  
Certificate of Completion**

<b>First Semester</b>			<b>Credit</b>
RELE*	1406	Principles of Real Estate	4
RELE*	2301	Law of Agency	3
RELE*	1311	Law of Contracts	3
<b>Second Semester</b>			
ELCT*		RELE (except 2488/2489) or approved selection	3
RELE	2488	Internship - Real Estate	4
<b>Total Hours</b>			<b>17</b>

\* Upon successful completion of these courses, the student is eligible to sit for the Texas Real Estate Sales Agent License exam.

## Business Programmer Analyst (CSPA)

### Associate of Applied Science Degree

#### First Year

First Semester			Credit
ITNW	1437	Introduction to the Internet	4
ITSE	1402	Introduction to Computer Programming	4
ITSC	1409	Integrated Software Applications I	4
ENGL	1301	Composition I	3
MATH		MATH 1314 or higher level	3

#### Second Semester

ITSE	1418	Introduction to COBOL Programming	4
COSC	2425	Computer Organization & Machine Language	4
ITSC	1405	Introduction to PC Operating Systems	4
ITSC	1411	AS/400 Operating System I	4
PHED		Physical Education	1

#### Second Year

First Semester			
ITSY	2400	Operating Systems Security	4
ITSE	1422	Introduction to C Programming	4
ITSE	1414	Introduction to RPG Programming	4
IMED	2409	Internet Commerce	4
or			
ITSE	1491	Special Topics in Computer Programming	
ELCT		Social/Behavioral Science Selection	3
Second Semester			
ITSE	2451	Advanced COBOL Programming	4
ITSE	2431	Advanced C++ Programming	4
ITSE	1450	System Analysis and Design	4
SPCH	1315	Public Speaking	3
ELCT		Humanities/ Fine Arts Selection	3
<b>Total Hours</b>			<b>72</b>

Computer Science

# Information Technology (CSIT)

## Associate of Applied Science Degree

### First Year

#### First Semester

			<b>Credit</b>
ITSE	1431	Introduction to Visual Basic	4
ITSW	1401	Introduction to Word Processing	4
ITSW	1404	Introduction to Spreadsheets	4
ITSC	1409	Integrated Software Applications I	4
PHED		Physical Education	1

#### Second Semester

ITSC	1413	Internet/Web Page Development	4
ITSW	1407	Introduction to Database	4
ITSC	1405	Introduction to PC Operating Systems	4
ITNW	1437	Introduction to the Internet	4

### Second Year

#### First Semester

ITSC	2439	Personal Computer Help Desk	4
ITNW	1425	Fundamentals of Networking Technologies	4
IMED	2409	Internet Commerce	4
ENGL	1301	Composition I	3
ELCT		Humanities/Fine Arts Selection	3

#### Second Semester

ITSC	1492	Special Topics in Management Information Systems & Business and Data Processing General	4
ITSY	2400	Operating Systems Security	4
MATH		MATH 1314 or higher level	3
ELCT		Social/Behavioral Science Selection	3
SPCH	1315	Public Speaking	3
<b>Total Hours</b>			<b>68</b>

## Network Systems Administrator (CSNS)

### Associate of Applied Science Degree

#### First Year

First Semester			Credit
ITSC	1409	Integrated Software Applications I	4
ITSE	1431	Introduction to Visual Basic	4
ENGL	1301	Composition I	3
MATH		MATH 1314 or higher level	3
PHED		Physical Education	1

#### Second Semester

COSC	2425	Computer Organization and Machine Language	4
ITSC	1405	Introduction to PC Operating Systems	4
ELCT		Social/Behavioral Science Selection	3
ITNW	1437	Introduction to the Internet	4

#### Second Year

First Semester			
ITSC	2439	Personal Computer Help Desk	4
ITNW	2405	Network Administration	4
ITSY	2400	Operating Systems Security	4
ITNW	1425	Fundamentals of Networking Technologies	4
ELCT		Humanities/Fine Arts Selection	3

#### Second Semester

ITSE	1450	System Analysis and Design	4
ITNW	2435	Troubleshooting and Support	4
or			
ITSE	2413	Web Authoring	
IMED	2409	Internet Commerce	4
SPCH	1315	Public Speaking	3
<b>Total Hours</b>			<b>64</b>

## Computer Science

# Computer Science – Webmaster Specialization (CSWS)

## Associate of Applied Science Degree

### First Year

#### First Semester

ITSC	1409	Integrated Software Applications	4
ITSE	1431	Introduction to Visual Basic	4
ITNW	1437	Introduction to Internet	4
ENGL	1301	Composition I	3
PHED		Physical Education	1

#### Second Semester

ITSW	1407	Introduction to Database	4
ITSE	2417	Java Programming	4
ITSC	1413	Internet/Web Page Development	4
ITSC	1405	Introduction to PC Operating Systems	4

### Second Year

#### First Semester

ITSC	2439	Personal Computer Help Desk	4
ITSE	2402	Intermediate Web Programming	4
ITSE	2413	Web Authoring	4
ELCT		Humanities/Fine Arts Elective	3
ITSY	2400	Operating Systems Security	4

#### Second Semester

IMED	2409	Internet Commerce	4
INEW	2434	Advanced Web Page Programming	4
MATH		MATH 1314 or higher level	3
ELCT		Social/Behavioral Science Selection	3
SPCH	1315	Public Speaking	3
<b>Total Hours</b>			<b>68</b>

## Network Specialist (NSCC) Certificate of Completion

### First Year

First Semester			Credit
ITSC	1409	Integrated Software Applications I	4
ITSE	1431	Introduction to Visual Basic	4
ITNW	1437	Introduction to the Internet	4
ELCT		ITSC/ITSE/ITSW/ITNW Technical Elective	4

### Second Semester

COSC	2425	Computer Organization and Machine Language	4
ITSC	1413	Internet/Web Page Development	4
ITNW	1425	Fundamentals of Networking Technologies	4
ITSY	2400	Operating Systems Security	4
<b>Total Hours</b>			<b>32</b>

## Information Center Specialist (ICSP) Certificate of Completion

First Semester			Credit
ITSE	1431	Introduction to Visual Basic	4
ITSW	1401	Introduction to Word Processing	4
ITSW	1404	Introduction to Spreadsheets	4
ITSC	1409	Integrated Software Applications I	4

### Second Semester

ITSW	1407	Introduction to Database	4
ITSC	1413	Internet/Web Page Development	4
ITSC	1405	Introduction to PC Operating Systems	4
ITSC	2439	Personal Computer Help Desk	4
<b>Total Hours</b>			<b>32</b>

## Criminal Justice

# Criminal Justice (CRIJ)

## Associate of Applied Science Degree

### First Year

#### First Semester

		<b>Credit</b>
CJSA1322/CRIJ 1301	Introduction to Criminal Justice	3
CJSA 2300/CRIJ 2323	Legal Aspects of Law Enforcement	3
CJSA 1313/CRIJ 1306	Court Systems and Practices	3
CJSA 1312/CRIJ 1307	Crime in America	3
ENGL 1301	Composition I	3
PHED 1130	Physical Conditioning	1

#### Second Semester

CJSA 1327/CRIJ 1310	Fundamentals of Criminal Law	3
CJSA 1317/CRIJ 1313	Juvenile Justice System	3
CJSA 1348	Ethics in Criminal Justice	3
ENGL 1302 or 2311	ENGL 1302 or 2311	3
MATH 1314 or higher level	MATH 1314 or higher level	3
PHED	Physical Education	1

### Second Year

#### First Semester

CJSA 1359/CRIJ 2328	Police Systems and Practices	3
CJSA 1342/CRIJ 2314	Criminal Investigation	3
CJSA 1351	Use of Force	3
ELCT	Criminal Justice Elective	3
SOCI 1301	Introduction to Sociology	3
GOVT 2301/2302	American Government I/II	3

#### Second Semester

CJSA 2331	Child Abuse, Prevention and Investigation	3
CJLE 1211	Basic Firearms	2
ELCT	Criminal Justice Elective	3
SPCH 1321	Business and Professional Speaking	3
ELCT	Humanities/Fine Arts Selection	3
ELCT	Computer Technology/Skills Selection	3
<b>Total Hours</b>		<b>67</b>



## Criminal Justice - Corrections Specialization (CRJC)

### Associate of Applied Science Degree

#### First Year

First Semester			Credit
CJSA 1322/CRIJ 1301	Introduction to Criminal Justice		3
CJCR 2325	Legal Aspects of Corrections		3
CJSA 1313/CRIJ 1306	Court Systems and Practices		3
CJSA 1312/CRIJ 1307	Crime in America		3
ENGL 1301	Composition I		3
PHED 1130	Physical Conditioning		1

#### Second Semester

CJSA 1327/CRIJ 1310	Fundamentals of Criminal Law		3
CJCR 1304	Probation and Parole		3
CJSA 1348	Ethics in Criminal Justice		3
ENGL	ENGL 1302 or 2311		3
MATH	MATH 1314 or higher level		3
PHED	Physical Education		1

#### Second Year

##### First Semester

CJCR 1307/CRIJ 2313	Correctional Systems and Practices		3
CJCR 2324/CRIJ 2301	Community Resources in Corrections		3
CJSA 1351	Use of Force		3
ELCT	Criminal Justice Elective		3
SOCI 1301	Introduction to Sociology		3
GOVT 2301/2302	American Government I/II		3

##### Second Semester

CJLE 1358	Rights of Prisoners		3
CJLE 1211	Basic Firearms		2
ELCT	Criminal Justice Elective		3
SPCH 1321	Business and Professional Speaking		3
ELCT	Humanities/Fine Arts Selection		3
ELCT	Computer Technology/Skills Selection		3
<b>Total Hours</b>			<b>67</b>

## Criminal Justice

# Criminal Justice Studies with Specialization

## Certificate of Completion

### First Year

<b>First Semester (Core Courses)</b>		<b>Credit</b>
CJSA 1312/CRIJ 1307	Crime in America	3
CJSA 1313/CRIJ 1306	Court Systems and Practices	3
CJSA 1348	Ethics in Criminal Justice	3
CJSA 1322/CRIJ 1301	Introduction to Criminal Justice	3
CJSA 1359/CRIJ 2328	Police Systems and Practices	3
<b>Core Courses Total</b>		<b>15</b>

<b>Second Semester (Criminal Justice Studies Specialization) (CJSS)</b>		<b>Credit</b>
CJSA 1342/CRIJ 2314	Criminal Investigation	3
CJSA 1327/CRIJ 1310	Fundamentals of Criminal Law	3
CJSA 1317/CRIJ 1313	Juvenile Justice System	3
CJSA 2300/CRIJ 2323	Legal Aspects of Law Enforcement	3
ELCT	Criminal Justice Elective	3
<b>Specialization Courses Total</b>		<b>15</b>
<b>Certificate Total</b>		<b>30</b>

<b>Second Semester (Criminal Justice Corrections Specialization)(CJCS)</b>		
CJCR 2325	Legal Aspects of Corrections	3
CJCR 1304	Probation and Parole	3
CJCR 1307/CRIJ 2313	Correctional Systems and Practices	3
CJCR 2324/CRIJ 2301	Community Resources in Corrections	3
ELCT	Criminal Justice Elective	3
<b>Specialization Courses Total</b>		<b>15</b>
<b>Certificate Total</b>		<b>30</b>

# Criminal Justice - Law Enforcement Technology Specialization (LETS)

## Associate of Applied Science Degree

### First Year

First Semester		Credit
CJSA1322/CRIJ 1301	Introduction to Criminal Justice	3
CJSA1312/CRIJ 1307	Crime in America	3
CJSA1317/CRIJ 1313	Juvenile Justice System	3
CJLE 1506	Basic Peace Officer I	5
ENGL 1301	Composition I	3
PHED 1130	Physical Conditioning	1

### Second Semester

CJSA 1348	Ethics in Criminal Justice	3
CJLE 1512	Basic Peace Officer II	5
ENGL	ENGL 1302 or 2311	3
MATH	MATH 1314 or higher level	3
PHED	Physical Education	1

### Second Year

First Semester		Credit
CJSA1359/CRIJ 2328	Police Systems & Practices	3
CJLE 1518	Basic Peace Officer III	5
ELCT	Criminal Justice Elective	3
SOCI 1301	Introduction to Sociology	3
GOVT 2301/2302	American Government I/II	3

### Second Semester

CJSA 2331	Child Abuse, Prevention & Investigation	3
CJLE 1524	Basic Peace Officer IV	5
SPCH 1321	Business and Professional Speaking	3
ELCT	Humanities/Fine Arts Selection	3
ELCT	Computer Technology/Skills Selection	3
<b>Total Hours</b>		<b>67</b>

Diesel

## Diesel Engine Mechanic and Repairer (DEMR)

### Associate of Applied Science Degree

<b>First Semester</b>			<b>Credit</b>
DEMR	1401	Shop Safety and Procedures	4
DEMR	1406	Diesel Engines I	4
AUMT	1445	Automotive Heating and Air Conditioning	4
ENGL	1312	Business Writing	3
ELCT		Computer Technology/Skill Selection	3
<b>Second Semester</b>			
DEMR	1421	Power Trains I	4
DEMR	1405	Basic Electrical Systems	4
DEMR	1417	Basic Brake Systems	4
MATH		MATH 1314 or higher level	3
SPCH	1321	Business and Professional Speaking	3
<b>Third Semester</b>			
DEMR	1416	Basic Hydraulics	4
DEMR	1471	Basic Diesel Engine Tune-Up and Troubleshooting	4
DEMR	1411	Diesel Engine Testing and Repair II	4
ELCT		Humanities/Fine Arts Selection	3
ELCT		Elective	3
<b>Fourth Semester</b>			
GOVT	2301/2302	American Government I/II	3
DEMR	1447	Power Trains II	4
DEMR	1330	Steering and Suspension II	3
DEMR	2434	Advanced Diesel Tune-Up and Troubleshooting	4
DEMR	1449	Diesel Engine II	4
OR			
DEMR	2488	Internship - Diesel Mechanics Technology/Technician	
<b>Total Hours</b>			<b>72</b>

## Diesel Technician (DETE)

### Certificate of Completion

			<b>Credit</b>
DEMR	1401	Shop Safety and Procedures	4
DEMR	1406	Diesel Engines I	4
DEMR	1405	Basic Electrical Systems	4
DEMR	1471	Basic Diesel Engine Tune-Up & Troubleshooting	4
DEMR	2434	Advanced Diesel Tune-Up & Troubleshooting	4
DEMR	1411	Diesel Engine Testing and Repair II	4
DEMR	1416	Basic Hydraulics	4
DEMR	1421	Power Trains I	4
DEMR	1447	Power Trains II	4
DEMR	1417	Basic Brake Systems	4
DEMR	1330	Steering and Suspension I	3
AUMT	1445	Automotive Heating & Air Conditioning	4
DEMR	1449	Diesel Engines II	4
WLDG	2413	Intermediate Welding Using Multiple Processes	4
OR			
DEMR	2488	Internship - Diesel Mechanics Technology/Technician	
<b>Total Hours</b>			<b>55</b>

## Diesel System Specialist (DESS) Certificate of Completion

			Credit
DEMR	1401	Shop Safety and Procedures	4
DEMR	1405	Basic Electrical Systems	4
DEMR	1416	Basic Hydraulics	4
DEMR	1421	Power Trains I	4
DEMR	1447	Power Trains II	4
DEMR	1417	Basic Brake Systems	4
DEMR	1330	Steering and Suspension I	3
AUMT	1445	Automotive Heating and Air Conditioning	4
WLDG	2413	Intermediate Welding Using Multiple Processes	4
OR			
DEMR	2488	Internship - Diesel Mechanics Technology/Technician	35
<b>Total Hours</b>			<b>35</b>

## Diesel Engine Specialist (DEES) Certificate of Completion

			Credit
DEMR	1401	Shop Safety and Procedures	4
DEMR	1406	Diesel Engines I	4
DEMR	1405	Basic Electrical Systems	4
DEMR	1471	Basic Diesel Engine Tune-Up and Troubleshooting	4
DEMR	2434	Advanced Diesel Tune-Up and Troubleshooting	4
DEMR	1411	Diesel Engine Testing and Repair II	4
DEMR	1449	Diesel Engines II	4
WLDG	2413	Intermediate Welding Using Multiple Processes	4
or			
DEMR	2488	Internship - Diesel Mechanics Technology/Technician	32
<b>Total Hours</b>			<b>32</b>

## Drafting and Design

### Computer-Aided Drafting and Design (DFTG)

#### Associate of Applied Science Degree

##### First Year

First Semester			Credit
ENGR	1304	Engineering Graphics I	3
DFTG	2412	Technical Illustration	4
DFTG	2410	Structural Drafting	4
MATH	1314	College Algebra	3

##### Second Semester

ENGR	1305	Engineering Graphics II	3
DFTG	2402	Machine Drafting	4
DFTG	1409	Basic Computer-Aided Drafting	4
ENGL	1312	Business Writing	3
ELCT		General Academic Elective	3

##### Second Year

First Semester			Credit
DFTG	1417	Architectural Drafting-Residential	4
DFTG	1458	Electrical/Electronics Drafting	4
DFTG	2440	Solid Modeling/Design	4
ELCT		Approved Elective	3
ELCT		Humanities/Fine Arts Selection	3

##### Second Semester

DFTG	2423	Pipe Drafting	4
DFTG	2421	Topographical Drafting	4
DFTG	2438	Final Project - General Drafting	4
ELCT		Social/Behavioral Science Selection	3
<b>Total Hours</b>			<b>64</b>

### Computer-Aided Drafting and Design (DDCC)

#### Certificate of Completion

First Semester			Credit
ENGR	1304	Engineering Graphics I	3
ENGR	1305	Engineering Graphics II	3
DFTG	1409	Basic Computer-Aided Drafting	4
DFTG	2402	Machine Drafting	4
DFTG	2410	Structural Drafting	4
DFTG	2412	Technical Illustration	4
TECM	1303	Technical Math	3
<b>Total Hours</b>			<b>25</b>

## Early Childhood Professions (CDEC)

### Associate of Applied Science Degree

The courses for this degree may be taken in any sequence. The Early Childhood Profession courses, CDEC, have no required prerequisites.

#### First Year

First Semester		Credit
CDEC/TECA 1311	Introduction to Early Childhood Education	3
CDEC 1313	Curriculum Resources for Early Childhood Programs	3
CDEC 1319	Child Guidance	3
ENGL	ENGL 1301 or 1312	3
CDEC* 1359	Children with Special Needs	3
PHED	Physical Education	1

#### Second Semester

CDEC 1358	Creative Arts for Early Childhood	3
CDEC/TECA 1354	Child Growth and Development	3
CDEC/TECA 1318	Nutrition, Safety and Health	3
CDEC/TECA 1303	Family and the Community	3
CDEC 1356	Emergent Literacy for Early Childhood	3

#### Second Year

First Semester		
CDEC 1321	The Infant and Toddler	3
CDEC 2326	Administration of Programs for Children I	3
or		
CDEC 2328	Administration of Programs for Children II	3
ELCT	Computer Technology/Skills Selection	4
SPCH	SPCH 1315, 1321 or 2341	3
MATH	MATH 1314 or higher level	3
or		
ENVR 1401	Environmental Science	4
CDEC 1335	Early Childhood Development: 3-5 Years	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
<b>Total Hours</b>		<b>66-67</b>

\* CDEC 1371 and 1340 may substitute

## Early Childhood Professions

### Early Childhood Professions (ECTC) Certificate of Completion

			<b>Credit</b>
CDEC/TECA	1311	Introduction to Early Childhood Education	3
CDEC	1313	Curriculum Resources for Early Childhood Programs	3
CDEC	1319	Child Guidance	3
CDEC	1359	Children with Special Needs	3
CDEC	1358	Creative Arts for Early Childhood	3
CDEC/TECA	1354	Child Growth and Development	3
CDEC/TECA	1318	Nutrition, Safety and Health	3
CDEC/TECA	1303	Family and the Community	3
CDEC	1356	Emergent Literacy for Early Childhood	3
CDEC	1321	The Infant and Toddler	3
CDEC	1335	Early Childhood Development: 3-5 Years	3
<b>Total Hours</b>			<b>33</b>

### Administrator's Credentials (CDAD) Certificate of Completion

<b>First Semester</b>			<b>Credit</b>
CDEC/TECA	1311	Introduction to Early Childhood Education	3
or			
CDEC	2341	The School Age Child	3
CDEC	1313	Curriculum Resources for Early Childhood Programs	3
or			
CDEC	1357	Math and Science for Early Childhood	3
CDEC	1319	Child Guidance	3
CDEC	2326	Administration of Programs for Children I	3
ENGL		ENGL 1301 or 1312	3
<b>Second Semester</b>			
CDEC/TECA	1354	Child Growth and Development	3
CDEC/TECA	1318	Nutrition, Safety and Health	3
CDEC	2328	Administration of Programs for Children II	3
CDEC	2384	Cooperative Education in Child Development	3
ELCT		Computer Technology/Skills Selection	3
<b>Total Hours</b>			<b>30</b>



## Special Child Option (CDSC) Certificate of Completion

<b>First Semester</b>			<b>Credit</b>
CDEC/TECA	1311	Introduction to Early Childhood Education	3
CDEC	1359	Children with Special Needs	3
CDEC/TECA	1303	Family and the Community	3
CDEC	1371	Physical Development and Disorder in Children	3
ENGL		ENGL 1301 or 1312	3
<b>Second Semester</b>			
CDEC	1313	Curriculum Resources in Early Childhood Programs	3
CDEC	1340	Instructional Techniques for Children with Special Needs	3
CDEC/TECA	1354	Child Growth and Development	3
CDEC/TECA	1318	Nutrition, Safety and Health	3
<b>Total Hours</b>			<b>27</b>

## Electronics

# Communications Electronics Technology (CMET)

## Associate of Applied Science Degree

### First Year

#### First Semester

			Credit
CETT	1421	Electronics Fabrications	4
CETT	1425	Digital Fundamentals	4
CETT	1403	DC Circuits	4
CPMT	1403	Introduction to Computer Technology	4

#### Second Semester

MATH	1314	College Algebra	3
CETT	1405	AC Circuits	4
CETT	1429	Solid State Devices	4
ENGL	1312	Business Writing	3
ELCT		Social/Behavioral Science Selection	3

### Second Year

#### First Semester

CETT	2445	Color Television Repair	4
EECT	1474	Basic Communication Circuits	4
CETT	1449	Digital Systems	4
CETT	1441	Solid State Circuits	4
ELCT		Approved Technical Elective	4

#### Second Semester

EECT	2439	Communication Circuits	4
ELMT	2437	Electronic Troubleshooting: Service and Repair	4
ELCT		Humanities/Fine Arts	3
EECT	1476	Digital Communications	4
ELCT		Academic Elective from Humanities/Fine Arts, Social/Behavioral Science, Natural Science/Mathematics	3

**Total Hours** **71**

## Computer Electronics (CELT)

### Associate of Applied Science Degree

#### First Year

##### First Semester

			<b>Credit</b>
CETT	1421	Electronics Fabrication	4
CETT	1425	Digital Fundamentals	4
CETT	1403	DC Circuits	4
CPMT	1403	Introduction to Computer Technology	4

##### Second Semester

MATH	1314	College Algebra	3
CETT	1405	AC Circuits	4
CETT	1429	Solid State Devices	4
ENGL	1312	Business Writing	3
ELCT		Social/Behavioral Science Selection	3

#### Second Year

##### First Semester

CETT	2445	Color Television Repair	4
CPMT	1445	Computer Systems Maintenance	4
CPMT	1449	Computer Networking Technology	4
CETT	1449	Digital Systems	4
CETT	1441	Solid State Circuits	4

##### Second Semester

CPMT	2445	Computer System Troubleshooting	4
ELMT	2437	Electronic Troubleshooting, Service and Repair	4
ELCT		Humanities/Fine Arts Selection	3
ELCT		Approved Technical Elective	4
ELCT		Academic Elective from Humanities/Fine Arts, Social/Behavioral Science, Natural Science/Mathematics	3

**Total Hours** **71**

Electronics

## Computer Electronics Technology (COEC) Certificate of Completion

First Semester			Credit
CPMT	1403	Introduction to Computer Technology	4
CETT	1425	Digital Fundamentals	4
CETT	1403	DC Circuits	4
ENGL	1312	Business Writing	3
Second Semester			
CETT	1405	AC Circuits	4
CETT	1429	Solid State Devices	4
CPMT	1445	Computer Systems Maintenance	
ELCT		Approved Elective	3
<b>Total Hours</b>			<b>30</b>

## Emergency Medical Technology (EMPT)

### Associate of Applied Science Degree

#### First Year

First Semester			Credit
EMSP	1401	Emergency Medical Technician - Basic	4
EMSP	1160	Clinical-EMT	1
BIOL	2401	Anatomy and Physiology I	4
PSYC	2314	Life Span Growth and Development	3
PHED		Physical Education	1

#### Second Semester

EMSP	1441	EMT-Intermediate	4
EMSP	1355	Trauma Management	3
EMSP	1166	Practicum-EMT	1
BIOL	2402	Anatomy and Physiology II	4
ELCT		Elective	3

#### Third Semester

EMSP	2444	Cardiology	4
ENGL	1301	Composition I	3
PSYC	2301	General Psychology	3

#### Second Year

First Semester			Credit
EMSP	2434	Medical Emergencies	4
SPCH		SPCH 1315 or 1318	3
PHED		Physical Education	1
ELCT		Humanities/Fine Arts Selection	3
EMSP	1167	Practicum-EMT	1

#### Second Semester

EMSP	2330	Special Populations	3
BIOL	2421	Microbiology	4
ITSC	1409	Integrated Software Applications I	4

#### Third Semester

EMSP	2143	Assessment Based Management	1
EMSP	1268	Practicum-EMT	2
EMSP	2338	EMS Operations	3
<b>Total Hours</b>			<b>67</b>

## Fire Protection

# Fire Protection (FIRT)

## Associate of Applied Science Degree

(Offered at locations outside of Texas under Military Contract Obligation)

### First Year

#### First Semester

			<b>Credit</b>
FIRT	1301	Fundamentals of Fire Protection	3
FIRT	1309	Fire Administration I	3
FIRT	1333	Fire Chemistry I	3
FIRT	1338	Fire Protection Systems	3
ENGL	1301	Composition I	3
PHED	1130	Physical Conditioning	1

#### Second Semester

FIRT	1307	Fire Prevention Codes and Inspection	3
FIRT	1319	Firefighter Health & Safety	3
FIRT	1331	Firefighting Strategies and Tactics I	3
ENGL		ENGL 1302 or 2311	3
MATH		MATH 1314 or higher level	3
PHED		Physical Education	1

### Second Year

#### First Semester

FIRT	1315	Hazardous Materials I	3
FIRT	1329	Building Codes & Construction	3
FIRT	1303	Fire and Arson Investigation I	3
FIRT		Technical Elective	3
SOCI	1301	Introduction to Sociology	3
GOVT	2301/2302	American Government I/II	3

#### Second Semester

FIRT	1347	Industrial Fire Protection	3
FIRT	2331	Firefighting Strategies & Tactics II	3
FIRT	1349	Fire Administration II	3
SPCH	1321	Business and Professional Speaking	3
ELCT		Humanities/Fine Arts Selection	3
ELCT		Computer Technology/Skills Selection	3
<b>Total Hours</b>			<b>68</b>

# Fire Protection (FIRC)

## Certificate of Completion

(Offered at locations outside of Texas under Military Contract Obligation)

<b>First Semester</b>			<b>Credit</b>
FIRT	1301	Fundamentals of Fire Protection	3
FIRT	1331	Firefighting Strategies and Tactics I	3
FIRT	1338	Fire Protection Systems	3
FIRT	1309	Fire Administration I	3
FIRT	1315	Hazardous Materials I	3
<b>Second Semester</b>			
FIRT	1307	Fire Prevention Codes and Inspections	3
FIRT	1303	Fire and Arson Investigation I	3
FIRT	2331	Firefighting Strategies & Tactics II	
FIRT	1333	Fire Chemistry I	3
FIRT		Technical Elective	3
<b>Total Hours</b>			<b>30</b>

## General Studies

# General Studies

## Associate of General Studies Degree

This is a suggested curriculum.

Students must have a minimum of 16 semester credit hours within the Central Texas College System.

### First Year

First Semester			Credit
ENGL*	1301	Composition I	3
or			
ENGL*	1312	Business Writing	
HIST	1301	United States History I	3
PHED		Physical Education	1
ELCT		Electives	9

### Second Semester

SPCH*		Speech Selection	3
or			
ELCT**		Elective	
HIST	1302	United States History II	3
MATH		MATH 1314 or higher level	3
ELCT		Electives	4
ELCT		Computer Technology/Skills Selection	3

### Second Year

First Semester			
GOVT	2301	American Government I	3
ELCT**		Electives	12
PHED		Physical Education	1
Second Semester			
GOVT	2302	American Government II	3
ELCT		Humanities/Fine Arts Selection	3
ELCT**		Electives	10
<b>Total Hours</b>			<b>64</b>

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 of 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.



# Heating, Air Conditioning and Refrigeration Mechanic and Repairer (HART)

## Associate of Applied Science Degree

### First Year

First Semester			Credit
HART	1407	Refrigeration Principles	4
HART	1401	Basic Electricity for HVAC	4
HART	1445	Gas and Electric Heating	4
MATH		MATH 1314 or higher level	3
PHED		Physical Education	1

### Second Semester

HART	1403	A/C Control Principles	4
HART	1441	Residential Air Conditioning	4
ELCT		Computer Technology/Skills Selection	4
ENGL	1312	Business Writing	3
GOVT	2301/2302	American Government I/II	3

### Second Year

First Semester			
HART	2449	Heat Pumps	4
HART	2431	Advanced Electricity	4
HART	2441	Commercial Air Conditioning	4
HART	2442	Commercial Refrigeration	4
ELCT		Humanities/Fine Arts Selection	3

### Second Semester

HART	2436	Air Conditioning Troubleshooting	4
HART	2471	Advanced Heat Pumps	4
SPCH	1321	Business and Professional Speaking	3
HART	2445	Residential Air Conditioning System Design	4
or			
HART	2488	Internship-Heating, A/C Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR)	

**Total Hours** **68**

## Heating and Air Conditioning

### Heating, Air Conditioning and Refrigeration (HARC) Certificate of Completion

#### First Year

First Semester			Credit
HART	1407	Refrigeration Principles	4
HART	1401	Basic Electricity for HVAC	4
HART	1445	Gas and Electric Heating	4
Second Semester			
HART	1403	A/C Control Principles	4
HART	1441	Residential Air Conditioning	4
HART	2431	Advanced Electricity	4

#### Second Year

First Semester			
HART	2449	Heat Pumps	4
HART	2441	Commercial Air Conditioning	4
HART	2442	Commercial Refrigeration	4
Second Semester			
HART	2436	Air Conditioning Troubleshooting	4
HART	2471	Advanced Heat Pumps	4
HART	2445	Residential Air Conditioning System Design	4
or			
HART	2488	Internship-Heating, A/C Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR)	

**Total Hours** **48**

### Commercial Heating, Air Conditioning and Refrigeration (CHAR) Certificate of Completion

First Semester			Credit
HART	1407	Refrigeration Principles	4
HART	1401	Basic Electricity for HVAC	4
HART	1445	Gas and Electric Heating	4
HART	1441	Residential Air Conditioning	4
HART	1403	A/C Control Principles	4
Second Semester			
HART	2441	Commercial A/C	4
HART	2431	Advanced Electricity	4
HART	2442	Commercial Refrigeration	4
HART	2436	Air Conditioning Troubleshooting	4
HART	2445	Residential Air Conditioning System Design	4
or			
HART	2488	Internship-Heating, A/C Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR)	

**Total Hours** **40**

# Residential Heating, Air Conditioning and Refrigeration (RHAR) Certificate of Completion

<b>First Semester</b>			<b>Credit</b>
HART	1407	Refrigeration Principles	4
HART	1401	Basic Electricity for HVAC	4
HART	1445	Gas and Electric Heating	4
HART	1441	Residential Air Conditioning	4
HART	1403	A/C Control Principles	4
<b>Second Semester</b>			
HART	2449	Heat Pumps	4
HART	2471	Advanced Heat Pumps	4
HART	2431	Advanced Electricity	4
HART	2436	Air Conditioning Troubleshooting	4
HART	2445	Residential Air Conditioning System Design	4
or			
HART	2488	Internship-Heating, A/C Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR)	
<b>Total Hours</b>			<b>40</b>

Hospitality Management

**Restaurant and Culinary Management (HMRI)**  
**Associate of Applied Science Degree**

<b>First Semester</b>			<b>Credit</b>
CHEF	1305	Sanitation and Safety	3
HAMG	1308	Introduction to the Hospitality Industry	3
CHEF	1301	Basic Food Preparation	3
ELCT		Humanities/Fine Arts	3
HAMG	2307	Hospitality Marketing and Sales	3
RSTO	1221	Menu Management	2
PHED		Physical Education	1
<b>Second Semester</b>			
GOVT	2301	American Government I	3
HAMG	1319	Computers in Hospitality	3
SPCH	1315	Public Speaking	3
ELCT		Selected Technical Elective	3
ELCT		Selected Technical Elective	3
HAMG	2301	Principles of Food and Beverage Operations	3
<b>Second Year</b>			
<b>First Semester</b>			
HAMG	2332	Hospitality Financial Management	3
IFWA	1318	Nutrition for the Food Service Professional	3
ENGL	1301	Composition I	3
PSTR	1301	Fundamentals of Baking	3
ELCT		Technical Elective	3
ELCT		Selected Technical Elective	3
<b>Second Semester</b>			
RSTO	1325	Purchasing for Hospitality Operations	3
MATH	1342	Elementary Statistical Methods	3
HAMG	1340	Hospitality Legal Issues	3
RSTO	1313	Hospitality Supervision	3
ELCT		Academic Elective	3
HAMG	2388	Internship - Hospitality Administration and Management	3
<b>Total Hours</b>			<b>72</b>

Programs of Study

## Hotel Management Specialization (HMLT) Associate of Applied Science Degree

### First Year

First Semester			Credit
CHEF	1305	Sanitation and Safety	3
HAMG	1308	Introduction to the Hospitality Industry	3
CHEF	1301	Basic Food Preparation	3
HAMG	1319	Computers in Hospitality	3
ELCT		Humanities/Fine Arts	3
ELCT		Academic Elective	3

### Second Semester

GOVT	2301	American Government I	3
SPCH	1315	Public Speaking	3
HAMG	2332	Hospitality Financial Management	3
RSTO	1313	Hospitality Supervision	3
HAMG	1313	Front Office Procedures	3
HAMG	2301	Principles of Food and Beverage Operations	3

### Second Year

First Semester			Credit
RSTO	1325	Purchasing for Hospitality Operations	3
RSTO	1204	Dining Room Service	2
HAMG	1342	Guest Room Maintenance	3
MATH	1342	Elementary Statistical Methods	3
HAMG	1340	Hospitality Legal Issues	3
ELCT		Technical Elective	3
PHED		Physical Education	1

### Second Semester

HAMG	2337	Hospitality Facilities Management	3
ENGL	1301	Composition I	3
ELCT		Technical Elective	3
HAMG	2307	Hospitality Marketing and Sales	3
ELCT		Technical Elective	3
HAMG	2388	Internship - Hospitality Administration and Management	3
<b>Total Hours</b>			<b>72</b>

## Hospitality Management

### Culinary Arts (CULA) Certificate of Completion

First Semester			Credit
CHEF	1305	Sanitation and Safety	3
RSTO	1313	Hospitality Supervision	3
HAMG	1308	Introduction to the Hospitality Industry	3
CHEF	1301	Basic Food Preparation	3
HAMG	1319	Computers in Hospitality	3
Second Semester			
HAMG	1340	Hospitality Legal Issues	3
HAMG	2301	Principles of Food and Beverage Operations	3
CHEF	1410	Garde Manger	4
Third Semester			
IFWA	1318	Nutrition for the Food Service Professional	3
HAMG	2388	Internship - Hospitality Administration and Management	3
RSTO	1325	Purchasing for Hospitality Operations	3
PSTR	1301	Fundamentals of Baking	3
ELCT		Selected Technical Elective	3
<b>Total Hours</b>			<b>40</b>

### Restaurant Skills (HMRS) Certificate of Completion

First Semester			Credit
CHEF	1305	Sanitation and Safety	3
HAMG	1319	Computers in Hospitality	3
CHEF	1301	Basic Food Preparation	3
HAMG	2301	Principles of Food and Beverage Operations	3
RSTO	1221	Menu Management	2
CHEF	1410	Garde Manger	4
PSTR	1301	Fundamentals of Baking	3
ELCT		Selected Technical Elective	3
<b>Total Hours</b>			<b>24</b>

## Rooms Division (HMRD) Certificate of Completion

<b>First Semester</b>			<b>Credit</b>
HAMG	1313	Front Office Procedures	3
HAMG	1308	Introduction to the Hospitality Industry	3
HAMG	1342	Guest Room Maintenance	3
HAMG	1340	Hospitality Legal Issues	3
<b>Second Semester</b>			
RSTO	1313	Hospitality Supervision	3
HAMG	1319	Computers in Hospitality	3
HAMG	2332	Hospitality Financial Management	3
HAMG	2388	Internship - Hospitality Administration and Management	3
<b>Total Hours</b>			<b>24</b>

## Food and Beverage Management (HMFB) Certificate of Completion

<b>First Semester</b>			<b>Credit</b>
CHEF	1305	Sanitation and Safety	3
HAMG	1319	Computers in Hospitality	3
RSTO	2301	Principles of Food and Beverage Controls	3
RSTO	1301	Beverage Management	3
<b>Second Semester</b>			
RSTO	1204	Dining Room Service	2
RSTO	1313	Hospitality Supervision	3
HAMG	2301	Principles of Food & Beverage Operations	3
HAMG	2388	Internship - Hospitality Administration and Management	3
<b>Total Hours</b>			<b>23</b>

## Hospitality Management

# Food & Beverage Management Specialization (FBMA)

## Associate of Applied Science Degree

### First Year

First Semester			Credit
CHEF	1305	Sanitation and Safety	3
HAMG	1308	Introduction to the Hospitality Industry	3
HAMG	1319	Computers in Hospitality	3
ELCT		Humanities/Fine Arts Selection	3
HAMG	2307	Hospitality Marketing and Sales	3
ELCT		Technical Elective	3

### Second Semester

GOVT	2301	American Government I	3
HAMG	1324	Hospitality Human Resource Management	3
SPCH	1315	Public Speaking	3
RSTO	1204	Dining Room Service	2
ELCT		Technical Elective	3
HAMG	2301	Principles of Food and Beverage Operations	3

### Second Year

First Semester			Credit
HAMG	2332	Hospitality Financial Management	3
TRVM	2301	Convention Management and Service	3
ENGL	1301	Composition I	3
RSTO	2301	Principles of Food and Beverage Controls	3
RSTO	1301	Beverage Management	3
HAMG	2337	Hospitality Facilities Management	3

### Second Year

RSTO	1325	Purchasing for Hospitality Operations	3
MATH	1342	Elementary Statistical Methods	3
HAMG	1340	Hospitality Legal Issues	3
RSTO	1313	Hospitality Supervision	3
ELCT		Academic Elective	3
HAMG	2388	Internship-Hospitality Administration and Management	3
<b>Total Hours</b>			<b>71</b>



## Paralegal/Legal Assistant (PLLA)

### Associate of Applied Science Degree

The Paralegal/Legal Assistant Program offered at the Central Campus located at 6200 W. Central Texas Expressway, Killeen, Texas is an officially approved program by the American Bar Association.

A paralegal (also known as legal assistant) is a professional who, by training and experience, is qualified to perform legal functions under the direction and supervision of an attorney, court, or military command.

#### First Year

First Semester			Credit
LGLA	1303	Legal Research	3
LGLA	1307	Introduction to Law and the Legal Profession	3
ENGL	1301	Composition I	3
ELCT		Humanities/Fine Arts Selection*	3
POFT	1329	Keyboarding and Document Formatting**	3
ITSW	1401	Introduction to Word Processing	4

#### Second Semester

LGLA	1317	Law Office Technology	3
LGLA	1345	Civil Litigation	3
LGLA	1351	Contracts	3
LGLA	1355	Family Law	3
SPCH	1321	Business and Professional Speaking	3
MATH		MATH 1324 or 1342	3

#### Second Year

First Semester			Credit
LGLA	1353	Wills, Trusts, and Probate Administration	3
PHIL	2303	Introduction to Logic	3
LGLA	2303	Torts and Personal Injury Law	3
ELCT		ACCT2301 or ACNT 1325	3
GOVT	2301	American Government I	3
PHED		Physical Education	1

#### Second Semester

LGLA	2313	Criminal Law and Procedures	3
GOVT	2302	American Government II	3
LGLA	2331	Advanced Legal Research and Writing	3
LGLA		Legal Elective	3
LGLA		Legal Elective	3
LGLA	2433	Advanced Legal Document Preparation	
OR			
LGLA	2488	Internship - Paralegal/Legal Assistant	
OR			
LGLA	2480	Cooperative Education - Paralegal/Legal Assistant	4
<b>Total Hours</b>			<b>72</b>

\* Humanities/Fine Arts shall include only ARTS 1303, 1304, DRAM 1310, HUMA 1315, SPCH 2341, MUSI 1306.

\*\* Unless demonstrated typing proficiency of 45 words per minute.

Maintenance Technology

# Maintenance Technology (MTNT)

## Associate of Applied Science Degree

### First Year

#### First Semester

			<b>Credit</b>
CRPT	1429	Introduction to Carpentry	4
HART	1407	Refrigeration Principles	4
CRPT	1423	Floor Systems	4
MATH		MATH 1314 or higher level	3
PHED		Physical Education	1

#### Second Semester

ELPT	1411	Basic Electrical Theory	4
ELPT	1429	Residential Wiring	4
ENGL	1312	Business Writing	3
CRPT	1411	Conventional Roof Systems	4
ELEC		Humanities/Fine Arts Selection	3

### Second Year

#### First Semester

CRPT	1415	Conventional Wall Systems	4
PFPB	2409	Residential Construction Plumbing I	4
HART	1445	Gas and Electric Heating	4
ELEC		Computer Technology/Skills Selection	4
GOVT	2301/2302	American Government I/II	3

#### Second Semester

CBFM	1334	Interior & Exterior Painting and Refinishing	3
PFPB	2445	Residential Construction Plumbing II	4
MBST	1507	Masonry I	5
SPCH	1321	Business and Professional Speaking	3
HART	1401	Basic Electricity for HVAC	4
or			
CBFM	2487	Internship–Building/Property Maintenance and Manager	4

**Total Hours** **72**

## At Risk Youth Specialization (MHR Y)

### Associate of Applied Science Degree

#### First Year

First Semester			Credit
DAAC	1319	Introduction to Alcohol and Other Drug Addictions	3
CMSW	1309	Problems of Children and Adolescents	3
PSYT	1329	Interviewing and Communication Skills	3
DAAC	1304	Pharmacology of Addiction	3
CMSW	1319	Adolescent Development	3
CHLT	1309	Community Ethics	3
Second Semester			
PSYT	1321	Crisis Intervention	3
CMSW	1313	Assessment and Service Delivery	3
DAAC	1314	Dynamics of Group Counseling	3
PSYC	2301	General Psychology	3
DAAC	1311	Counseling Theories	3
PHED		Physical Education	1
Third Semester			
ITSC	1409	Integrated Software Applications I	4
ENGL	1301	Composition I	3
ELCT		Department Approved Elective	3
Fourth Semester			
PSYT	1345	Principles of Behavior Management and Modification	3
ELCT		Mental Health Elective	3
SPCH		Speech 1315 or 1321	3
PSYT	2331	Abnormal Psychology	3
ENGL	1302	Composition II	3
Fifth Semester			
CMSW	1167	Practicum -Clinical and Medical Social Work	1
MATH		MATH 1314 or higher level	3
ELCT		Mental Health Elective	3
DAAC	1307	Addicted Family Intervention	3
ELCT		Humanities/Fine Arts Selection	3
<b>Total Hours</b>			<b>72</b>

## At Risk Youth Specialization Advanced Certificate (MHYC) Certificate of Completion

### First Year

First Semester			Credit
DAAC	1319	Introduction to Alcohol and Other Drug Addictions	3
CMSW	1309	Problems of Children and Adolescents	3
PSYT	1329	Interviewing and Communication Skills	3
DAAC	1304	Pharmacology of Addiction	3
CMSW	1319	Adolescent Development	3

### Second Semester

PSYT	1321	Crisis Intervention	3
CHLT	1309	Community Ethics	3
CMSW	1313	Assessment and Service Delivery	3
DAAC	1314	Dynamics of Group Counseling	3

### Third Semester

PSYT	1345	Principles of Behavior Management and Modification	3
PSYT	2331	Abnormal Psychology	3
CMSW	1167	Practicum -Clinical and Medical Social Work	1
DAAC	1311	Counseling Theories	3
DAAC	1307	Addicted Family Intervention	3
<b>Total Hours</b>			<b>40</b>

## Chemical Dependency Specialization (MHDD)

Associate of Applied Science Degree

### First Year

First Semester			Credit
DAAC	1319	Introduction to Alcohol and Other Drug Addictions	3
PSYT	1329	Interviewing and Communication Skills	3
DAAC	1304	Pharmacology of Addiction	3
DAAC	1307	Addicted Family Intervention	3
CHLT	1309	Community Ethics	3
CMSW	1309	Problems of Children and Adolescents	3

### Second Semester

PSYT	1321	Crisis Intervention	3
DAAC	1309	Assessment Skills of Alcohol and Other Drug Addictions	3
ELCT		Department Elective	3
DAAC	1314	Dynamics of Group Counseling	3
DAAC	1311	Counseling Theories	3
PHED		Physical Education	1

### Second Year

First Semester			Credit
ITSC	1409	Integrated Software Applications I	4
ENGL	1301	Composition I	3
PSYC	2301	General Psychology	3

### Second Semester

DAAC	1341	Counseling Alcohol and Other Drug Addictions	3
DAAC	1167	Practicum -Alcohol/Drug Abuse Counseling	1
SPCH		Speech 1315 or 1321	3
ELCT		Mental Health Elective	3
PSYT	2331	Abnormal Psychology	3
ENGL	1302	Composition II	3

### Third Semester

DAAC	2367	Practicum -Alcohol/Drug Abuse Counseling	3
MATH		MATH 1314 or higher level	3
ELCT		Mental Health Elective	3
ELCT		Humanities/Fine Arts Selection	3
<b>Total Hours</b>			<b>72</b>

## Chemical Dependency Specialization - Advanced Certificate (MHAD) Certificate of Completion

### First Year

First Semester			Credit
DAAC	1319	Introduction to Alcohol and Other Drug Addictions	3
PSYT	1329	Interviewing and Communication Skills	3
DAAC	1304	Pharmacology of Addiction	3
CMSW	1309	Problems of Children and Adolescents	3

### Second Semester

PSYT	1321	Crisis Intervention	3
DAAC	1309	Assessment Skill of Alcohol and Other Drug Addictions	3
DAAC	1167	Practicum -Alcohol/Drug Abuse Counseling	1
DAAC	1314	Dynamics of Group Counseling	3
DAAC	1307	Addicted Family Intervention	3

### Third Semester

DAAC	1341	Counseling Alcohol and Other Drug Addictions	3
DAAC	1311	Counseling Theories	3
PSYT	2331	Abnormal Psychology	3
CHLT	1309	Community Ethics	3

### Fourth Semester

DAAC	2367	Practicum-Alcohol/Drug Abuse Counseling	3
<b>Total Hours</b>			<b>40</b>

**Executive Assistant (ASEC)****Associate of Applied Science Degree***(formerly Word Processing and Administrative Secretarial)***First Year**

<b>First Semester</b>			<b>Credit</b>
POFI	1301	Computer Applications I	3
POFT	1329	Keyboarding and Document Formatting	3
POFT	1301	Business English	3
POFT	1309	Administrative Office Procedures I	3
ITSC	1409	Integrated Software Applications I	4
PHED		Physical Education	1

**Second Semester**

POFI	2301	Word Processing	3
POFT	1325	Business Math and Machine Applications	3
POFT	1319	Records and Information Management I	3
MATH		MATH 1314 or higher level	3
ENGL		English Selection	3
POFT	2312	Business Correspondence and Communication	3

**Second Year**

<b>First Semester</b>			
ACNT	1325	Principles of Accounting I	3
POFI	2331	Desktop Publishing for the Office	3
ELCT		Humanities/Fine Arts	3
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1
POFT	2386	OR	3
OR		Internship - Administrative Assistant/Secretary General	3
POFT	2388	OR	3
		Internship - General Office/Clerical and Typing Service	3

**Second Semester**

POFI	1349	Spreadsheets	3
POFT	1349	Administrative Office Procedures II	3
POFT	2333	Advanced Document Formatting and Skillbuilding	3
OR			
POFI	2340	Advanced Word Processing	3
ELCT		Social Behavioral Science Selection	3
POFT	2387	OR	3
OR		Internship - Administrative Assistant/Secretarial Science	3
POFT	2389	OR	3
		Internship - General Office/Clerical and Typing Service	3
<b>Total Hours</b>			<b>66</b>

## Administrative Support (ASAC) Certificate of Completion

### First Year

#### First Semester

			<b>Credit</b>
POFI	1301	Computer Applications I	3
POFT	1329	Keyboarding and Document Formatting	3
POFT	1301	Business English	3
POFT	1309	Administrative Office Procedures I	3
ITSC	1409	Integrated Software Applications I	4

#### Second Semester

POFI	2301	Word Processing	3
POFT	1325	Business Math and Machine Applications	3
POFT	1319	Records and Information Management I	3
MATH		MATH 1314 or higher level	3
ENGL		English Selection	3
POFT	2312	Business Correspondence and Communication	3

#### Third Semester

ACNT	1325	Principles of Accounting I	3
POFI	2331	Desktop Publishing for the Office	3
POFI	1349	Spreadsheets	3
SPCH		SPCH 1315 or 1321	3
POFT	2386	Internship-Administrative Assistant/Secretary General	3
OR			
POFT	2388	Internship-General Office/Clerical and Typing Service	3
<b>Total Hours</b>			<b>49</b>



## Office Assistant (ASGS) Certificate of Completion

### First Year

First Semester			Credit
POFI	1301	Computer Applications I	3
POFT	1329	Keyboarding and Document Formatting	3
POFT	1301	Business English	3
POFT	1309	Administrative Office Procedures I	3
ITSC	1409	Integrated Software Applications I	4

### Second Semester

POFI	2301	Word Processing	3
POFT	1325	Business Math and Machine Applications	3
POFT	1319	Records and Information Management I	3
POFI	1349	Spreadsheets	3
ENGL		English Selection	3
POFT	2386	Internship - Administrative Assistant/Secretary General	3
OR			
POFT	2388	Internship - General Office/Clerical and Typing Service	3
<b>Total Hours</b>			<b>34</b>

## Office Technology

# Office Management (OFFM)

## Associate of Applied Science Degree

### First Year

First Semester			Credit
POFI	1301	Computer Applications I	3
POFT	1329	Keyboarding and Document Formatting	3
POFT	1301	Business English	3
BMGT	1303	Principles of Management	3
POFT	1309	Administrative Office Procedures I	3
PHED		Physical Education	1

### Second Semester

POFI	2301	Word Processing	3
POFT	1319	Records and Information Management I	3
POFT	2312	Business Correspondence and Communication	3
ITSC	1409	Integrated Software Applications I	4
BMGT	1325	Office Management	3
ENGL	1301	Composition I	3

### Second Year

First Semester			
ACNT*	1325	Principles of Accounting I	3
POFT	1325	Business Math and Machine Applications	3
POFI	1349	Spreadsheets	3
MATH		MATH 1314 or higher level	3
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1

### Second Semester

ACNT*	1326	Principles of Accounting II	3
POFT	1349	Administrative Office Procedures II	3
HRPO	2301	Human Resource Management	3
ELCT		Social Behavioral Science Selection	3
ELCT		Humanities/Fine Arts Selection	3
ELCT		POFI/POFT Internship Selection	3
<b>Total Hours</b>			<b>69</b>

\*ACNT 1325, 1326 or ACCT 2301, 2302.

## Office Management (AOFM) Certificate of Completion

### First Year

First Semester			Credit
POFI	1301	Computer Applications I	3
POFT	1329	Keyboarding and Document Formatting	3
POFT	1301	Business English	3
BMGT	1303	Principles of Management	3
POFT	1309	Administrative Office Procedures	3

### Second Semester

POFI	2301	Word Processing	3
POFT	1319	Records and Information Management I	3
POFT	2312	Business Correspondence and Communication	3
ITSC	1409	Integrated Software Applications I	4
BMGT	1325	Office Management	3

### Second Year

First Semester			Credit
ACNT*	1325	Principles of Accounting I	3
POFT	1325	Business Math and Machine Applications	3
POFI	1349	Spreadsheets	3
SPCH		SPCH 1315 or 1321	3

### Second Semester

ACNT*	1326	Principles of Accounting II	3
POFT	1349	Administrative Office Procedures II	3
ELCT		Social Behavioral Science Selection	3
ELCT		POFI/POFT Internship Selection	3
<b>Total Hours</b>			<b>55</b>

\*ACNT 1325, 1326 or ACCT 2301, 2302.

## Office Management (OFMC) Certificate of Completion

### First Year

First Semester			Credit
POFI	1301	Computer Applications I	3
POFT	1329	Keyboarding and Document Formatting	3
POFT	1301	Business English	3
BMGT	1303	Principles of Management	3
POFT	1309	Administrative Office Procedures I	3

### Second Semester

POFI	2301	Word Processing	3
POFT	1319	Records and Information Management I	3
POFT	2312	Business Correspondence and Communication	3
POFT	1325	Business Math and Machine Applications	3
BMGT	1325	Office Management	3
ITSC	1409	Integrated Software Applications I	4
<b>Total Hours</b>			<b>34</b>

## Small Gas Engine Repair

# Small Engine Mechanic and Repairer (SEMR)

## Associate of Applied Science Degree

(Offered at Fort Leonard Wood location only)

### First Year

#### First Semester

			Credit
DEMR	1401	Shop Safety and Procedures	4
or			
AUMT	1405	Introduction to Automotive Technology	
SMER	1471	Small Gas Engine Fundamentals	4
ENGL	1312	Business Writing	3
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	4
SMER	1372	Shop Organization and Management	3

#### Second Semester

SMER	1428	Small Engine Service Principles	4
MATH		MATH 1314 or higher level	3
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
ELCT		Humanities/Fine Arts Selection	3
SMER	1431	Small Engine Tune-Up	4

### Second Year

#### First Semester

WLDG	1430	Introduction to Gas Metal Arc (MIG) Welding	4
SMER	1404	Marine Equipment Service Principles	4
SMER	1437	Small Engine Four Stroke Engine/Transmission	4
GOVT	2301/2302	American Government I/II	3
ELCT		Elective	3

#### Second Semester

SMER	1434	Small Engine Two Stroke Overhaul	4
SMER	1473	Large Air Cooled Engines	4
BUSG	2309	Small Business Management	3
ELCT		Computer Technology/Skills Selection	3
SPCH	1321	Business and Professional Speaking	3
PHED		Physical Education	1
<b>Total Hours</b>			<b>72</b>

## Small Engine Mechanic and Repairer (SEMC) Certificate of Completion

*(Offered at Fort Leonard Wood location only)*

### First Year

#### First Semester

			<b>Credit</b>
DEMR	1401	Shop Safety and Procedures	4
or			
AUMT	1405	Introduction to Automotive Technology	
SMER	1471	Small Gas Engine Fundamentals	4
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	4
SMER	1372	Shop Organization and Management	3

#### Second Semester

SMER	1428	Small Engine Service Principles	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
SMER	1431	Small Engine Tune-Up	4
WLDG	1430	Introduction to Gas Metal Arc (MIG) Welding	4

#### Third Semester

SMER	1404	Marine Equipment Service Principles	4
SMER	1437	Small Engine Four Stroke Engine/Transmission	4
SMER	1434	Small Engine Two Stroke Overhaul	4
SMER	1473	Large Air Cooled Engines	4
BUSG	2309	Small Business Management	3
<b>Total Hours</b>			<b>50</b>

## Welding Technology

# Welding (WLDG)

## Associate of Applied Science Degree

### First Year

#### First Semester

			<b>Credit</b>
WLDG	1423	Welding Safety Tools and Equipment	4
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
MATH		MATH 1314 or higher level	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
ENGL	1312	Business Writing	3
PHED		Physical Education	1

### 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 (GTAW) Welding	4
ELCT		Computer Science Technology Skills Selection	3
GOVT	2301/2302	American Government I/II	3

#### Second Semester

WLDG	2453	Advanced Pipe Welding	4
SPCH	1321	Business and Professional Speaking	3
WLDG	1430	Introduction to Gas Metal Arc (GMAW) Welding	4
ELCT		Humanities/Fine Arts Selection	3
WLDG	2435	Advanced Layout and Fabrication	4
or			
WLDG	2488	Internship- Welding Technology/Welder	

**Total Hours** **70**

## Welding Technology (WLWT) Certificate of Completion

			<b>Credit</b>
WLDG	1423	Welding, Safety, Tools & Equipment	4
WLDG	1413	Introduction to Blueprint Reading for Welders	4
WLDG	1425	Introduction to Oxy-Fuel Welding & Cutting	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
WLDG	1457	Intermediate Shielded Metal Arc Welding (SMAW)	4
WLDG	2443	Advanced Shielded Metal Arc Welding (SMAW)	4
WLDG	1430	Introduction to Gas Metal Arc (GMAW) Welding	4
WLDG	2447	Advanced Gas Metal Arc (GMAW) Welding	4
WLDG	1434	Introduction to Gas Tungsten Arc (GTAW) Welding	4
WLDG	2451	Advanced Gas Tungsten Arc (GTAW) Welding	4
WLDG	1435	Introduction to Pipe Welding	4
WLDG	2406	Intermediate Pipe Welding	4
WLDG	2453	Advanced Pipe Welding	4
WLDG	2435	Advanced Layout and Fabrication	4
or			
WLDG	2488	Internship- Welding Technology/Welder	56
<b>Total Hours</b>			<b>56</b>

## Welder (WLWC) Certificate of Completion

This is a self-paced, open-entry program.

			<b>Credit</b>
WLDG	1423	Welding Safety, Tools & Equipment	4
WLDG	1413	Introduction to Blueprint Reading for Welders	4
WLDG	2443	Advanced Shielded Metal Arc Welding (SMAW)	4
WLDG	1430	Introduction to Gas Metal Arc (GMAW) Welding	4
WLDG	2447	Advanced Gas Metal Arc (GMAW) Welding	4
WLDG	1434	Introduction to Gas Tungsten Arc (GTAW) Welding	4
WLDG	2451	Advanced Gas Tungsten Arc (GTAW) Welding	4
WLDG	2406	Intermediate Pipe Welding	4
WLDG	2453	Advanced Pipe Welding	4
WLDG	2435	Advanced Layout & Fabrication	4
or			
WLDG	2488	Internship- Welding Technology/Welder	40
<b>Total Hours</b>			<b>40</b>

# Course Descriptions

## ABDR Autobody Repair

### ABDR 1419 Basic Metal Repair 2-7-4

In-depth coverage of basic metal principles and working techniques including proper tool usage and product application.

### ABDR 1431 Basic Refinishing 2-6-4

An introduction to current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Emphasis on surface preparation, masking techniques, and refinishing of trim and replacement parts. Recommended prerequisite or co-requisite: ABDR 1419.

### ABDR 1441 Structural Analysis and Damage Repair I 2-7-4

Expanded training in the roughing and shaping procedures on automotive sheet metal necessary to make satisfactory body repairs. Emphasis on the alignment of component parts such as doors, hood, front-end assemblies, and deck lids. Recommended prerequisites or co-requisites: ABDR 1419 and 1471.

### ABDR 1442 Structural Analysis and Damage Repair II 3-3-4

Continuation of general repair and replacement procedures for damaged structural parts and collision damage. Recommended prerequisites: ABDR 1419, 1441, and 1471.

### ABDR 1449 Automotive Plastic and Sheet Molded Compound Repair 2-6-4

A comprehensive course in repair of interior and exterior plastics including the use of various types of adhesives and plastic welding. Recommended prerequisite or co-requisite: ABDR 1419.

### ABDR 1471 Advanced Auto Body Welding 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. Recommended prerequisite or co-requisite: ABDR 1419.

### ABDR 1472 Auto Body Glass, Hardware and Trim 2-7-4

This course is designed to provide the student with instruction in the removal, replacement, and service of both stationary and moveable 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. Recommended prerequisite or co-requisite: ABDR 1419.

### ABDR 2402 Auto Body Mechanical and Electrical Service 2-7-4

A course in the repair, replacement, and/or service of collision damaged mechanical or electrical systems. Topics include drive train removal, reinstallation and service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading wiring diagrams, and troubleshooting. Recommended prerequisite or co-requisite: ABDR 1419.

### ABDR 2435 Structural Analysis and Damage Repair IV 2-6-4

Extension of Structural Analysis and Damage Repair II providing skill development in the auto body application of theories to the repair and replacement of complete body units. Recommended prerequisites: ABDR 1419, 1442 and 1471.

### ABDR 2437 Structural Analysis and Damage Repair V 2-7-4

Advanced development in the operation of equipment and the procedures involved in the repair of body structures. Special emphasis on conducting a thorough damage analysis as well as demonstrating proper pulling and anchoring techniques. Recommended prerequisites: ABDR 1419, 1471, and 2435.

### ABDR 2449 Advanced Refinishing 2-7-4

Skill development in multi-stage refinishing techniques. Further development in identification of problems and solutions in color matching and partial panel refinishing. Recommended prerequisite: ABDR 1419 and 1431.

### ABDR 2488 Internship-Autobody/Collision and Repair Technology/Technician 1-18-4

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and employer. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

## ACCT Accounting

### ACCT 2301 Principles of Financial Accounting 3-0-3

An introduction to accounting concepts and their application in transaction analysis and financial statement preparation; analysis of financial statements; and asset, liability, and equity accounting in proprietorships, partnerships, and corporations.

### ACCT 2302 Principles of Managerial Accounting 3-0-3

An introduction to the use of accounting information as an aid to management decision making. Topics include cost behavior, budgeting, responsibility accounting, cost control, and product costing. Prerequisite: ACCT 2301.

## ACNT Accounting

### ACNT 1311 Introduction to Computerized Accounting 2-4-3

Introduction to utilizing the computer in maintaining accounting records, making management decisions, and processing common business applications with primary emphasis on a general ledger package. Prerequisites: ACNT 1325 or equivalent recommended.

### ACNT 1325 Principles of Accounting I 2-4-3

A study of accounting concepts and their application in transaction analysis and financial statement preparation and asset and equity accounting in proprietorships and corporations. Emphasis on accounting cycle for service and merchandising enterprises.



**ACNT 1326 Principles of Accounting II** 2-4-3  
 A study of the fundamentals of managerial accounting. Emphasis on accounting for a manufacturing concern, budgeting, planning, management decision making, and analysis of financial reports. Prerequisites: ACNT 1325 or equivalent recommended.

**ACNT 1331 Federal Income Tax: Individual** 3-0-3  
 Basic instruction in the tax laws as currently implemented by the Internal Revenue Service providing a working knowledge of preparing taxes for the individual.

## AERM Aviation Maintenance Technology

*Not offered in Texas*

**AERM 1203 Shop Practices-G** 2-2-2  
 An introduction to the correct use of hand tools and equipment and precision measurement; identification of aircraft hardware; and the fabrication of fluid lines and tubing. Emphasis on procedures for testing, heat treating, and inspection of aircraft structures.

**AERM 1205 Weight and Balance-G** 2-2-2  
 An introduction to Federal Aviation Administration (FAA) required subjects relating to the weighing of aircraft, the performance of weight and balance calculations, and appropriate maintenance record entries.

**AERM 1208 Federal Aviation Regulations-G** 2-2-2  
 A course in the use and understanding of the Federal Aviation Administration and aircraft manufacturers' publications, forms, and records; and the exercise of mechanic privileges within prescribed limitations.

**AERM 1210 Ground Operations-G** 2-2-2  
 An introductory course in fuels, servicing methods and procedures, aircraft movement, securing and operations of aircraft, external power equipment, aircraft cleaning, and corrosion control.

**AERM 1243 Instruments and Navigation/  
 Communications-G** 2-1-2  
 A study of aircraft instruments and electronic flight instrument systems including testing and installing instruments; inspecting, checking, and troubleshooting navigation and communication systems; and inspecting and repairing antennas and electronic equipment installations.

**AERM 1254 Aircraft Composites-A** 2-2-2  
 A study of the inspection and repair of composite, fiberglass, honeycomb, and laminated structural materials including doors, windows, bonded structures, and interior furnishings.

**AERM 1314 Basic Electricity-G** 2-4-3  
 A study of aircraft electrical systems and their requirements including the use of ammeter, voltmeter, and ohmmeter; series and parallel circuits; inductance and capacitance; magnetism; converting alternating current (AC) to direct current (DC); controlling devices; maintenance and servicing of aircraft batteries; and reading and interpreting aircraft electrical diagrams to include solid state devices and logic functions.

**AERM 1340 Aircraft Propellers-P** 2-4-3  
 Fundamentals of construction of propellers. Skill development in inspection, servicing, and repair of fixed-pitch, constant-speed, and feathering propellers and governing systems. Instruction in removal, balancing, and installation of propellers.

**AERM 1357 Fuel Metering and Induction System-P** 2-4-3  
 A study of fuel metering and induction systems used on reciprocating and turbine engines including fuel metering systems, carburetors, induction systems, heat exchangers, and cooling systems.

**AERM 1444 Aircraft Reciprocating Engines-P** 3-4-4  
 A study of reciprocating engines and their development, operating principles, and theory. Instruction in engine instruments, lubricating, and exhaust systems.

**AERM 1445 Airframe Electrical Systems-A** 3-4-4  
 A study of airframe electrical systems including installation, removal, disassembly, and repair of electrical components and related wiring.

**AERM 1449 Hydraulic, Pneumatic, and  
 Fuel Systems-A** 3-4-4  
 Skill development in inspecting, servicing, and maintaining aircraft fluid systems including hydraulics, pneumatics, and fuel. Application of basic concepts through detailed maintenance procedures.

**AERM 1452 Aircraft Sheet Metal-A** 2-6-4  
 A course in inspection and repair of sheet metal structures including forming, lay out, and bending of sheet metal and identification, selection, and installation of rivets and fasteners.

**AERM 1456 Aircraft Power Plant Electricity** 3-4-4  
 Theory, operation, and maintenance of powerplants including electrical, ignition, starting, and fire protection systems.

**AERM 2231 Airframe Inspection-A** 2-2-2  
 A study of the materials and procedures for completing a One Hundred Hour Inspection as per Federal Aviation Regulations and manufacturers' service information.

**AERM 2337 Landing Gear and Hydraulic Systems-A** 2-3-3  
 General principles of commercial fuel and hydraulic systems, landing gear, pneumatic systems, and water/waste systems.

**AERM 2341 Power Plant Auxiliary Power Units-P** 2-3-3  
 General principles of auxiliary power unit (APU) and powerplant systems and components.

**AERM 2351 Aircraft Turbine Engine Overhaul-P** 2-4-3  
 Topics address inspection, disassembly, reassembly, and replacement of gas turbine engines, sections, and components and operational troubleshooting and analysis.

**AERM 2370 A&P Mechanic General Course** 3-0-3  
 A course intended to prepare experienced aircraft mechanics to successfully complete the written, oral and practical exams for certification by the Federal Aviation Administration as Aviation Maintenance Technician. In-depth coverage of topics for A&P certification will include maintenance publications, FAA Regulations, weight & balance determination, blueprints, diagrams, corrosion control, basic electricity, aircraft materials and hardware, basic math and physics, basic aerodynamics and aircraft inspection fundamentals.

**AERM 2371 Aircraft Airframe Course** 3-0-3  
 A course intended to prepare experienced aircraft mechanics to successfully complete the written, oral and practical exams for certification by the Federal Aviation Administration as an Airframe Maintenance Technician. An in-depth coverage of topics pertaining to Airframe certification to include inspection, fabrication and repair of aircraft structures and components; application of aircraft finishes; sheet metal and composite structures; fuel systems; instrumentation; hydraulics; pneumatics and airframe electrical systems.

**AERM 2372 Aircraft Power Plants and Systems 3-0-3**

A course intended to prepare experienced aircraft mechanics to successfully complete the written, oral and practical exams for certification by the Federal Aviation Administration as a Powerplant Maintenance Technician. An in-depth coverage of topics pertaining to Power plant certification to include proper technique and procedures for maintaining, servicing, overhaul and inspections of both reciprocating and turbine engines. Other subjects to be covered include engine electrical, fuel, oil, cooling and propeller subsystems.

**AGRI Agriculture**

**AGRI 1231 The Agriculture Industry 2-0-2**

An overview of world agriculture, nature of the industry, resource conservation, and the American system, including production, distribution, and marketing.

**AIRP Aviation Science  
see also AVIM**

**AIRP 1305 Aircraft Science 3-0-3**

An introduction to the study of basic sciences in the aeronautical field as they may be applied to theoretical and practical application in aircraft construction and design.

**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 2302 Introduction to Archeology 3-0-3**

Overview of human origins and biocultural adaptations. Introduces methods and theory in the excavation and interpretation of material remains of past cultures.

**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 sub-fields: 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 their cultural patterns. An introduction to the various theories and anthropologists is reviewed as well as the relationship of Cultural Anthropology to the other social sciences (Psychology, Sociology, History, etc.).

**ARTS Arts**

**ARTS 1303 Art History I 3-0-3**

This course is a survey of the major and minor arts from prehistoric times to the 14th century. Prerequisite: None

**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. Prerequisite: None.

**ARTS 1311 Design I 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. Prerequisite: None

**ARTS 1312 Design II 2-4-3**

This course gives basic instruction in the principles and elements of design as applicable to three-dimensional design problems. Prerequisite: None.

**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. Prerequisite: None

**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.

**AUMT Automotive Service and Repair**

**AUMT 1405 Introduction to Automotive Technology 3-3-4**

An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance.

**AUMT 1407 Automotive Electrical Systems 2-7-4**

An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of batteries, charging and starting systems, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. Recommended prerequisites or co-requisites: AUMT 1405 and 2305.

**AUMT 1410 Automotive Brake Systems 2-6-4**

Operation and repair of drum/disc type brake systems. Emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. Recommended prerequisite or co-requisite: AUMT 1405.

**AUMT 1416 Automotive Suspension and Steering Systems 2-6-4**

A study of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. Recommended prerequisite or co-requisite: AUMT 1405.

**AUMT 1419 Automotive Engine Repair 3-3-4**

Fundamentals of engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, and disassembly, repair, and reassembly of the engine. Recommended prerequisites: AUMT 1405, 2305 and 2434.

**AUMT 1445 Automotive Heating and Air Conditioning 2-6-4**

Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements. Recommended prerequisites: AUMT 1405, 1407, 1472 and 2437.

**AUMT 1471 Automotive Fuel Systems 2-7-4**

This course provides 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. Recommended prerequisites: AUMT 1405, 1407, 1472, 2305 and 2437.

**AUMT 1472 Automotive Computer Systems 2-7-4**

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. Recommended prerequisites: AUMT 1405, 1407, 2437.

**AUMT 2305 Theory of Automotive Engines 2-2-3**

Fundamentals of engine operation and diagnosis including lubrication and cooling systems. Emphasis on identification of components, measurements, inspections, and repair methods. Recommended prerequisite or co-requisite: AUMT 1405.

**AUMT 2413 Automotive Drive Train and Axles 2-6-4**

A study of automotive clutches, clutch operation devices, manual transmissions, transaxles, and differentials with emphasis on the diagnosis and repair of transmissions and drive lines. Recommended prerequisite or co-requisite: AUMT 1405.

**AUMT 2425 Automotive Automatic Transmission and Transaxle 2-6-4**

A study of the operation, hydraulic principles, and related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and proper repair techniques. Recommended prerequisite or co-requisite: AUMT 2413.

**AUMT 2434 Automotive Engine Performance Analysis II 2-7-4**

Diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment. Recommended prerequisites: AUMT 1407, 1471, 1472, 2305, and 2437.

**AUMT 2437 Automotive Electronics 3-3-4**

Topics address electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. Recommended prerequisites: AUMT 1405 and 1407.

**AUMT 2488 Internship - Automobile/Automotive Mechanics Technology/Technician 1-18-4**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and employer. Recommended prerequisite: Satisfactory completion of all other technical courses in the programs.

**AVIM Aviation Science  
see also AIRP****AVIM 2331 Airline Management 3-0-3**

An examination of the organization, operation, and management of airlines. Topics include financing, aircraft selection, route feasibility studies, load factors, and marketing.

**BCIS Computer Science  
see also COSC****BCIS 1405 Business Computer Applications 3-3-4**

Computer terminology, hardware, software, operating systems, and information systems relating to the business environment. The main focus of this course is on business applications of software, including word processing, spreadsheets, databases, presentation graphics, and business-oriented utilization of the internet.

**BIOL Biology****BIOL 1308 General Biology I 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. Only offered as a telecourse.

**BIOL 1322 Nutrition and Diet Therapy I 3-0-3**

A study of the essential nutrients, including nutrient functions, food source, deficiency symptoms, and toxicity symptoms; the nutritional requirements throughout life; the effects of nutrition on health and fitness; nutrition fads and controversies; and evaluation of personal eating habits. Prerequisite: One semester of chemistry is recommended.

**BIOL 1406 General Biology I (BIOL 1408) 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 1407 General Biology II (BIOL 1409) 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. Prerequisite: BIOL 1406.

**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. Prerequisite: BIOL 1406.

**BIOL 2401 Anatomy and Physiology I 3-3-4**

Study of the structure and function of the human body, with emphasis on basic biochemistry, cytology, and structures, including: skeletal-muscular, integumentary, immune, digestive, renal, lymphatic, and reproductive systems. A one-semester course in Biology is a preferred prerequisite.

**BIOL 2402 Anatomy and Physiology II 3-3-4**

Study of the structure and function of the human body, with emphasis on the functions and interactions of, between, and among, the systems identified in Anatomy and Physiology I with emphasis on cardiovascular, respiratory, nervous, and endocrine systems. Prerequisite: BIOL 2401.

**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.

**BMGT Business Administration and Management  
see also BUSG, HRPO and MRKG****BMGT 1301 Supervision 3-0-3**

A study of the role of the supervisor. Managerial functions as applied to leadership, counseling, motivation, and human skills are examined.

**BMGT 1303 Principles of Management 3-0-3**

Concepts, terminology, principles, theory, and issues that are the substance of the practice of management.

**BMGT 1325 Office Management 3-0-3**

Systems, procedures, and practices related to organizing and planning office work, controlling employees' performance, and exercising leadership skills.

**BMGT 2370 Management Applications I 1-5-3**

A management laboratory that emphasizes 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. It serves as a program Capstone for those students whose situation precludes an internship. The course may be repeated (if topics and learning outcomes vary). Prerequisite: Consent of the Department Chair.

**BMGT 2371 Management Applications II 1-5-3**

A management laboratory that emphasizes 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. It serves as a program Capstone for those students whose situation precludes an internship. Prerequisite: BMGT 2370 and Consent of the Department Chair.

**BMGT 2488 Internship - Business Administration and Management, General 1-18-4**

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience. Prerequisite: Consent of the Department Chair.

**BMGT 2489 Internship - Business Administration and Management, General 1-18-4**

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience. Prerequisites: BMGT 2488 and Consent of the Department Chair.

**BUSG Business Administration and Management see also BMGT, HRPO and MRKG**

**BUSG 1315 Small Business Operations 3-0-3**

**Central Campus Only.** A course in the unique aspects of managing a small business. Topics address management functions including how managers plan, exercise leadership, organize, and control the operations. 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.

**BUSG 1370 Small Business Accounting 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 cost, pricing decisions, payroll accounting and taxes.

**BUSG 1371 Entrepreneurship and Business Plan Development 3-0-3**

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.

**BUSG 2305 Business Law/Contracts 3-0-3**

Principles of law which form the legal framework for business activity including applicable statutes, contracts, and agency.

**BUSG 2309 Small Business Management 3-0-3**

A course on how to start and operate a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, financial needs, marketing strategies, and legal issues.

**BUSI Business Administration and Management**

**BUSI 1301 Business Principles 3-0-3**

Introduction to the role of business in modern society. Includes overview of business operations, analysis of the specialized fields within the business organization, and development of a business vocabulary.

**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 1311 Salesmanship 3-0-3**

Principles of personal salesmanship including methods and tasks applicable to a wide variety of industries and commercial settings.

**BUSI 2301 Business Law 3-0-3**

Principles of law which form the legal framework for business activity.

**CBFM Maintenance Technology see also CNBT, ELPT, MBST, PFPB, and WDWK**

**CBFM 1334 Interior and Exterior Painting and Refinishing 2-4-3**

Introduction to interior and exterior painting and refinishing for commercial and residential applications. Recommended prerequisite or co-requisite: CRPT 1429.

**CBFM 2487 Internship-Building/Property Maintenance and Manager 1-18-4**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and employer. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

## CDEC Early Childhood Professions

*\*All CDEC courses require a lab except CDEC 1195.*

### CDEC 1195 Special Topics in Child Care 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. This course has different topics and may be repeated.

### CDEC 1303 Family and the Community 2-2-3

A study of the relationship between the child, the family, the community, and early childhood educators, including a study of parent education, family and community lifestyles, multi-culture instruction, child abuse, and current issues.

### CDEC 1311 Introduction To Early Childhood Education 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.

### CDEC 1313 Curriculum Resources for Early Childhood Programs 2-2-3

Fundamentals of curriculum design and implementation in developmentally appropriate programs for young children.

### CDEC 1317 Child Development Associate Training I 2-2-3

Based on the requirements for the Child Development Associate (CDA) National Credential. Three of the 13 functional areas of study include family, program management and professionalism. Topics on CDA overview, general observation skills, and child growth and development overview.

### CDEC 1318 Nutrition, Health, and Safety 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 implications. Integration of these principles apply to a variety of settings.

### CDEC 1319 Child Guidance 2-2-3

An exploration of common behavior problems of young children in an early childhood setting. Emphasis on positive guidance techniques for effective behavior management. Practical application through direct participation in an early childhood setting.

### CDEC 1321 The Infant and Toddler 2-2-3

A study of appropriate infant and toddler (birth to 3 years) programs, including an overview of development, quality caregiving routines, appropriate environments, materials and activities, and teaching/guidance techniques.

### CDEC 1335 Early Childhood Development: 3-5 Years 2-2-3

This course covers the principles of normal growth and development from three to five years. Emphasis is on physical, emotional, and social development.

### CDEC 1340 Instructional Techniques for Children with Special Needs 2-2-3

Exploration of development and implementation of curriculum for children with special needs. The focus is on how to adapt curriculum activities for children with special needs.

### CDEC 1354 Child Growth & Development 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.

### CDEC 1356 Emergent Literacy for Early Childhood 2-2-3

An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based, integrated curriculum.

### CDEC 1357 Math & Science for Early Childhood 2-2-3

An exploration of principles, methods, and materials for teaching young children math and science concepts through discovery and play.

### CDEC 1358 Creative Arts for Early Childhood 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.

### CDEC 1359 Children with Special Needs 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.

### CDEC 1371 Physical Development and Disorder in Children 2-2-3

This course is designed for the paraprofessional 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.

### CDEC 1391 Special Topics in Family Day Care Homes 2-2-3

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. The focus is on setting up a FDCH and activities for children.

### CDEC 1393 Special Topics in Family Living & Parenthood 2-2-3

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.

### CDEC 2322 Child Development Associate Training II 2-2-3

A continuation of the study of the requirements for the Child Development Associate (CDA) National Credential. The six functional areas of study include safe, healthy, learning environment, self, social, and guidance.

### CDEC 2324 Child Development Associate Training III 2-2-3

A continuation of the study of the requirements for the Child Development Associate (CDA) National Credential. The four functional areas of study are creative, cognitive, physical, and communication.

**CDEC 2326 Administration of Programs for Children I** **2-2-3**  
 A practical application of management procedures for early care and education programs, including a study of operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication.

**CDEC 2328 Administration of Programs for Children II** **2-2-3**  
 An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management advocacy, professionalism, fiscal analysis and planning parent education/partnerships, and technical applications in programs.

**CDEC 2341 The School Age Child** **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.

**CDEC 2384 Cooperative Education in Child Development** **1-14-3**  
 An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience.

**CETT Computer Electronics Technology**  
 see also CPMT, EECT, ELMT, INTC and ITCC

**CETT 1403 DC Circuits** **3-3-4**  
 A study of the fundamentals of direct current including Ohm's law, Kirchoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements.

**CETT 1405 AC Circuits** **3-3-4**  
 A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Prerequisite: CETT 1403.

**CETT 1421 Electronics Fabrication** **3-3-4**  
 A study of electronic circuit fabrication techniques including printed circuit boards, wire wrapping, bread boarding, and various soldering techniques.

**CETT 1425 Digital Fundamentals** **3-3-4**  
 An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits.

**CETT 1429 Solid State Devices** **3-3-4**  
 A study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bi techniques, and thermal considerations of solid state devices. Prerequisite or co-requisite: CETT 1405.

**CETT 1441 Solid State Circuits** **3-3-4**  
 A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Prerequisite: CETT 1429.

**CETT 1449 Digital Systems** **3-3-4**  
 A course in electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital to-analog circuits, and large-scale integrated circuits. Prerequisites CETT 1425 and CETT 1429.

**CETT 1491 Special Topics in Computer Engineering Technology/Technician** **3-3-4**  
 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. Prerequisites CETT 1429 and CETT 1449.

**CETT 1509 DC-AC Circuits** **4-3-5**  
 Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques.

**CETT 2248/2249 Research and Project Design** **2-0-2**  
 Principles of electrical/electronic design encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates. Prerequisite: CETT 1491

**CETT 2445 Color Television Repair** **3-3-4**  
 An advanced study of television theory and basic repair including television receiver tuning system, remote control, I-F amplifiers, automatic gain control and video amplifiers, television power supplies, and deflection circuits. Prerequisite CETT 1425 and CETT 1429

**CETT 2489 Internship-Computer Engineering Technology/Technician** **1-18-4**  
 A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience.

**CHEF Hospitality Management**  
 see also HAMG, IFWA, PSTR, RSTO and TRVM

**CHEF 1301 Basic Food Preparation** **1-8-3**  
 A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism.

**CHEF 1305 Sanitation and Safety** **3-0-3**  
 The fundamentals of sanitation practices, laws, methods, and techniques of food handling for protection, safety, 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 sanitation examination.

**CHEF 1341 American Regional Cuisine** **2-4-3**  
 A study of the development of regional cuisine in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and build a portfolio of recipe strategies and production systems. Prerequisite: CHEF 1301.

**CHEF 1345 International Cuisine** **2-4-3**  
 The study of classical cooking skills associated with the preparation and service of international and ethnic cuisine. Topics include similarities between food production systems used in the United States and other regions of the world. Prerequisite: CHEF 1301.

**CHEF 1410 Garde Manger** 2-7-4  
 A study of specialty foods and garnishes. Emphasis on design, techniques, and display of fine foods. Subject includes history, soup, salads, cured and smoked foods, sausage, terrines, pates, galantines, hors d'oeuvres and appetizers. Prerequisite: CHEF 1301.

**CHEF 2301 Intermediate Food Preparation** 1-8-3  
 Continuation of previous food preparation course. Topics include the concept of pre-cooked food items, as well as scratch preparation. Covers full range of food preparation techniques. Prerequisite: CHEF 1301.

**CHEF 2302 Saucier** 2-3-3  
 Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. Prerequisite: CHEF 1301.

**CHEF 2332 Buffet Theory and Production** 2-4-3  
 Advanced concepts in the construction of inedible display items. Emphasis on buffet production, presentation, and service. The student will produce tallow, butter, and ice sculptures, and organize a buffet layout. Prerequisite: CHEF 1301.

## CHEM Chemistry

**CHEM 1411 General Chemistry I** 3-4-4  
 The first of two courses for science-related majors, this course is a study of the fundamental theories and laws of chemistry, chemical nomenclature, metals and non-metals and their compounds, states of matter, solutions, and the quantum theory of structure. Emphasis is placed on problem solving. 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 kinetics, chemical equilibrium, acid-base concepts, electrochemistry, elementary thermodynamics, and introduction to nuclear chemistry. Prerequisite: CHEM 1411.

**CHEM 2423, 2425 Organic Chemistry I and 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 and synthesis of compounds. 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.

## CHLT Mental Health Services See also CMSW, DAAC and PSYT

**CHLT 1309 Community Ethics** 3-0-3  
 Discussion of the role of ethics as it pertains to health care and community settings including ethical decision-making teamwork and the impact of illness on individual and social settings.

## CJCR Criminal Justice See also CJLE, CJSA and SLPS

**CJCR 1011 Basic Certification for Correctional Officers**  
 (1st of 2 courses) 160 clock hours  
 Preparation for certification required for employment with the Corrections Division of the Texas Department of Criminal Justice. Must include the objectives developed by the Corrections Division.

**CJCR 1012 Basic Certification for Correctional Officers**  
 (2nd of 2 courses) 40 clock hours  
 Preparation for certification required for employment with the Corrections Division of the Texas Department of Criminal Justice. Must include the objectives developed by the Corrections Division.

**CJCR 1304 Probation and Parole** 3-0-3  
 A survey of the structure, organization, and operation of probation and parole services. Emphasis on applicable state statutes and administrative guidelines.

**CJCR 1307 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.

**CJCR 1391 Special Topics in Corrections/Correctional Administration** 3-0-3  
 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. Prerequisites: CRIJ 1301/CJSA1322 and CRIJ 2301/CJCR 2324 or CRIJ 2317/CJCR 1307 and consent of the Department Chair.

**CJCR 1400 Basic Jail Course** 4-1-4  
 Provides instruction in human relations, observation, evaluation of prisoners, booking procedures, classification, mug shots, fingerprinting, strip searches, meals, medical services, visitation, inmates rights and privileges, detention areas, key, knife and tool control, disturbances, riots, fire procedures, and release procedures. Taught in accordance with the current TCLEOSE instructor guides provided by the Commission for course #1005.

**CJCR 2324 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; future trends in community treatment.

**CJCR 2325 Legal Aspects of Corrections** 3-0-3  
 A study of the operation, management, and legal issues affecting corrections. Analysis of constitutional issues involving rights of the convicted, as well as civil liability of correctional agencies and staff.

**CJCR 2466 Practicum (or Field Experience)-  
 Corrections/Correctional Administration** 1-27-4  
 Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: Consent of the Department Chair.

## CJLE Criminal Justice see also CJCR, CJSA and SLPS

**CJLE 1211 Basic Firearms** 1-2-2  
 Instruction in firearm safety, cleaning and care techniques, proper shooting principles, and proficiency with a handgun and shotgun. Prerequisite: Department approval required.

**CJLE 1333 Traffic Law and Investigation** 3-0-3  
 Instruction in the basic principles of traffic control, traffic law enforcement, court procedures, and traffic law. Emphasis on the need for a professional approach in dealing with traffic law violators and the police role in accident investigation and traffic supervision.

**CJLE 1345 Intermediate Crime Scene Investigation 3-0-3**

Topics include objectives, preparations, procedures, and methods of crime scene search; value of crime scene sketches and their relationship to crime scene photographs; fingerprints as physical evidence, fingerprint identification and classification, types of impressions and techniques for locating and developing impressions. Prerequisites: CRIJ 2314/CJSA 1342 or Police Academy.

**CJLE 1358 Rights of Prisoners 3-0-3**

Analysis of the legal rights of the convicted offender incarcerated in state and federal penal institutions. Emphasis on constitutional principles, case law, and federal and state statutes concerning prisoner rights.

**CJLE 2345 Vice & Narcotics Investigation 3-0-3**

Study of various classifications of commonly used narcotics, dangerous drugs, gambling, sex crimes, fraud, gangs, and investigative techniques; and identify proper interdiction procedures and techniques. Prerequisite: CRIJ 2314/CJSA 1342.

**CJLE 2486 Internship-Law Enforcement/ Police Science 1-18-4**

A basic or intermediate or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be paid or unpaid learning experience. Prerequisite: Consent of the Department Chair.

**CJSA Criminal Justice**  
see also CJCR, CSLE and SLPS

**CJSA 1302 Private Security Officer Training 3-0-3**

A critical study of the provisions of the Texas Private Investigators and Private Security Agencies Act. Topics include the impact of the code on procedures and policies, judicial interpretation of statutes and related procedures, and rules and regulations. Satisfies the requirements for Commissioned Security Officer Skill Certification. Prerequisite: Consent of Department Chair.

**CJSA 1308 Criminalistics I 3-0-3**

Introduction to the field of criminalistics. Topics include the application of scientific and technical methods in the investigation of crime including location, identification, and handling of evidence for scientific analysis. Prerequisites: CRIJ 2314/CJSA 1342.

**CJSA 1312 Crime in America 3-0-3**

The study of 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 1313 Court Systems and Practices 3-0-3**

Examination of the role of the judiciary in the criminal justice system. Topics include the structure of the American court system, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence, and sentencing.

**CJSA 1317 Juvenile Justice System 3-0-3**

A study of the juvenile justice process. Topics include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency.

**CJSA 1318 Court Management 3-0-3**

Exploration of operational issues in the administration of American courts. Topics include responsibilities of court personnel, records management, and organizational management topics.

**CJSA 1322 Introduction to Criminal Justice 3-0-3**

The study of the history and philosophy of criminal justice and ethical considerations; crime defined; its nature and impact; overview of criminal justice system; law enforcement, court system; prosecution and defense; trial process; corrections.

**CJSA 1327 Fundamentals of Criminal Law 3-0-3**

A study of the nature of criminal law; philosophical and historical development; major definitions and concepts; classification of crime; elements of crimes and penalties using Texas statutes as illustrations; criminal responsibility.

**CJSA 1342 Criminal Investigation 3-0-3**

Study of investigative theory, the collection and preservation of evidence, sources of information, concepts of interviewing and interrogation, the use of forensic sciences, case and trial preparation.

**CJSA 1348 Ethics in Criminal Justice 3-0-3**

A study of ethical thoughts and issues facing the criminal justice professional. Topics include constitutional ethics, codes of conduct, and standards of conduct.

**CJSA 1351 Use of Force 3-0-3**

A study of the use of force including introduction to and statutory authority for the use of force, force options, deadly force, and related legal issues. Fulfills the TCLEOSE Use of Force Intermediate Certificate requirement. Prerequisite: Consent of Department Chair.

**CJSA 1359 Police Systems and Practices 3-0-3**

Exploration of the profession of police officer. Topics include organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues.

**CJSA 1393 Special Topics in Criminal Justice Studies 3-0-3**

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. Prerequisite: CRIJ 1301/CJSA 1322 and consent of Department Chair.

**CJSA 2300 Legal Aspects of Law Enforcement 3-0-3**

Exploration of police authority. Topics include responsibilities and constitutional constraints, law of arrest, search and seizure, and police liability.

**CJSA 2302 Police Management, Supervision, and Related Topics 3-0-3**

Techniques and theories regarding dealing with people, their performance and problems. Topics include basic supervision, leadership, time management, first-line supervision, and management by objectives.

**CJSA 2331 Child Abuse, Prevention and Investigation 3-0-3**

Topics include forms of child abuse and neglect, the traits of typical abusers, and investigative strategies. Prerequisites: CRIJ 2314/CJSA 1342 or CRIJ 1313/CJSA 1317, or Police Academy.



**CJSA 2334 Contemporary Issues in Criminal Justice 3-0-3**

A series of lectures and class participation exercises presenting selected topics currently confronting criminal justice personnel and the public they serve. Prerequisite: Consent of Department Chair and CRIJ 1301/CJSA 1322 and either CRIJ 1307/CJSA 1312 or CRIJ 2314/CJSA 1342.

**CJSA 2488 Internship-Criminal Justice Safety Studies 1-18-4**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: Consent of the Department Chair.

**CMSW Mental Health Services  
see also CHLT, DAAC and PSYT**

**CMSW 1167 Practicum (or Field Experience) - Clinical and Medical Social Work 1-9-1**

An intermediate type of health professions work-based instruction that helps students gain practical experience in the discipline, enhance skills and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. Direct supervision is provided by the clinical professional. Practical general training and experiences in the workplace through assignment to a specific field placement. An individualized student plan is developed to facilitate placement and will support the students' activities, training and experience, participation, and competency evaluation. Chosen activity will be based upon the students general, academic course of study, and their specialization option. Students will be required to journal and process their experience. The following workplace issues will be reinforced: infectious diseases, legal/ethical, management of inter/intra personal crises, diversity, interviewing, resume writing, and workplace etiquette. The guided external experiences may be paid or unpaid. Liability insurance, transportation, physical exam, documentation of required immunizations, CPR/First Aid, and medical insurance will be provided by the student. Prerequisites: Department Approval, PSYT 1329, recommended Prerequisites: CMSW 1309, CMSW 1313, DAAC 1314 or SOCW 2361 (dependent upon specialization).

**CMSW 1309 Problems of Children and Adolescents 2-4-3**  
Examination of the particular problems of youth and their implications for the delivery of social services. Emphasis on social service institutions of a preventative and rehabilitative nature.

**CMSW 1313 Assessment and Service Delivery 2-4-3**  
A study of interviewing and assessment instruments and approaches for working with multicultural population. Emphasis in service delivery systems. Suggested prerequisite: CMSW 1309.

**CMSW 1319 Adolescent Development 3-0-3**  
The study of the developmental phases from adolescence through young adulthood. Identification of the tasks and goals to be achieved during these stages. Topics include physical and psychological changes as well as the areas of interpersonal relationships and the individual's ability to relate to the social environment.

**CNBT Maintenance Technology  
see also CBFM, CRPT, ELPT, MBST, PFPBand WDWK**

**CNBT 1446 Construction Estimating I 3-3-4**  
Fundamentals of estimating materials and labor costs in construction. Recommended prerequisite: All other technical courses in the program except CBFM 2487.

**COMM Communications**

**COMM 1238 Television Production III (Directing/Producing) 2-4-2**  
Study and practical experience with television production control equipment including switchers, audio consoles, special effects and graphics. Prerequisite: COMM 1336 or consent of the Telecommunications Department Chair.

**COMM 1307 Introduction to Mass Communications 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 1335 Survey of Radio/Television 3-0-3**  
Study of the development, regulation, economics, social impact and industry practices in broadcasting and cable communication. Includes non-broadcast television and radio, new technologies, and other communication systems.

**COMM 1336 Television Production I (Studio) 3-3-3**  
Study and practical experience with television studio production equipment including cameras, lighting, audio, sets and communication with talent.

**COMM 1337 Television Production II (Field) 3-3-3**  
Study and practical experience in the operation of television field production equipment including cameras, lighting, audio, video storage and editing systems.

**COMM 2303 Audio/Radio Production 2-2-3**  
Concepts and techniques of sound production, including the coordinating and directing processes. Hands-on experience with equipment, sound sources, and direction of talent.

**COMM 2305 Editing and Layout 2-2-3**  
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.

**COMM 2311 News Gathering and Writing I 3-2-3**  
Fundamentals of writing news for the mass media. Includes instruction in methods and techniques for gathering, processing, and delivering news in a professional manner.

**COMM 2315 News Gathering and Writing II 3-2-3**  
Continuation of the aims and objectives of news gathering and writing with emphasis on advanced reporting techniques. Prerequisite: COMM 2311 or consent of the Department Chair.

**COMM 2324 Practicum in Electronic Media (Audio) 2-4-3**  
Study and practical experience in digital audio production systems and software including multi track recording techniques, processing and special effects. Prerequisite: COMM 2303 or consent of the Telecommunications Department Chair.

**COMM 2327 Principles of Advertising** 3-0-3  
 Fundamentals of advertising including marketing theory and strategy, copy writing, and selection of media

**COMM 2389 Academic Cooperative in Humanities/  
 Fine Arts** 1-6-3  
 An instructional program designed to integrate on-campus study with practical hands-on work experience in a specific area of communication. Prerequisite: (COMM 1335 or COMM 1337) or (COMM 1336 and COMM 2303) or the consent of the Telecommunications Department Chair.

**COSC Computer Science  
 see also BCIS**

**COSC 1300 Introduction to Computing** 3-1-3  
 Overview of computer information systems. Introduces computer hardware, software, procedures and human resources. Explores integration and applications in business and other segments in society. Fundamentals of computer problem solving and programming may be discussed and applied. Prerequisite: None.

**COSC 2425 Computer Organization and Machine  
 Language** 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. Prerequisite: ITSE 1431 or ITSE 1402.

**CPMT Computer Electronics Technology  
 see also CETT, EECT, ELMT, INTC and ITCC**

**CPMT 1403 Introduction to Computer Technology** 3-3-4  
 A fundamental computer course that provides in-depth explanation of the procedures to utilize hardware and software. Emphasis on terminology, acronyms, and hands-on activities.

**CPMT 1445 Computer Systems Maintenance** 3-3-4  
 Examination of the functions of the components within a computer system. Development of skills in the use of test equipment and maintenance aids. Prerequisite CETT 1425 and CETT 1429

**CPMT 1449 Computer Networking Technology** 3-3-4  
 A beginning course in computer networks with focus on networking fundamentals, terminology, hardware, software, and network architecture. A study of local/wide area networking concepts and networking installations and operations. Prerequisite: CETT 1421, CETT 1425, CETT 1403, and CPMT 1403.

**CPMT 2445 Computer System Troubleshooting** 3-3-4  
 Principles and practices involved in computer system troubleshooting techniques and repair procedures including advanced diagnostic test programs and the use of specialized test equipment. Prerequisite: CPMT 1445

**CRIJ Criminal Justice**

**CRIJ 1301 Introduction to Criminal Justice** 3-0-3  
 History, philosophy, and ethical considerations of criminal justice; the nature and impact of crime; and an overview of the criminal justice system, including law enforcement and court procedures.

**CRIJ 1306 Court Systems and Practices** 3-0-3  
 The study of the judiciary in the American criminal justice system and the adjudication processes and procedures.

**CRIJ 1307 Crime in America** 3-0-3  
 The study of American crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and prevention of crime.

**CRIJ 1310 Fundamentals of Criminal Law** 3-0-3  
 Study of criminal law, its philosophical and historical development, major definitions and concepts, classifications and elements of crime, penalties using Texas statutes as illustrations, and criminal responsibility.

**CRIJ 1313 Juvenile Justice System** 3-0-3  
 A study of the juvenile justice process. Topics include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency.

**CRIJ 2301 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; future trends in community treatment.

**CRIJ 2313 Correctional Systems and Practices** 3-0-3  
 A study of the role of corrections in the criminal justice system. Topics include organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatments and rehabilitation, and current and future issues.

**CRIJ 2314 Criminal Investigation** 3-0-3  
 Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation.

**CRIJ 2323 Legal Aspects of Law Enforcement** 3-0-3  
 Exploration of police authority. Topics include responsibilities and constitutional restraints, law of arrest, search and seizure, and police liability.

**CRIJ 2328 Police Systems and Practices** 3-0-3  
 Exploration of the profession of police officer. Topics include organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues.

**CRPT Maintenance Technology**

**See also CBFM, CNBT, ELPT, MBST, PFPB and WDWK**

**CRPT 1411 Conventional Roof Systems** 3-3-4  
 Study of the principles of design and construction of a conventional roof system incorporating gable, hip, and intersections. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Recommended prerequisite or co-requisite: CRPT 1429.

**CRPT 1415 Conventional Wall Systems** 3-3-4  
 Instruction in conventional wall systems with emphasis on wood frame construction. Topics include identification of components; construction of a wall system; safe work practices; and the selection, use, and maintenance of tools and equipment. Recommended prerequisite or co-requisite: CRPT 1429.

**CRPT 1423 Floor Systems** 3-3-4  
 An introduction to common floor systems. Topics include component identification, construction of a floor system, safe work practices; and the selection, use, and maintenance of tools and equipment. Recommended prerequisite or co-requisite: CRPT 1429.

**CRPT 1429 Introduction to Carpentry** 3-3-4  
 An introduction to the carpentry trade including safety, tools, equipment, terminology, and methods.

**DAAC Mental Health Services**  
**see also CHLT, CMSW and PSYT**

**DAAC 1167 Practicum (or Field Experience) - Alcohol/ Drug Abuse Counseling** 1-9-1  
 An intermediate type of health professions work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. Direct supervision is provided by the clinical professional. Practical general training and experience in the workplace through assignment to a specific field placement site working with a chemically dependent population. An individualized student plan will be used to facilitate placement and will support the student's activities, training and experience, participation, and competency evaluation. Chosen activities will be based upon the students' general, academic course of study, and their specialization option of working with the chemically dependent population. Students will be required to journal and process their experiences. The following workplace issues will be reinforced: infectious diseases, legal/ethical, management of inter/intra personal crisis, diversity, interviewing, resume writing, and workplace etiquette. The guided external experiences may be paid or unpaid. Liability insurance, transportation, physical exam, documentation of required immunizations, CPR/First Aid, and medical insurance will be provided by the student. Prerequisites: Department Approval, DAAC 1319, PSYT 1329, Recommended Prerequisites: DAAC 1309, DAAC 1314.

**DAAC 1304 Pharmacology of Addiction** 2-2-3  
 Psychological, physiological, and sociological effects of mood altering substances and behaviors and their implications for the addiction process are discussed. Emphasis is placed on pharmacological effects of tolerance, dependency/withdrawal, cross addiction, and drug interaction. This course provides for basic mathematic/arithmetic competency as it applies to the study of drugs.

**DAAC 1307 Addicted Family Intervention** 2-2-3  
 An introduction to the family as a dynamic system focusing on the effects of addiction pertaining to family roles, rules, and behavior patterns. Discuss the impact of mood altering substances and behaviors and therapeutic alternatives as they relate to the family from a multicultural and transgenerational perspective.

**DAAC 1309 Assessment Skill of Alcohol and other Drug Addictions** 2-2-3  
 Examines procedures by which a counselor/program identifies and evaluates an individual's strengths, weaknesses, problems, and needs which will be used in the development of a treatment plan. Prepares the student to appropriately explain assessment results and individual rights to clients. Prerequisite: Departmental Approval. Recommended pre or co-requisite: DAAC 1319.

**DAAC 1311 Counseling Theories** 3-0-3  
 An introduction to major theories of various treatment modalities including Reality therapy, Psycho-Dynamic Therapy, grief therapy, Rational-Emotive Therapy, cognitive-behavioral approaches such as life skills training, behavior modification, and the introduction to experiential therapies as they relate to detoxification, residential, outpatient, and extended treatment.

**DAAC 1314 Dynamics of Group Counseling** 2-4-3  
 An introduction to the patterns and dynamics of group interactions across the life span. Focus includes group therapy, structure, types, stages, development, leadership, therapeutic factors, the impact of groups on the individual, group growth, and behavior. Effective group facilitation skills and techniques used to address special population issues and needs are covered. Effective case management and record keeping are addressed. Recommended pre or co-requisite: PSYT 1329.

**DAAC 1319 Introduction to Alcohol and other Drug Addictions** 2-4-3  
 Causes and consequences of addiction as they relate to the individual, family, community, and society are discussed. Response alternatives regarding intervention, treatment, education, and prevention are reviewed. Competencies and requirements for licensure in Texas are explained. Addiction issues related to diverse populations are presented.

**DAAC 1341 Counseling Alcohol and other Drug Addictions** 2-4-3  
 This course will focus on special skills and techniques in the application of counseling skills for the Alcohol and Other Drug (AOD) client. Design and utilization of treatment planning using a treatment team approach will be introduced. Confidentiality and ethical issues will be reviewed and practiced. Prerequisite: Departmental Approval, DAAC 1319, PSYT 1329, DAAC 1304, DAAC 1309. Pre or co-requisite DAAC 1311, PSYT 1321, DAAC 1167, DAAC 1314. Recommended Prerequisite: PSYT 2331, PSYT 1321.

**DAAC 2367 Practicum (or Field Experience) - Alcohol/ Drug Abuse Counseling** 1-21-3  
 An advanced type of health professions work based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. Direct supervision is provided by the clinical professional. This course provides for a supervised field placement experience, at an advanced level, in an agency serving a chemically dependent population. An individualized student plan will facilitate placement and will support the students' activities, training and experience, participation, and competency evaluation. The chosen site and activities will be based upon the students' general, academic course of study, and their specialization option of working with a chemically dependent population. Students will be required to process their experiences. The following workplace issues will be reinforced: competencies of the drug and alcohol abuse counselor, infectious diseases, legal/ethical, management of inter/intra personal crises, diversity, interviewing, resume writing, and workplace etiquette. The guided external experiences may be paid or unpaid. Liability insurance, transportation, physical exam, documentation of required immunizations, CPR/First Aid, and medical insurance will be provided by the student. Prerequisites: Department Approval, DAAC 1319, PSYT 1329, DAAC 1304, DAAC 1309, DAAC 1314, DAAC 1167, PSYT 2331. Recommended prerequisite: DAAC 1341, DAAC 1307, CHLT 1309, PSYT 1321, DAAC 1311, CMSW 1309.

## DEMR Diesel

### DEMR 1330 Steering and Suspension I 2-4-3

A study of design, function, maintenance, and repair of steering and suspension systems. Emphasis on troubleshooting and repair of failed components. Recommended prerequisite or co-requisite: DEMR 1401.

### DEMR 1401 Shop Safety and Procedures 3-3-4

A study of shop safety, rules, basic shop tools, and test equipment.

### DEMR 1405 Basic Electrical Systems 2-7-4

Basic principles of electrical systems of diesel powered equipment with emphasis on starters, alternators, batteries, and regulators. Recommended prerequisites or co-requisites: DEMR 1401 and 1406.

### DEMR 1406 Diesel Engine I 3-3-4

An introduction to the basic principles of diesel engines and systems. Recommended prerequisite or co-requisite: DEMR 1401.

### DEMR 1411 Diesel Engine Testing and Repair II 2-7-4

Coverage of testing and repairing diesel engines including related systems and specialized tools. Recommended prerequisites: DEMR 1401 and 1406.

### DEMR 1416 Basic Hydraulics 2-7-4

Fundamentals of hydraulics including components and related systems. Recommended prerequisite or co-requisite: DEMR 1401.

### DEMR 1417 Basic Brake Systems 2-6-4

Basic principles of brake systems of diesel powered equipment. Emphasis on maintenance, repairs, and troubleshooting. Recommended prerequisite or co-requisite: DEMR 1401.

### DEMR 1421 Power Train I 2-6-4

Fundamentals, repair, and theory of power trains including clutches, transmissions, drive shafts, and differentials. Emphasis on inspection and repair. Recommended prerequisite or co-requisite: DEMR 1401 and DEMR 1416.

### DEMR 1447 Power Train II 3-3-4

Continuation of fundamentals and theory of power train systems. Emphasis on disassembly, inspection, and repair of power train components. Recommended prerequisites: DEMR 1401, 1416 and 1421.

### DEMR 1449 Diesel Engine II 2-7-4

An in-depth coverage of disassembly, repair, identification, evaluation, and reassembly of diesel engines. Recommended prerequisites: DEMR 1401, 1406, 1471 and 2434.

### DEMR 1471 Basic Diesel Engine Tune-Up and Troubleshooting 2-7-4

This course covers basic theories, concepts, and skills for tune-up and troubleshooting procedures for diesel engines equipped with mechanical or hydraulic actuated fuel systems. Emphasis is placed on diagnostics and repair. Recommended prerequisites: DEMR 1401 and 1406.

### DEMR 2434 Advanced Diesel Tune-Up and Troubleshooting 2-6-4

Advanced concepts and skills required for tune-up and troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach. Recommended prerequisites: DEMR 1401, 1405, 1406, and 1471.

### DEMR 2488 Internship-Diesel Mechanics Technology/Technician 1-18-4

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and employer. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

## DFTG Computer-Aided Drafting and Design

### DFTG 1315 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 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 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 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 1458 Electrical/Electronics Drafting 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 2402 Machine Drawing 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 2417, or concurrent enrollment.

### DFTG 2410 Structural Drafting 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 3-3-4

Topics include pictorial drawing including isometrics, oblique, perspectives, charts, and graphs, shading, transfer lettering, and use of different media including pencil and ink. Prerequisite: ENGR 1304, DFTG 1405, or concurrent enrollment

### DFTG 2417 Descriptive Geometry 3-3-4

Examination of the graphical solution to problems involving points, lines, and planes in space. Prerequisite: ENGR 1304 or DFTG 1405.

**DFTG 2421 Topographical Drafting 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 2423 Pipe Drafting 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 2438 Final Project - General Drafting 3-3-4**

A general drafting course in which students participate in a simulated project. The process from conception to conclusion is studied. All work done in this class will typify actual industrial projects. An employment resume, cover letter, and portfolio will be completed as part of the course requirements. All projects will be completed with the use of Computer-Aided Drafting (AutoCAD). Prerequisites: Second semester Sophomore standing in the Drafting program.

**DFTG 2440 Solid Modeling/Design 3-3-4**

A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Prerequisite: DFTG 1409 and consent of the Department Chair.

## DS— Developmental Studies

The credit received from these courses is not transferable and cannot be applied towards degree completion.

**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 college and life. Emphases in this particular course will be 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.

**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. (Fort Polk, LA only.)

**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. 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 3-1-3**

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 0309 Fundamentals of Algebra 4-0-3**

This course is designed for the student who requires a flexible schedule and possesses the commitment and self-discipline to benefit from interactive on-line learning. Topics include operations on real numbers, linear equations and inequalities, exponents and polynomials, systems of linear equations, factoring, rational expressions, graphing and an introduction to functions. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: A course comparable to DSMA 0300 or appropriate test scores.

**DSMA 0310 Intermediate Algebra 4-0-3**

This course is designed for the student who requires a flexible schedule and possesses the commitment and self-discipline to benefit from interactive on-line learning. Topics include a continuation of rational expressions, radicals, rational exponents, quadratic equations and functions, exponential and logarithmic functions and complex numbers. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: A course comparable to DSMA 0309 or appropriate test scores.

**DSRE 0300 Developmental Reading I 2-2-3**

Developmental Reading I is designed to aid students in establishing and developing fundamental reading skills necessary for college reading and for life. This course was developed specifically for those who scored below 50 percent on the reading section of the college's placement test. Focus is on word attack skills, vocabulary development, basic comprehension skills to include stated and implied main idea and details, and fluency. A computer lab where students practice reading skills is required.

**DSRE 0301 Developmental Reading II 2-2-3**

Developmental Reading II is designed to aid students in developing and reinforcing the skills necessary for reading college-level materials; specifically those who scored between 50-69 percent on the reading section of the college's placement test or passed DSRE 0300. This course emphasizes vocabulary development, literal comprehension skills, critical reading and thinking skills, and fluency. A computer lab where students practice reading skills is required.

**DSRE 0302 Fundamentals of Reading I 3-0-3**

Fundamentals of Reading I is designed to aid students in establishing and developing fundamental reading skills necessary for college reading and for life. This course was developed specifically for those who scored below 50 percent on the reading section of the college's placement test. Focus is on word attack skills, vocabulary development, basic comprehension skills to include stated and implied main idea and details, and fluency. Includes all the objectives of DSRE 0300 without the additional laboratory reinforcement.

**DSRE 0303 Fundamentals of Reading II 3-0-3**

Fundamentals of Reading II is designed to aid students in developing and reinforcing the skills needed for reading college-level materials; specifically those who scored between 50-69 percent on the college placement reading section or passed DSRE 0300. This course emphasizes vocabulary development, literal comprehensions skills, critical reading and thinking skills, and fluency.

**DSRE 0311 Developmental Reading II 4-0-3**

Developmental Reading II is designed for the student who requires a flexible schedule and possesses the commitment and self discipline to benefit from interactive on-line learning. This course's purpose is to aid students in developing and reinforcing the skills needed for reading college-level materials; specifically those who scored between 50-69 percent on the college placement reading section or passed DSRE 0300. This course emphasizes vocabulary development, literal comprehension skills, critical reading and thinking skills, and fluency. A computer, internet connection, and designated course software to facilitate interactive learning must be available. Prerequisite: A course comparable to DSRE 0300 or appropriate test scores.

**DSWR 0100 Developmental Writing Laboratory 1-0-1**

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. Offered on the Fort Polk campus only.

**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. Offered on the Fort Polk campus only.

**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 emphasizes the organizational skills needed to write a basic essay.

**ECON Economics**

**ECON 2301 Principles of 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 Principles of 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.

**EECT Communications Electronics**

see also CETT, CPMT, ELMT, INTC and ITCC

**EECT 1474 Basic Communications Circuits 3-3-4**

An introduction to communications circuits used in both the two way and broadcast medium of transmission and reception with heavy emphasis on reception. Prerequisite: CETT 1429.

**EECT 1476 Digital Communications 3-3-4**

A broad coverage of digital communications including telephone data communications and voice synthesis. Prerequisite: CETT 1425 and CETT 1429.

**EECT 1491 Special Topics in Electrical, Electronic & Communications Engineering 3-3-4**

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. Prerequisite: CETT 1429 and CETT 1449.

**EECT 2439 Communications Circuits 3-3-4**

A study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. Discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers. Prerequisite: EECT 1474.

**ELMT Communications Electronics**

see also CETT, CPMT, EECT, INTC and ITCC

**ELMT 2437 Electronic Troubleshooting, Service, and Repair 3-3-4**

In-depth coverage of electronic systems, maintenance, troubleshooting, and repair. Topics include symptom identification, proper repair procedures, repair checkout, and preventative maintenance. Emphasis on safety and proper use of test equipment. May be offered as a capstone course. Recommended prerequisite: CETT 1425, CETT 1429, CETT 2445.

**ELPT Maintenance Technology**

see also CBFM, CNBT, CRPT, MBST, PFPB and WDWK

**ELPT 1411 Basic Electrical Theory 3-3-4**

An overview of the theory and practice of electrical circuits including calculations as applied to alternating and direct current.

**ELPT 1429 Residential Wiring 3-3-4**  
 Instruction in wiring methods used for single-family, two-family, and multi-family dwellings. Recommended prerequisite: ELPT 1411.

## EMSP Emergency Medical Technology

**EMSP 1108 Emergency Vehicle Operations 0-2-1**  
 Instruction, demonstration, and driving range practice to prepare drivers of emergency vehicles to operate their vehicles safely in the emergency and non-emergency mode.

**EMSP 1145 Basic Trauma Life Support 1-0-1**  
 Intense skill development in emergency field management, systematic rapid assessment, resuscitation, packaging, and transportation of patients. Includes experience necessary to meet initial certification requirements.

**EMSP 1147 Pediatric Advanced Life Support 1-0-1**  
 A course in a system of protocols for management of the pediatric patient experiencing difficulties in medical and/or trauma related emergencies.

**EMSP 1160 Clinical-Emergency Medical Technology/Technician 0-6-1**  
 A basic, intermediate, or advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience. Upon successful completion of this course and EMSP 1401, students are eligible to take the exam to be certified as an EMT-Basic. This course is only offered with EMSP 1401.

**EMSP 1166 Practicum/Field Experience-Emergency Medical Technology/Technician 0-7-1**  
 An intermediate or advanced type of health professions work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. Direct supervision is provided by the clinical professional, generally a clinical preceptor. A health practicum may be a paid or unpaid learning experience. Upon successful completion of this course, EMSP 1441 and EMSP 1355, students are eligible to take the exam to be certified as an EMT-I. This course is only offered with EMSP 1441 and EMSP 1355.

**EMSP 1167 Practicum/Field Experience-Emergency Medical Technology/Technician 0-8-1**  
 An intermediate or advanced type of health professions work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. Direct supervision is provided by the clinical professional, generally a clinical preceptor. A health practicum may be a paid or unpaid learning experience. This course is designed to meet Practicum requirements for EMSP 2444 and EMSP 2434. Prerequisites: Current CPR certification. co-requisites: EMSP 2444 and 2434. See also admission requirements.

**EMSP 1215 Single Lead ECG Interpretation 1-2-2**  
 An overview of cardiac anatomy, physiology and electrophysiology. Instruction and practice in the interpretation of single lead electrocardiograms, sinus atrial, junctional, ventricular, blocks, and paced arrhythmias are identified and their clinical significance is discussed.

**EMSP 1268 Practicum/Field Experience-Emergency Medical Technology/Technician 0-14-2**  
 An intermediate or advanced type of health professions work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience for which the student has already acquired the necessary theoretical knowledge and basic skills. Direct supervision is provided by the clinical professional, generally a clinical preceptor. A health practicum may be a paid or unpaid learning experience. Upon successful completion of this course and EMSP 2143, students are eligible to take the exam to be certified as an EMT-P by the Texas Department of Health and/or National Registry of EMT. Prerequisites: Current CPR certification. co-requisite: EMSP 2143. See also admission requirements.

**EMSP 1291 Special Topics in Emergency Medical Technology/Technician 2-0-2**  
 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.

**EMSP 1305 Emergency Care Attendant 2-3-3**  
 Basic first responder course in basic emergency medical care. Emphasis on requirements of national and state accrediting agencies.

**EMSP 1355 Trauma Management 2-3-3**  
 A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries. Upon successful completion of this course, EMSP 1441 and EMSP 1166, students are eligible to take the exam to be certified as an EMT-Intermediate. Prerequisites: Current CPR certification, EMSP 1401, EMSP 1160. See also admission requirements.

**EMSP 1401 Emergency Medical Technician - Basic 2-6-4**  
 Introduction to the level of Emergency Medical Technician (EMT) - Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services. Upon successful completion of this course and EMSP 1160, students are eligible to take the exam to be certified as an EMT-Basic by the Texas Department of Health and/or National Registry of EMT. Prerequisite: Current CPR certification. See also admission requirements.

**EMSP 1441 Emergency Medical Technician - Intermediate 2-6-4**  
 Introduction to the advanced life support program. Emphasis on the Department of Transportation Emergency Medical Technician (EMT) - Intermediate guidelines in all aspects of pre-hospital emergency care. Upon successful completion of this course, EMSP 1166 and EMSP 1355, students are eligible to take the exam to be certified as an EMT-Intermediate by the Texas Department of Health and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1401 and, EMSP 1160. See also admissions requirements.

**EMSP 2135 Advanced Cardiac Life Support 1-0-1**  
 Skill development for professional personnel practicing in critical care units, emergency departments, and paramedic ambulances. Establishes a system of protocols for management of the patient experiencing cardiac difficulties.

**EMSP 2143 Assessment Based Management 0-3-1**

The capstone course of the EMSP program. Designed to provide for teaching and evaluating comprehensive, assessment-based patient care management. Upon successful completion of this course and EMSP 1268, students are eligible to take the exam to be certified as an EMT-P by the Texas Department of Health and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 2330. co-requisite: EMSP 1268. See also admission requirements.

**EMSP 2147 Pediatric Education for Pre-Hospital Providers 1-0-1**

A course in a system of protocols for management of the pediatric patient experiencing difficulties in medical and/or trauma-related emergencies.

**EMSP 2300 Methods of Teaching Emergency Medical Service 2-2-3**

Instruction in teaching methodology for instructors of emergency medical services.

**EMSP 2330 Special Populations 2-2-3**

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients in nontraditional populations. Upon successful completion of this course, EMSP 2444, EMSP 2434, EMSP 1167, EMSP 2143 and EMSP 1268, students are eligible to take the exam to be certified as an EMT-P by the Texas Department of Health and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1167. See also admission requirements.

**EMSP 2338 EMS Operations 3-0-3**

A detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency. Prerequisites: Current CPR certification, EMSP 1401. co-requisite: EMSP 1441. See also admission requirements.

**EMSP 2434 Medical Emergencies 3-3-4**

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies. Upon successful completion of this course, EMSP 2444, EMSP 1167, EMSP 2330, EMSP 2143 and EMSP 1268, students will be eligible to take the exam to be certified as an EMT-P by the Texas Department of Health and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1401 and EMSP 1160. See also admissions requirements.

**EMSP 2444 Cardiology 3-3-4**

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. Upon successful completion of this course, EMSP 2434, EMSP 1167, EMSP 2330, EMSP 2143 and EMSP 1268, students will be eligible to take the exam to be certified as an EMT-P by the Texas Department of Health and/or National Registry of EMT. Prerequisites: Current CPR certification, EMSP 1401 and EMSP 1160. See also admission requirements.

**ENGL English**

**ENGL 1301 Composition 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. Prerequisite: DSWR 0302 or equivalent with a grade of "C" or better or appropriate test score(s).

**ENGL 1302 Composition 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, or equivalent, with a grade of "C" or above.

**ENGL 1312 Business Writing 3-0-3**

Instruction in grammar and diction, writing expository papers, writing effective business correspondence and reports, and oral presentations. Prerequisite: DSWR 0302 or equivalent with a grade of "C" or better or appropriate test score(s).

**ENGL 2307 Creative Writing I 3-0-3**

This course provides practical experience in the techniques of imaginative writing. It is designed to engage students in practical criticism and contemporary trends while emphasizing the development of creative skills. Students will receive guidance and instruction in the skills and craft necessary to construct successful fiction (short stories) and poetry. Prerequisites are ENGL 1301 and ENGL 1302, or equivalent, with an earned course grade of "C" or above.

**ENGL 2311 Technical and Business 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, or equivalent, with an earned course grade of "C" or above.

**ENGL 2322 British Literature I 3-0-3**

A survey of English literature from Beowulf to the major writers of the 18<sup>th</sup> Century. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis of the course is on individual selections themselves as outstanding expressions of the English literary heritage. The course employs critical reading, thinking, and writing skills in the analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with an earned course grade of "C" or above.

**ENGL 2323 British Literature II 3-0-3**

A survey of English literature from the early Romantic writers to the early Twentieth Century writers. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis of the course is on the individual selections themselves as outstanding expressions of the English literary heritage. The course employs critical reading, thinking, and writing skills in an analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with an earned course grade of "C" or above.

**ENGL 2327 American Literature I 3-0-3**

A survey of American literature from selected Pre-Colonial and Colonial literature to selected major writers of the American Renaissance period. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis of the course is on the individual selections themselves as outstanding expressions of our American literary heritage. The course employs critical reading, thinking, and writing skills in an analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with an earned course grade of "C" or above.



**ENGL 2328 American Literature II 3-0-3**

A survey of American literature beginning with Walt Whitman and ending with selected major writers from the present. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis is on the individual selections themselves as outstanding expressions of our American literary heritage. The course employs critical reading, thinking, and writing skills in an analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with an earned course grade of "C" or above.

**ENGL 2332 World Literature I 3-0-3**

A survey of the major works of selected world writers from Homer through the Renaissance period. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis is on the individual selections themselves as outstanding examples of world masterpieces. The course employs critical reading, thinking, and writing skills in an analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with an earned course grade of "C" or above.

**ENGL 2333 World Literature II 3-0-3**

A survey course of the major selected world writers from the Enlightenment to the Twentieth Century. Although careful attention is given to the historical, social, and intellectual developments that gave rise to the literature, the emphasis is on the individual selections themselves as outstanding examples of world masterpieces. The course employs critical reading, thinking, and writing skills in an analysis of a wide variety of selected readings. Prerequisites: ENGL 1301 and 1302, or equivalent, with an earned course grade of "C" or above.

**ENGR Engineering**

**ENGR 1201 Introduction to Engineering 2-0-2**

Introduction to engineering as a discipline and a profession. Includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefit of society. Prerequisite: MATH 1314 or equivalent with a grade of "C" or better.

**ENGR 1304 Engineering Graphics I 2-4-3**

Freehand and instrument drawing, dimensioning, fastening, pictorial methods, charts and graphs, projections drawing, geometry of graphical construction and an introduction to computer-aided drafting. Required for beginning engineering students.

**ENGR 1305 Engineering Graphics II 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.

**ENGR 2301 Engineering Mechanics I – Statics 4-0-3**

Calculus-based study of composition and resolution of forces, equilibrium of force systems, friction, centroids, and moments of inertia. Prerequisite: PHYS 2425. co-requisite: MATH 2414.

**ENGR 2302 Engineering Mechanics II – Dynamics 4-0-3**

Calculus-based study of dynamics of rigid bodies, force-mass-acceleration, work-energy, and impulse-momentum computation. Prerequisite: ENGR 2301 and MATH 2414.

**ENVR Environmental Science**

**ENVR 1401 Environmental Science I 3-3-4**

General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. Emphasis is placed on a global approach to principles and problems in our environment. Topics include: the importance of biodiversity, population dynamics; pest control; human population demographics; land use and abuse; weather; air and water pollution; water use and management; and various forms of conventional and sustainable energy resources. Lab includes methods of measurement, analysis and interpretation of environmental data; and certification for the Texas Watch Program through the Brazos River Authority.

**FIRT Fire Protection**

**FIRT 1301 Fundamentals of Fire Protection 3-0-3**

Study of the philosophy, history and fundamentals of public and private fire protection. Topics include statistics of fire and property loss, agencies involved in public and private protection, legislative development, departmental organization, training, and staffing.

**FIRT 1303 Fire and Arson Investigation I 3-0-3**

In-depth study of basic fire and arson investigation practices. Emphasis on fire behavior principles related to fire cause and origin determination.

**FIRT 1307 Fire Prevention Codes and Inspections 3-0-3**

Study of local building and fire prevention codes. Emphasis on fire prevention inspections, practices, and procedures.

**FIRT 1309 Fire Administration I 3-0-3**

Introduction to the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis on fire service leadership from the perspective of the company officer.

**FIRT 1311 Fire Service Hydraulics 3-0-3**

Study of water distribution systems and fire stream development as related to fire protection and suppression. Not offered in Texas.

**FIRT 1315 Hazardous Materials I 3-0-3**

Study of the chemical characteristics and behavior of various materials. Topics include storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation.

**FIRT 1319 Firefighter Health and Safety 3-0-3**

Study of firefighter occupational safety and health in emergency and non-emergency situations.

**FIRT 1329 Building Codes and Construction 3-0-3**

Examination of building codes and requirements, construction types, and building materials. Topics include walls, floorings, foundations, and various roof types and the associated dangers of each. Not offered in Texas.

**FIRT 1331 Firefighting Strategies and Tactics I 3-0-3**

Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of manpower and equipment to mitigate the emergency.

**FIRT 1333 Fire Chemistry I 3-0-3**

Introduction to the chemical nature and properties of inorganic compounds as related to the fire service. Topics include fundamental laws of chemistry, states of matter, gas laws, chemical bonding, and thermodynamics with applications to various industrial processes. Not offered in Texas.

**FIRT 1334 Fire Chemistry II 3-0-3**

Introduction to the chemistry of carbon compounds as related to the fire service with primary emphasis on the hydrocarbons. Topics include alcohols, phenols, halogen compounds, and ethers with application to various industrial processes. Not offered in Texas.

**FIRT 1338 Fire Protection Systems 3-0-3**

Study of fire detection, alarm, and extinguishing systems.

**FIRT 1345 Hazardous Materials II 3-0-3**

In-depth study of mitigation practices and techniques to effectively control hazardous material spills and leaks. Not offered in Texas.

**FIRT 1347 Industrial Fire Protection 3-0-3**

Study of industrial emergency response teams and specific concerns related to business and industrial facilities. Not offered in Texas.

**FIRT 1349 Fire Administration II 3-0-3**

In-depth study of fire service management as pertaining to budgetary requirements, administration, organization of divisions within the fire service, and relationships between the fire service and outside agencies. Not offered in Texas.

**FIRT 2331 Firefighting Strategies and Tactics II 3-0-3**

Continuation of Firefighting Strategies and Tactics I. Emphasis on use of incident command in large scale command problems and other specialized fire problems. Not offered in Texas.

**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 4-2-4**

Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: FREN 1411 with a grade of "C" or better.

**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, with a grade of "C" or better, 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 with a grade of "C" or better.

**GEOG Geography**

**GEOG 1300 Principles of Geography 3-0-3**

This is an introductory-level course that combines physical and cultural geography using a spatial 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 Physical Geography 3-0-3**

A course which examines the physical characteristics of the Earth's environment using maps as a primary tool for expressing location and interrelationships. Principle discussion topics are the atmosphere and oceans, weather, climate, environments of earth materials and vegetation, earth processes, 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 spatial 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 spatial interrelationships. An additional emphasis is the diversity of ideas and practices to be found in those regions.

**GEOL Geology**

**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, continental evolution, earthquakes, seismology, volcanoes, weathering, running water, ground water, mass wasting, and others. The study of regional 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, sedimentary processes, paleontology, geologic time, plate tectonics, and hypotheses of the Earth's origin are studied in the course. The study of local and regional fossil fauna and the opportunity for field observation and collection of rocks and the fossils are provided.

**GEOL 1405 Environmental Geology 3-2-4**

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.

**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 with a grade of "C" or better, or a "passing" score on the CTC German placement test.

**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 with a grade of "C" or better; or two years of high school German from an accredited high school; or a "high passing" score on the CTC German placement test.

**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 with a grade of "C" or better.

## GOVT Government

**GOVT 2301 American 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, interest groups, and political parties.

**GOVT 2302 American 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 public policy including defense and foreign relations.

**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.

## HAMG Hospitality Management

see also CHEF, IFWA, PSTR, RSTO and TRVM

**HAMG 1308 Introduction to the Hospitality Industry 3-0-3**  
 An introduction to lodging and food service operations. Topics include growth, development and organization of the lodging industry; growth, development, organization, structure, and management of food service operations; human resources, marketing, security, engineering, and maintenance of hospitality operations; and opportunities within the travel and tourism industry. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 1313 Front Office Procedures 3-0-3**  
 A study of the flow of activities and functions in today's lodging operation. Topics include a comparison of manual, machine-assisted, and computer-based methods for each front file function. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 1319 Computers in Hospitality 2-4-3**  
 An introduction to computers and their relationship as an information system to the hospitality industry. This course 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 on computer-based restaurant management.

**HAMG 1324 Hospitality Human Resource Management 3-0-3**  
 A study of the principles and procedures of managing people in the hospitality workplace. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 1340 Hospitality Legal Issues 3-0-3**  
 A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws. Successful completion of the National Restaurant Association certification exam is required. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 1342 Guest Room Maintenance 3-0-3**  
 Demonstrates the working relationship in the lodging industry between housekeeping and maintenance. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 2301 Principles of Food and Beverage Operations 3-0-3**  
 An introduction to food, beverage, and labor cost controls with an overview of the hospitality industry from procurement to marketing. Examination of cost components including forecasting, menu planning and pricing, logistical support, production, purchasing, and quality assurance. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 2307 Hospitality Marketing and Sales 3-0-3**  
 Identification of the core principles of marketing and their impact on the hospitality industry. Successful completion of the National Restaurant Association certification exam is required. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 2332 Hospitality Financial Management 3-0-3**  
 Methods and application of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 2337 Hospitality Facilities Management 1-5-3**  
 Identification of building systems, facilities management, security and safety procedures. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 2370 Hospitality Financial Management II 3-0-3**  
 This course serves as a bridge between basic accounting and managerial accounting courses. Covers such areas as specialized accounting for hotel revenue and expenses; periodic inventory accounting for food and beverage areas; hospitality payroll accounting; intangible assets; accounting for inventory, property and equipment; financial information systems; hotel departmental financial statements; the income statement, balance sheets and statement of cash flow; the analysis of financial statements; and interim and annual reports. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification. Prerequisite: HAMG 2332.

**HAMG 2372 Hospitality Industry Training 3-0-3**  
 This course provides a thorough look at training by addressing how to assess and analyze the training needs of new and established operations; design, implement, and evaluate training programs for non-management employees; manage the basic training functions; and train the trainer programs. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**HAMG 2388 Internship - Hospitality Administration and Management 1-16-3**

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience.

**HART Heating, Air Conditioning and Refrigeration**

**HART 1401 Basic Electricity for HVAC 3-3-4**

Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation.

**HART 1403 A/C Control Principles 3-3-4**

A basic study of HVAC and refrigeration controls; troubleshooting of control components; emphasis on use of wiring diagrams to analyze high and low voltage circuits; a review of Ohm's law as applied to air conditioning controls and circuits. Recommended prerequisite: HART 1401.

**HART 1407 Refrigeration Principles 3-3-4**

An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components and safety.

**HART 1441 Residential Air Conditioning 3-3-4**

A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. Recommended prerequisite or co-requisite: HART 1407.

**HART 1445 Gas and Electric Heating 3-3-4**

Study of the procedures and principles used in servicing heating systems including gas fired furnaces and electric heating systems.

**HART 2431 Advanced Electricity 3-3-4**

Advanced electrical instruction and skill building in installation and servicing of air conditioning and refrigeration equipment including detailed instruction in motors and power distribution and introduction to solid state devices. Recommended prerequisites: HART 1401 and HART 1403.

**HART 2436 Air Conditioning Troubleshooting 3-3-4**

An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests. Recommended prerequisites: HART 1401, 1403, 1407, 1441, and 2442.

**HART 2441 Commercial Air Conditioning 3-3-4**

A study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. Recommended prerequisites: HART 1401 and HART 1407.

**HART 2442 Commercial Refrigeration 3-3-4**

Theory and practical application in the maintenance of commercial refrigeration; medium and low temperature applications and ice machines. Recommended prerequisites: HART 1401 and HART 1407.

**HART 2445 Residential Air Conditioning System Design 3-3-4**

A study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. Recommended prerequisite: HART 1407.

**HART 2449 Heat Pumps 3-3-4**

A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems. Recommended prerequisites: HART 1403 and HART 1441.

**HART 2471 Advanced Heat Pumps 3-3-4**

An introduction to geothermal heat pumps, polyethylene butt and socket fusion, geothermal applications, ground heat exchangers (vertical, horizontal and slinky loops), flow controls, system design, troubleshooting, repair and system service. Recommended prerequisites: HART 2449 and 2431.

**HART 2488 Internship - Heating, A/C, Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR) 1-18-4**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and employer. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

**HIST History**

**HIST 1301 United States History I 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 United States History II 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 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 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 Revolution 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.

**HRPO Business Administration and Management**  
see also BMGT, BUSG and MRKG

**HRPO 1311 Human Relations 3-0-3**  
Practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment.

**HRPO 2301 Human Resource Management 3-0-3**  
Behavioral and legal approaches to the management of human resources in organizations.

**HUMA Humanities**

**HUMA 1315 Fine Arts Appreciation 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. Prerequisite: None

**IFWA Hospitality Management**  
see also CHEF, HAMG, PSTR, RSTO and TRVM

**IFWA 1318 Nutrition for the Food Service Professional 3-0-3**  
An introduction to nutrition including nutrients, digestion and metabolism, menu planning, recipe modification, dietary guidelines and restrictions, diet and disease, and healthy cooking techniques. National Restaurant Association (NRA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**IMED Computer Science**  
see also INEW, ITNW, ITSC, ITSE, ITSW, ITSY

**IMED 2409 Internet Commerce 3-3-4**  
An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Topics include database technology, creating web sites in order to collect information, performing on-line transactions, and generating dynamic content. Prerequisite: ITNW 1437, or ITSC 1409, or BCIS 1405.

**INEW Computer Science**  
see also IMED, ITNW, ITSC, ITSE, ITSW, ITSY

**INEW 2434 Advanced Web Page Programming 3-3-4**  
Advanced applications for Web authoring. Topics may include Perl Scripts, Common Gateway Interface (CGI), Database Interaction, Active Server Pages, Java Applets, Javascripts, tables, HTML, and/or interactive elements. Prerequisite: ITSE 2402 and ITSE 2413.

**INTC Computer Electronics Technology**  
See also CETT, CPMT, EECT, ELMT and ITCC

**INTC 1307 Electronic Test Equipment 2-4-3**  
A study of the theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments. Emphasis on accuracy and limitations of instruments and calibration techniques.

**ITAL Italian**

**ITAL 1311 Beginning Italian I 3-0-3**  
This course is designed to help learners build proficiency in Italian and appreciation for the Italian language. It will also help students to develop an understanding of the Italian culture while providing contexts that reinforce the usefulness of the Italian language while living and traveling in Italy. This course is only available, under contract, to the Navy Pace Campus.

**ITAL 1312 Beginning Italian II 3-0-3**  
This course is a continuation of ITAL 1311, Beginning Italian I. This course will build upon skills developed in Beginning Italian I, with continued emphasis on understanding Italian culture. Prerequisite: ITAL 1311. This course is only available, under contract, to the Navy Pace Campus.

**ITNW Computer Science**  
see also IMED, INEW, ITSC, ITSE, ITSW, ITSY

**ITNW 1425 Fundamentals of Networking Technologies 3-3-4**  
Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. Prerequisite: ITSC 1405 or ITSC 1409.

**ITNW 1437 Introduction to the Internet 3-3-4**  
Introduction to the Internet with emphasis on using the World Wide Web to locate, transfer, and publish information. Survey of emerging technologies on the Internet. Prerequisite: None.

**ITNW 2405 Network Administration 3-3-4**  
Topics include network components, user accounts and groups, network file systems, file system security, and network printing. Prerequisite: ITSC 1405.

**ITNW 2435 Troubleshooting and Support 3-3-4**  
Troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research techniques, available resources, and network management hard/software. Prerequisite: ITNW 2405 and ITNW 1425.

**ITSC Computer Science**  
see also IMED, INEW, ITNW, ITSE, ITSW, ITSY

**ITSC 1301 Introduction to Computers 3-1-3**  
Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Explores integration and applications in business and other segments in society. Fundamentals of computer problem-solving and programming may be discussed and applied. Examines applications and software relating to a specific curricular area. Prerequisite: None

**ITSC 1405 Introduction to PC Operating Systems 3-3-4**  
A study of personal computer operating systems. Topics include installation and configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. Prerequisite: eight hours of computer science courses.

**ITSC 1409 Integrated Software Applications I 3-3-4**  
 Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. Prerequisite: None.

**ITSC 1411 AS/400 Operating System I 3-3-4**  
 A study of the AS/400 operating system including multi-user concepts, terminal emulation, use of system editor, basic AS/400 menus, commands, and help screens. Topics include introductory system management concepts and file management. Prerequisite: 8 semester hours in computer science courses.

**ITSC 1413 Internet/Web Page Development 3-3-4**  
 The student will identify basic Internet concepts and terminology; use electronic communication methods; collect and evaluate research data using the Internet; and design, create, organize, and publish web pages and sites. Prerequisite: ITSC 1409

**ITSC 1492 Special Topics in Management Information Systems and Business Data Processing, General 1-6-4**  
 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. Prerequisite: 8 semester hours of computer science courses and consent of the Department Chair.

**ITSC 2439 Personal Computer Help Desk 3-3-4**  
 Diagnosis and solution of user hardware and software related problems with on-the-job projects in either a Help Desk lab or in short-term assignments for local business. Prerequisite: 12 hours of computer science courses.

**ITSC 2486 Internship - Computer and Information Sciences, General 1-18-4**  
 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: 24 semester hours of computer science.

**ITSE Computer Science**  
 see also IMED, INEW, ITNW, ITSC, ITSW, ITSY

**ITSE 1191 Special Topics in Computer Programming 0-3-1**  
 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. Prerequisite: Completion of at least one mainframe programming course or departmental approval.

**ITSE 1402 Introduction to Computer Programming 3-3-4**  
 Introduction to computer programming with emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Prerequisites: none.

**ITSE 1414 Introduction to RPG Programming 3-3-4**  
 Introduction to computer programming using RPG. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Prerequisites: ITSE 1402 and ITSC 1411.

**ITSE 1418 Introduction to COBOL Programming 3-3-4**  
 Introduction to computer programming using COBOL. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Prerequisites: ITSE 1402.

**ITSE 1422 Introduction to C Programming 3-3-4**  
 Introduction to programming using C. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Prerequisite: (ITSC 1409 and COSC 2405) or (BCIS 1405 and COSC 2425).

**ITSE 1431 Introduction to Visual BASIC Programming 3-3-4**  
 Introduction to computer programming using Visual BASIC. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Prerequisite: None.

**ITSE 1450 System Analysis and Design 3-3-4**  
 Comprehensive introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools. Prerequisites: Must have 16 semester hours of computer science courses.

**ITSE 1491 Special Topics in Computer Programming 1-6-4**  
 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. Prerequisites: 8 semester hours of computer science course work and departmental approval.

**ITSE 2402 Intermediate Web Programming 3-3-4**  
 Intermediate applications for web authoring. Topics may include server side include (SSI), Perl, HTML, Java, Script, and/or ASP. Prerequisite: ITSC 1413

**ITSE 2413 Web Authoring 3-3-4**  
 Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Prerequisites: (ITSC 1409 and ITSC 1413) OR (ITSW 1401 and ITSC 1413).

**ITSE 2417 JAVA Programming 3-3-4**  
 Introduction to JAVA programming with object-orientation. Emphasis on the fundamental syntax and semantics of JAVA for applications and web applets. Prerequisite: ITSE 1431

**ITSE 2431 Advanced C++ Programming 3-3-4**  
 Further application of C++ programming techniques including subjects such as file access, abstract data structures, class modeling, and other object oriented programming. Prerequisite: ITSE 1422.

**ITSE 2451 Advanced COBOL Programming 3-3-4**  
 Further applications of programming techniques using COBOL, including file access methods, data structures and modular programming, program testing and documentation. Prerequisites: ITSE 1418.

**ITSE 2486 Internship - Computer Programming 1-18-4**  
 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisites: 24 hours in computer science courses.

## ITSW Computer Science

see also IMED, INEW, ITNW, ITSC, ITSE, ITSY

### ITSW 1401 Introduction to Word Processing 3-3-4

An overview of the production of documents, tables, and graphics. Prerequisites: none.

### ITSW 1404 Introduction to Spreadsheets 3-3-4

Instruction in the concepts, procedures, and importance of electronic spreadsheets. Prerequisites: none.

### ITSW 1407 Introduction to Database 3-3-4

Introduction to database theory and the practical applications of a database. Prerequisites: ITSW 1401 OR ITSW 1404 OR ITSC 1409.

### ITSW 2486 Internship - Data Processing Technology/ Technician 1-18-4

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience. Prerequisites: 24 hours in computer science courses.

## ITSY Computer Science

see also IMED, INEW, ITNW, ITSC, ITSE, ITSW

### ITSY 2400 Operating System Security 3-3-4

Safeguard computer operating systems by demonstrating server support skills, and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards. Prerequisite: 15 semester credit hours of computer science courses or ITSC 1405.

## JAPN Japanese

### JAPN 1311 Beginning 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 Beginning 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 with a grade of "C" or better.

### 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 with a grade of "C" or better.

### 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. Prerequisite JAPN 1411 and 1412 with a grade of "C" or better.

## LGLA Paralegal/Legal Assistant

### LGLA 1303 Legal Research 3-0-3

This course provides a working knowledge of the fundamentals of effective legal research. Topics include law library techniques, computer assisted legal research, briefs, and legal memoranda.

### LGLA 1307 Introduction to Law and the Legal Profession 3-0-3

This course provides an overview of the law and the legal professions. Topics include legal concepts, systems, and terminology; ethical obligations and regulations; professional trends and issues with particular emphasis on the paralegal.

### LGLA 1317 Law Office Technology 2-2-3

This course introduces computer technology and its applications within the law office. Topics include the use of computer technology in the delivery of legal services with particular emphasis on the paralegal's role. Lab included. Recommended co-requisite: ITSW 1401.

### LGLA 1321 Military Law I 3-0-3

This course presents an overview of the military legal system including an introduction to the Uniform Code of Military Justice, military regulations, and procedures involved in military law. A breakdown of the organization and personnel of the Judge Advocate General's Corps is also included. National security issues are addressed, including cases with the war on terrorism.

### LGLA 1343 Bankruptcy 3-0-3

This course presents fundamental concepts of bankruptcy law and procedure with emphasis on the paralegal's role. Topics include individual and business liquidation and reorganization.

### LGLA 1345 Civil Litigation 3-0-3

This course presents fundamental concepts and procedures of civil litigation with emphasis on the paralegal's role. Topics include pretrial, trial, and post trial phases of litigation. Prerequisites: LGLA 1307 and (LGLA 1317 is also recommended for students taking this course through online delivery).

### LGLA 1349 Constitutional Law 3-0-3

This course provides an overview of the United States Constitution and its articles, amendments, and judicial interpretations. Topics include separation of powers, checks and balances, governmental structures and process, and individual rights in relation to government.

### LGLA 1351 Contracts 3-0-3

This course presents fundamental concepts of contract law with emphasis on the paralegal's role. Topics include formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code. Prerequisite: LGLA 1307 and (LGLA 1317 is also recommended for students taking this course through online delivery).

### LGLA 1353 Wills, Trust and Probate Administration 3-0-3

This course presents fundamental concepts of the law of wills, trusts, and probate administration with emphasis on the paralegal's role. Recommended co-requisite: LGLA 1345.

### LGLA 1355 Family Law 3-0-3

This course presents fundamental concepts of family law with emphasis on the paralegal's role. Topics include formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship.

**LGLA 1357 Juvenile Law 3-0-3**

This course presents fundamental concepts of juvenile law with emphasis on the paralegal's role. Topics include differences between the criminal and juvenile justice systems, detention, adjudication and certification procedures, and related issues within the public education system. Prerequisites: LGLA 1307 and LGLA 1355.

**LGLA 1370 Elder Law 3-0-3**

Students will be introduced to topics in the law affecting older persons. Such topics as financial and estate planning, health care, personal planning and protection, and consumer protection will be covered in the course.

**LGLA 1391 Special Topics in Paralegal/Legal Assistance 3-0-3**

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.

**LGLA 2303 Tort and Personal Injury Law 3-0-3**

This course presents fundamental concepts of tort law with emphasis on the paralegal's role. Topics include intentional torts, negligence, and strict liability.

**LGLA 2307 Law Office Management 3-0-3**

This course presents the fundamentals of law office management and organization including basic principles and structure of management, administrative and substantive systems in the law office, and law practice technology. Recommended prerequisite: LGLA 1307.

**LGLA 2309 Real Property 3-0-3**

This course presents fundamental concepts of real property law with emphasis on the paralegal's role. Topics include the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents.

**LGLA 2311 Business Organizations 3-0-3**

This course presents basic concepts of business organizations with emphasis on the paralegal's role. Topics include law of agency, sole proprietorships, forms of partnerships, corporations, and other emerging business entities. Recommended prerequisite LGLA 1351.

**LGLA 2313 Criminal Law and Procedure 3-0-3**

This course introduces the criminal justice system including procedures from arrest to final disposition, principles of federal and state law, and the preparation of pleadings and motions. Prerequisite: LGLA 1307.

**LGLA 2321 Military Law II 3-0-3**

This course presents an in-depth look at the operation and management of military law. Topics include detailed coverage of criminal law, claims, military administrative law, legal assistance, and civil law as it applies to the military.

**LGLA 2331 Advanced Legal Research and Writing 3-2-3**

This course builds upon the skills acquired in prior legal research and writing courses including computerized research techniques and preparation of complex legal documents such as briefs, legal office memoranda, and citation forms. Prerequisite: LGLA 1303.

**LGLA 2433 Advanced Legal Document Preparation 3-3-4**

Preparation of legal documents based on hypothetical fact situations drawn from various areas including real estate, family law, contracts, litigation, and business organizations (lab included). This is a capstone course for advanced students and requires department consent.

**LGLA 2480 Cooperative Education - Paralegal/Legal Assistant 1-21-4**

An advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. This is a paid experience. This is a capstone course for advanced students and requires departmental consent.

**LGLA 2488 Internship- Paralegal/Legal Assistant 1-18-4**

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience. This is an unpaid experience. This is a capstone course for advanced students and requires department consent.

**MATH Mathematics**

**MATH 1314 College Algebra 3-0-3**

A study of relations and functions, polynomial functions and equations of degree higher than two, exponential and logarithmic functions and equations, matrices, and determinants, sequences and series, the binomial theorem, and mathematical induction. This course meets the college core requirement and is recommended for students planning to transfer to bachelor's degree programs. Prerequisites: DSMA 0303 or equivalent with a grade of "C" or better or acceptable evaluation scores.

**MATH 1316 Plane Trigonometry 3-0-3**

Topics include trigonometric functions, radian and degree measure, circular functions, solving right and oblique triangle problems, deriving and verifying trigonometric identities, inverse trigonometric functions, and solving conditional equations. Prerequisites: DSMA 0303 or equivalent with a grade of "C" or higher or acceptable evaluation scores.

**MATH 1324 Mathematics for Business and Social Sciences I (Finite Mathematics) 3-0-3**

Topics include systems of linear equations, linear programming, and the simplex method, set theory, counting techniques, combinatorics, probability, statistics, and functions. Prerequisites: Acceptable score on the CTC approved assessments, or DSMA 0303 or equivalent with a grade of "C" or higher, or MATH 1314. This course is not above the level of College Algebra and does not satisfy the CTC Core Curriculum mathematics (020) requirements for AA or AS degrees.

**MATH 1325 Mathematics for Business and Social Sciences I (Business Calculus) 3-0-3**

Topics include elementary, differential and integral calculus that apply to business and economics. Prerequisites: MATH 1314 or MATH 1324 with a grade of "C" or better.

**MATH 1332 Contemporary Mathematics 3-0-3**

Topics include sets, logic, number theory, geometric concepts, consumer finance, and an introduction to probability and statistics. Prerequisite: Passing score on the CTC approved assessments or DSMA 0301. This course is for non-mathematics, non-science, and non-business students seeking mathematics credit for an AAS degree only. This course is not above the level of College Algebra and does not satisfy the CTC Core Curriculum mathematics (020) requirements for AA or AS degrees.



**MATH 1342 Elementary Statistical Methods 3-0-3**

Topics include the collecting, organizing, and displaying of data; measures of central tendency, measures of variation, histograms, probability; probability distributions, binomial distributions, normal distributions, linear regression and their applications. Prerequisites: Acceptable score on the CTC approved assessments, or DSMA 0301 or equivalent with a grade of "C" or better. This course is not above the level of College Algebra and does not satisfy the CTC Core Curriculum mathematics (020) requirements for AA or AS degrees.

**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. Roosevelt Roads Only

**MATH 2318 Linear Algebra 3-0-3**

An introductory course in linear algebra covering vector spaces, linear transformations, matrices, systems of linear equations. Prerequisite: MATH 2414 with a grade of "C" or higher.

**MATH 2320 Differential Equations 3-0-3**

First and second order differential equations and their applications. Laplace Transforms, Fourier Series, and their applications. Prerequisite: MATH 2414 with a grade of "C" or higher.

**MATH 2412 Precalculus Math 4-0-4**

Topics include applications of algebra and trigonometry to the study of elementary functions and their graphs including polynomial, rational, exponential, logarithmic, and trigonometric functions. Prerequisite: MATH 1314 with a grade of "C" or better. (A previous study of trigonometry is helpful but not required.)

**MATH 2413 Calculus I 3-1-4**

A first course in differential calculus with emphasis on the limit definitions of derivatives and integrals, applications of derivatives. Derivatives and integrals of the trigonometric functions and their inverses, the hyperbolic functions, exponential, logarithmic, and inverse functions. Prerequisites: MATH 1314 and MATH 2412 with a grade of "C" or higher.

**MATH 2414 Calculus II 3-1-4**

A second course in differential and integral calculus. Topics include applications of integration, techniques of integration, infinite series, conics, parametric equations, polar coordinates, vectors, and the geometry of spaces. Prerequisites: MATH 2412 and MATH 2413 with a grade of "C" or higher.

**MATH 2415 Calculus III 3-1-4**

A third course in differential and integral calculus. Topics include vector-valued functions, functions of several variables, multiple integrations, and vector analysis. Prerequisites: MATH 2414 with a grade of "C" or higher.

**MBST Maintenance Technology**

see also CBFM, CBPT, ELPT, PFPB and WDWK

**MBST 1507 Masonry I 2-7-5**

Introduction to masonry including safety, tools and equipment, masonry materials, theory, terminology, federal and state guidelines, building plans, mortar mixing and spreading, and the fundamentals of laying bricks and block. Recommended prerequisite or co-requisite: CRPT 1429.

**MRKG Business Administration and Management  
see also BMGT, BUSG and HRPO**

**MRKG 1302 Principles of Retailing 3-0-3**

Introduction to the retailing environment and its relationship to consumer demographics, trends, and traditional/nontraditional retailing markets. The employment of retailing techniques and the factors that influence modern retailing.

**MRKG 1311 Principles of Marketing 3-0-3**

Introduction to basic marketing functions; identification of consumer and organizational needs; explanation of economic, psychological, sociological, and global issues; and description and analysis of the importance of marketing research.

**MRKG 2333 Principles of Selling 3-0-3**

Overview of the selling process. Identification of the elements of the communication process between buyers and sellers and examination of the legal and ethical issues of organizations which affect salespeople.

**PFPB Maintenance Technology**

see also CBFM, CNBT, CRPT, ELPT, MBST and WDWK

**PFPB 2409 Residential Construction Plumbing I 3-3-4**

Skill development in the procedures and techniques employed by a plumber in the rough-in and top-out stages of a new home or the remodeling of an older home. Recommended prerequisite or co-requisite: CRPT 1429.

**PFPB 2445 Residential Construction Plumbing II 3-3-4**

In-depth instruction in the setting of residential bathroom and kitchen plumbing fixtures. Recommended prerequisite: PFPB 2409.

**PHED Physical Education**

**PHED 1100 Football and Basketball 0-3-1**

**PHED 1101 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 1106 Beginning Swimming 0-3-1**

**PHED 1107 Beginning Tennis 0-3-1**

**PHED 1108 Beginning Golf 0-3-1**

**PHED 1110 Karate I 0-3-1**

**PHED 1114 Volleyball 0-3-1**

**PHED 1115 Basketball 0-3-1**

**PHED 1116 Fitness Walking 0-3-1**

**PHED 1118 Jogging 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 1129 Advanced Badminton 0-3-1**

**PHED 1131 Aerobics 0-3-1**

**PHED 1133 Weight Training 0-3-1**

**PHED 1136 Lifetime Fitness 0-3-1**

<b>PHED 1140 Karate II</b>	<b>0-3-1</b>
<b>PHED 1141 Intermediate Swimming</b>	<b>0-3-1</b>
<b>PHED 1142 Beginning Ballet</b>	<b>0-3-1</b>
<b>PHED 1143 Jazz Dance</b>	<b>0-3-1</b>
<b>PHED 1144 Yoga I</b>	<b>0-3-1</b>
<b>PHED 1145 Jujutsu</b>	<b>0-3-1</b>
<b>PHED 1153 Lifeguard Training</b>	<b>0-3-1</b>

**PHED 1130 Physical Conditioning 0-3-1**  
 A course which introduces the student to the health-related components of physical fitness. Emphasis is on developing a personal fitness program based on sound physiological principles.

**PHED 1138 Rhythmic Aerobics 0-3-1**  
 This course is designed to improve cardiovascular conditioning through the use of musical movement. Both low-impact aerobic dance and step-aerobics will be used to improve cardiorespiratory functioning.

**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 1158 Aquatic Fitness 0-3-1**  
 This course is designed to promote fitness through the use of water-related activities compatible with a pool environment. Emphasis is on water resistance exercises, lap swimming, and a variety of aquatic games. The class is open to both swimmers and non-swimmers.

**PHED 1159 Water Aerobics 0-3-1**  
 This course is designed to promote cardiorespiratory conditioning through active participation in a wide variety of activities such as water walking, jogging, and rhythmic aerobics, and water resistance exercise. The course is open to both swimmers and non-swimmers.

**PHED 1160 Beginning Casting and Angling 0-3-1**  
 This course will include the fundamentals of bait casting, spinning, and spin casting. This course covers basic knowledge and understanding of angling techniques and concepts.

**PHED 1301 Introduction Physical Fitness and Sport 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 Personal/Community Health I 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 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 I 3-0-3**  
 Theory and practice in techniques of officiating.

**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 Introduction to 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 1316 History of Religions I 3-0-3**  
 In a historical survey of major religions this course focuses on the history and literature of Ancient Judaism during the Old Testament period emphasizing its development of social, political, and religious institutions and ideas.

**PHIL 1317 History of Religions II 3-0-3**  
 In a historical survey of major religions this course focuses on the history and literature of Early Christianity during the New Testament period emphasizing its origin, development, and expansion of religious institutions and ideas.

**PHIL 2303 Introduction to 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 philosophical theories concerning the organization of societies and the role and scope of government.

**PHYS Physical Science**

**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. This course is only available, under contract, to the Navy Pace Campus.

**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. Only offered as a telecourse.

**PHYS 1401 College Physics I 3-3-4**

This is the first part of a one-year algebra-based physics course. This course includes the fundamentals of classical Mechanics, Thermal Physics, and Wave Motion. The student will be introduced to the basic principles of linear and rotational Kinematics and Dynamics, Newton's laws of motion, work and Energy, Impulse and Momentum, Elasticity, Simple Harmonic Motion, Fluids, Temperature and Heat, The Transfer of Heat, The Ideal Gas Laws and Kinetic Theory, Thermodynamics, Waves and Sound, Linear Superposition and Interference Phenomena. This is a required course for students who plan to major in Medicine, Dentistry, Veterinary Science, Pharmacy, and all other Biological or Health science disciplines. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course includes three hours of lecture and three hours of laboratory per week, usually offered in the fall and summer semesters. Prerequisite: MATH 1314 or concurrent enrollment.

**PHYS 1402 College Physics II 3-3-4**

This is the second part of a one-year algebra-based physics course. This course includes the basic principles of Electricity and Magnetism, Light and Optics, and modern advances in physics, namely, relativity, Atomic and Nuclear Physics. The topics covered in this course are as follows: Electrostatics (Electric forces, Electric fields and Electric Potentials); Electric Circuits, (DC and AC); Magnetic Forces and Magnetic Field; Electromagnetic Induction and Electromagnetic Waves; Light (Geometrical and Wave Optics); special Relativity; The Nature of the Atoms; Nuclear Physics and Radioactivity. This is a required course for students who plan to major in any Health science disciplines. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course includes three hours of lecture and three hours of laboratory per week, usually offered in the spring semester only. Prerequisite: PHYS 1401 or consent of the Department Chair.

**PHYS 1405 Elementary Physics I 3-3-4**

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. Offered at C&I locations only.

**PHYS 1411 Introductory Astronomy I 3-2-4**

This course is an introduction to Astronomy. The approach is very qualitative, but simple mathematics skills are required. The course is designed to explain the origin of the Solar System including the Sun and its nine planets, and smaller bodies - satellites (moon) orbiting the planets, asteroids, and comets. The students are also exposed to the basic idea of the function of a telescope. Planetarium and Observatory are used extensively. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course is structured around the lecture-lab format (i.e., depending on the topic, it may be necessary to do a hands-on activity before lecturing on the concepts). The class meets twice a week, three hours per day. Prerequisite: None.

**PHYS 1412 Introductory Astronomy II 3-2-4**

This course is designed to give an overview of the visible universe. The objective throughout this course is to explain how astronomers know the many curious things they have learned about our universe. It brings the universe alive, in a sense, by showing the drama of the birth, evolution, and death of stars. What is the universe? Did the universe have a beginning? Will the universe last forever? These cosmological questions are answered in a qualitative way. The chances of life elsewhere in the universe, and how we might know about it are discussed. Planetarium and Observatory are used extensively. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course is structured around the lecture-lab format (i.e., depending on the topic, it may be necessary to do a hands-on activity before lecturing on the concept). The class meets twice a week, three hours per day. Prerequisite: None.

**PHYS 1415 Physical Science I 3-3-4**

This is an introductory course on Physical Science for the first year non-science majors; strongly recommended for students in teacher training program. It is designed to provide skills needed for success in other science classes and for improving science literacy. The course emphasizes the basic concepts in Physics, Chemistry, Earth Science, and Astronomy. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course is structured around the lecture-lab format (i.e., depending on the topic, it may be necessary to do a hands-on activity before lecturing on the concept). The class meets twice a week, three hours per day. Prerequisite: None.

**PHYS 2425 University Physics I 3-3-4**

This is the first part of a one-year calculus-based physics course. It includes the materials from kinematics to special relativity. This course presents the fundamental principles of classical Mechanics, Heat and Thermodynamics, and Waves and Oscillations. It presumes that the student is now taking or has already taken calculus, but a modest knowledge of algebra, geometry and trigonometry is required. Whatever calculus is required will be included as the need arises. The student will be introduced to the basic principles of Vector algebra, Kinematics and Dynamics of Motion, Newton's laws, Work and Energy, Impulse and Momentum, Elasticity, Simple Harmonic Motion, Fluids, Temperature and Heat, The Transfer of Heat, The Ideal Gas Laws and Kinetic Theory, Thermodynamics, Waves and Oscillation, Linear Superposition and Interference Phenomena, Sound Waves, Special Theory of Relativity. This is a required course for students who plan to major in Engineering, Computer Science and in any subjects of Physical Science. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course includes three hours of lecture and three hours of laboratory per week, usually offered in the fall semester only. Prerequisite: MATH 2413 or concurrent enrollment.

**PHYS 2426 University Physics II 3-3-4**

This is the second part of a one-year calculus-based physics course and it includes the materials from Electrostatics to Atomic and Nuclear Physics. It presumes that the student is now taking or has already taken calculus, but a modest knowledge of algebra, geometry, and trigonometry is required. Whatever calculus is required will be included as the need arises. The student will be introduced to the basic principles of Electricity, Magnetism, Electromagnetic Waves, Properties of Light, Optical Devices, and the Nature of Atoms, Molecules, and Nucleus. This is a required course for students who plan to major in Engineering, Computer Science, and in any subjects of Physical Science. Methods of instruction include practical laboratory experiments, application of modern technology, and guided discussions. The course includes three hours of lecture and three hours of laboratory per week, usually offered in the spring semester only. Prerequisite: PHYS 2425 or consent of the Department Chair.

## POFI Office Technology see also POFM and POFT

**POFI 1301 Computer Applications I 2-4-3**

Overview of computer applications including current terminology and technology. Introduction to computer hardware, software applications, and procedures.

**POFI 1349 Spreadsheets 2-4-3**

In-depth coverage in the use of a spreadsheet software application. Introduction to a computer application course or equivalent recommended.

**POFI 1481 Cooperative Education - Business/  
Office Automation/Technology/Data 1-21-4**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Department Approval required.

**POFI 2301 Word Processing 2-4-3**

In-depth coverage of word processing software application. Prerequisites: Keyboarding proficiency recommended.

**POFI 2331 Desktop Publishing for the Office 2-4-3**

In-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis on layout techniques, graphics, and multiple page displays. Keyboarding and word processing skills or concurrent enrollment in word processing course recommended.

**POFI 2340 Advanced Word Processing 2-4-3**

Continuation of the study of word processing including advanced applications in merging, macros, graphics, desktop publishing, and extensive formatting for technical documents. Prerequisites: Keyboarding and word processing skills recommended.

**POFI 2386 Internship - Business/Office Automation/  
Technology/Data Entry 2-7-3**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Completion of course requires 144 contact hours as well as strong keyboarding/word processing proficiency and written communication skills. Concurrent enrollment in or completion of first year Office Technology courses recommended.

**POFI 2387 Internship - Business/Office Automation/  
Technology/Data Entry 2-7-3**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Completion of course requires 144 contact hours as well as strong keyboarding/word processing proficiency and written communication skills. Concurrent enrollment in or completion of second year Office Technology courses recommended.

**POFI 2481 Cooperative Education - Business/Office  
Automation/Technology/Data 1-21-4**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: POFI 1481 or equivalent. Departmental approval required.

**POFT Office Technology  
see also POFI and POFM**

**POFT 1301 Business English 2-4-3**

Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business. Keyboarding skills recommended.

**POFT 1309 Administrative Office Procedures I 2-4-3**

Study of current office procedures including telephone skills, time management, travel and meeting arrangements, mail processing, and other duties and responsibilities in an office environment. Keyboarding skills or current enrollment in a keyboarding course required.

**POFT 1319 Records and Information Management I 2-4-3**

Introduction to basic records and information management. Includes the life cycle of a record, manual and electronic records management, and basic filing procedures and rules. Keyboarding skills or other computer literacy course recommended.

**POFT 1325 Business Math and Machine  
Applications 2-4-3**

Skill development in the use of electronic calculators and business mathematical functions. Emphasis on business problem-solving skills using spreadsheet software and/or electronic calculator/keyboard.

**POFT 1329 Keyboarding and Document Formatting 2-4-3**

Skill development in the operation of the keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents.

**POFT 1349 Administrative Office Procedures II 2-4-3**

Advanced office application with special emphasis on decision making, goal setting, management theories, and critical thinking. Concurrent enrollment in or completion of second year office technology courses recommended.

**POFT 1481 Cooperative Education - Administrative  
Assistant/Secretarial Science, General 1-21-4**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Department approval required.

**POFT 1482 Cooperative Education - General Office/  
Clerical and Typing Services 1-21-4**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Department approval required.

**POFT 2301 Document Formatting and Skillbuilding 2-4-3**

A continuation of keyboarding skills in document formatting, speed, and accuracy. Emphasis on proofreading, editing, following instructions, and keying documents from various copy. Maintenance of acceptable speed and accuracy required. Prior keyboarding and document formatting skills recommended.

**POFT 2312 Business Correspondence and  
Communication 2-4-3**

Development of writing skills to produce effective business documents. Prerequisites: Keyboarding and document formatting skills recommended.

**POFT 2321 Machine Transcription 2-4-3**

Skill development in mailable business document production using computers and dictation equipment. Skill refinement in grammar and punctuation with emphasis on proofreading and formatting. Keyboarding, language usage, word processing and document formatting skills recommended.

**POFT 2333 Advanced Document Formatting & Skillbuilding 2-4-3**

Study of advanced concepts in a variety of office-simulated correspondence activities with emphasis on organization, prioritizing, decision making, composition, placement, accuracy, and speed development. Keyboarding and word processing skills recommended.

**POFT 2386 Internship - Administrative Assistant/ Secretarial Science, General 2-7-3**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Completion of course requires 144 contact hours as well as strong keyboarding/word processing proficiency and written communication skills. Concurrent enrollment in or completion of first year Office Technology courses recommended.

**POFT 2387 Internship - Administrative Assistant/ Secretarial Science, General 2-7-3**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Completion of course requires 144 contact hours as well as strong keyboarding/word processing proficiency and written communication skills. Concurrent enrollment in or completion of second year Office Technology courses recommended.

**POFT 2388 Internship - General Office/Clerical and Typing Services 2-7-3**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Completion of course requires 144 contact hours as well as strong keyboarding/word processing proficiency and written communication skills. Concurrent enrollment in or completion of first year Office Technology courses recommended.

**POFT 2389 Internship - General Office/Clerical and Typing Services 2-7-3**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Completion of course requires 144 contact hours as well as strong keyboarding/word processing proficiency and written communication skills. Concurrent enrollment in or completion of second year Office Technology courses recommended.

**POFT 2481 Cooperative Education - Administrative Assistant/Secretarial Science, General 1-21-4**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Departmental approval required.

**POFT 2482 Cooperative Education - General Office/ Clerical and Typing Services 1-21-4**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Departmental approval required.

**PSTR Hospitality Management**  
see also CHEF, HAMG, IFWA, RSTO and TRVM

**PSTR 1301 Fundamentals of Baking 2-4-3**

Fundamentals of baking including dough, quick breads, pies, cakes, cookies, tarts, and doughnuts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the use of proper flours.

**PSTR 2331 Advanced Pastry 2-4-3**

A study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Prerequisite: PSTR 1301.

**PSYC Psychology**

**PSYC 2301 General 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 2308 Child Psychology 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 Growth and 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 adults through the life span.

**PSYC 2315 Psychology of 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.

**PSYT Mental Health Services**  
see also CHLT, CMSW and DAAC

**PSYT 1309 Health Psychology 2-2-3**

Exploration of behavioral medicine and the interdependence of mind, body, and spirit. Topics include stress and its effect on body systems, mind/body interactions, and techniques for improving and maintaining health.

**PSYT 1313 Psychology of Personal Adjustment 3-0-3**

This course is designed to assist the student in the development of personal, social, and work adjustment skills.

**PSYT 1321 Crisis Intervention 2-2-3**

A study of the principles and theories of assisting the individual in a crisis situation. Topics include coping skills to increase potential reinstatement of equilibrium to an individual's lifestyle and suicide prevention.

**PSYT 1329 Interviewing and Communication Skills 2-4-3**

Development of interviewing and communication skills in professional relationships.

**PSYT 1345 Principles of Behavior Management and Modification 2-2-3**

The study of behavior management and cognitive theories and techniques with emphasis on their applications. Recommended prerequisite: PSYC 2301.

**PSYT 2331 Abnormal Psychology 2-4-3**

The study of the theories and processes involved in the diagnosis and treatment of mental disorders. Recommended prerequisite: PSYC 2301

**RELE Real Estate**

**RELE 1303 Real Estate Appraisal 3-0-3**

A study of the central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting.

**RELE 1311 Real Estate Contracts 3-0-3**

A review of real estate contracts required by Section 6A (3) of the Real Estate License Act with emphasis on general contract law requirements. Also covers the purpose, history, and working process of the Broker-Lawyer Committee. Includes preparation of real estate contract forms with emphasis on the most commonly used forms. Includes the elements of a contract, offer and acceptance, the statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms and owner disclosure requirements. This course meets the Texas Real Estate Licensing Act (TRELA) requirement for a core course on Real Estate contract law.

**RELE 1315 Property Management 3-0-3**

A study of the role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act.

**RELE 1325 Real Estate Mathematics 3-0-3**

Mathematical logic and basic arithmetic skills including percentages, interest, time-valued money, depreciation, amortization, proration, and estimation of closing statement.

**RELE 1406 Real Estate Principles ( RELE 1301) 4-0-4**

An overview of licensing as a real estate broker and salesperson, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens, distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also includes federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. This course meets the Texas Real Estate Licensing Act (TRELA) requirements for a core course on Real Estate principles.

**RELE 2301 Law of Agency 3-0-3**

A study of law of agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying procedures, and the disclosure of an agency. This course meets the Texas Real Estate Licensing Act (TRELA) requirement for a core course on Real Estate Agency Law.

**RELE 2488 Internship- Real Estate 1-18-4**

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience. Prerequisites: RELE 1311, 1406, 2301, and consent of the Department Chair.

**RELE 2489 Internship- Real Estate 1-18-4**

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience. Prerequisite: RELE 2488 and consent of the Department Chair.

**RNSG Nursing**

**RNSG 1209 Introduction to Nursing 2-0-2**

Overview of nursing and the role of the associate degree nurse as a provider of care, coordinator of care, and member of a profession. Topics include knowledge, judgment, skills and professional values with a legal/ethical framework. The use of medical terminology and study and test-taking skills for technical courses are included. The concepts of communications, caring, community and critical thinking are used throughout the course. Prerequisite: Admissions to Central Texas College.

**RNSG 1301 Pharmacology 3-0-3**

Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. The concepts of communication, caring, community, and critical thinking will be included throughout the course. Prerequisites: Admission to Central Texas College.

**RSTO Hospitality Management**

see also CHEF, HAMG, IFWA, PSTR and TRVM

**RSTO 1204 Dining Room Service 1-3-2**

Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel.

**RSTO 1221 Menu Management 2-0-2**

A study of the food service principles involved in menu planning, layout, and evaluation for a variety of types of facilities and service methods. Emphasis on analysis of menu profitability, modification, commodity use, and other activities generated by the menu.

**RSTO 1301 Beverage Management 3-0-3**

A study of the beverage service of the hospitality industry including spirits, wines, beers, and non alcoholic beverages. Topics include purchasing, resource control. Legislation, marketing, physical plant requirements, staffing, service, and the selection of wines to enhance foods. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**RSTO 1313 Hospitality Supervision 3-0-3**

Fundamentals of recruiting, selection, and training of food service and hospitality personnel. Topics include job descriptions, schedules, work improvement, motivation, and applicable personnel laws and regulations. Emphasis on leadership development. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**RSTO 1325 Purchasing for Hospitality Operations 3-0-3**

Study of purchasing and inventory management of foods and other supplies to include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**RSTO 2301 Principles of Food and Beverage Controls 3-0-3**

A study of financial principles and controls of food service operation including review of operation policies and procedures. Topics include financial budgeting and cost analysis emphasizing food and beverage labor costs, operational analysis, and international and regulatory reporting procedures. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

**RSTO 2307 Catering 2-2-3**

Principles, techniques, and applications for both on-premises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques.

**RSTO 2380 Cooperative Education - Food and Beverage/ Restaurant Operations Manager 1-16-3**

An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience.

**RSTO 2405 Management of Food Production and Service 2-4-4**

A study of quantity cookery and management problems pertaining to commercial and institutional food service, merchandising and variety in menu planning, and customer food preferences. Includes laboratory experiences in quantity food preparation and service.

## SLPS Criminal Justice

see also CJCR, CJLE and CJSA

**SLPS 2488 Internship–Security and Loss Prevention Services 1-18-4**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: Consent of the Department Chair.

**SMER Small Gas Engine**

SMER prefix courses are not offered on the Texas Campus.

**SMER 1372 Shop Organization and Management 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. Recommended prerequisite: Sophomore standing.

**SMER 1404 Marine Equipment Service Principles 3-3-4**

Principles of operation of two and four stroke marine engines and associated systems. Emphasis on troubleshooting and analysis of faulty systems and their individual components. Recommended prerequisites: SMER 1471 and SMER 1428.

**SMER 1428 Small Engine Service Principles 3-3-4**

Principles of operation of small engines and associated systems. Emphasis on troubleshooting and the analysis of faulty systems and their components. Recommended prerequisite or co-requisite: SMER 1471.

**SMER 1431 Small Engine Tune Up 3-3-4**

Tune up procedures for small engines including analysis, valve train, ignition fuel, starter, cutter, and safety compliance systems. Emphasis on the use of appropriate equipment and procedures. Recommended prerequisites: SMER 1471 and SMER 1428.

**SMER 1434 Small Engine Two-Stroke Overhaul 3-3-4**

Overhaul procedures for two-stroke small engines as used in lawn and garden applications. Emphasis on proper shop procedures for overhaul of two-stroke small engines and their applicable drive systems. Recommended prerequisites: SMER 1431, SMER 1471 and WLDG 1425.

**SMER 1437 Small Engine Four-Stroke Engine/ Transmission 3-3-4**

Overhaul procedures for four-stroke small engines, transmissions, and transaxles. Emphasis on shop procedures for overhaul, transmission troubleshooting, transmission inspection, and transaxle inspection. Recommended prerequisites: SMER 1428 and SMER 1434.

**SMER 1471 Small Gas Engine Fundamentals 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. Recommended prerequisite or co-requisite: DEMR 1401, or AUMT 1405.

**SMER 1473 Large Air-Cooled Engines 3-3-4**

This course is designed to provide the student with an understanding of the theory and operating principles of large air-cooled engines used in lawn mowers, RV, and generator applications. Single- and twin-cylinder engines will be included. Emphasis will be placed on inspection, testing, diagnosing, and repair/overhaul procedures. Recommended prerequisites: SMER 1428 and SMER 1471.

**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 Social Problems 3-0-3**  
 A study of identification and analysis of contemporary social problems and development of criteria for evaluating these issues 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 Minority Studies I 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.

**SOCW Mental Health Services**

**SOCW 2361 Introduction to Social Work 3**  
 Development of the philosophy and practice of social work in the United States, survey of the fields and techniques of social work.

**SOCW 2362 Social Welfare as a Social Institution 3**  
 Introduction to the study of the modern social work, the underlying philosophy and ethics of social work, and the major divisions and types of social work together with their methods and objectives.

**SPAN Spanish**

**SPAN 1411 Beginning Spanish I 4-2-4**  
 The study of basic Spanish grammar with the development of frequently used vocabulary. This course develops students' speaking, listening, reading and writing skills so they will be able to express their own ideas and interact with others. Some culture points are integrated to introduce students to the everyday lives of Spanish speakers in the twenty-one countries of the Spanish speaking world.

**SPAN 1412 Beginning Spanish II 4-2-4**  
 The study of basic Spanish grammar and vocabulary development continued from the SPAN 1411 curriculum. Prerequisite: SPAN 1411 with a "C" or better or a "passing" score on the CTC Spanish placement exam.

**SPAN 2311 Intermediate Spanish I 3-0-3**  
 The study of grammar and vocabulary with emphasis on conversation and writing. This course will introduce students to Spanish culture and history as well as Latin American culture and history. Prerequisites: SPAN 1411 and SPAN 1412 with a "C" or better or two years of Spanish at an accredited high school and a "high passing" score on the CTC Spanish placement test.

**SPAN 2312 Intermediate Spanish II 3-0-3**  
 The continuation of SPAN 2311. Emphasis on complex grammar, composition and conversation about Spanish American topics. Prerequisite: SPAN 2311 with a "C" or better or "the highest passing" score on the CTC Spanish placement test.

**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 as a member of CTC's speech team.

**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 as a member of CTC's speech team.

**SPCH 1315 Public Speaking 3-0-3**  
 Course encompasses both theory and practice of communicating with others and includes research, composition, organization, and delivery of speeches for various purposes and occasions.

**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 as a member of CTC's speech team.

**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 as a member of CTC's speech team.

**SPCH 2341 Oral Interpretation 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.

**TECA Early Childhood Professions**

**TECA 1303 Family and the Community 2-2-3**  
 A study of the relationship between the child, the family, the community, and early childhood educators, including a study of parent education, family and community lifestyles, child abuse, multicultural instruction techniques, and current issues.

**TECA 1311 Introduction To Early Childhood Education 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.

**TECA 1318 Nutrition, Health, and Safety 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 implications. Integration of these principles applied to a variety of settings.

**TECA 1354 Child Growth & Development 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.



## TECM Technical Math

### TECM1303 Technical Mathematics 3-0-3

A review of mathematical functions including fractions, decimals, proportions, perimeters, areas, volumes of geometric figures, and certain algebraic/trigonometric functions, as required by specific businesses and industries for successful on-the-job performance. Prerequisite: DSMA 0303 or consent of the Department Chair.

## TRVM Hospitality Management see also CHEF, HAMG, IFAW, PSTR and RSTO

### TRVM 1300 Introduction to Travel and Tourism 3-0-3

An overview of the travel industry. Emphasis on travel careers and the impact of tourism on society.

### TRVM 1313 Ticketing Forms and Procedures 2-2-3

A study of manual travel agency operations and basic hands-on computerized reservations techniques in manual travel agency operations; emphasis on making air, hotel, tour and cruise reservations; writing itineraries; reading and interpreting brochures; and ticketing rules, credit card sales, ticket refunds, exchanges, and re-issues. Topics include building a simple Passenger Name Record on an airline computer reservation system, accessing availability, fares, and miscellaneous related information.

### TRVM 2301 Introduction to Convention/Meeting Management 3-0-3

Overview of the meetings and convention industry and the various aspects and skills involved in planning and managing meetings and conventions. Emphasis on types of meetings, meeting markets, industry suppliers, budget and program planning, site selection and contract negotiations, registration and housing, food and beverage requirements, function and meeting room setup, and audiovisual requirements. American Hotel and Lodging Association (AH&LA) certification course. Student must attain a score of 70% or higher on certification test to receive National Certification.

### TRVM 2305 Travel Industry Management 3-0-3

The preparation for mid-management positions in the travel and tourism industry. Topics include business organization, Airline Reporting Corporation requirements and regulations, bookkeeping requirements, equipment decisions and airline computer system affiliation, as well as staff development and employee relations, experiential team building applications, and the interviewing process.

### TRVM 2366 Practicum - Travel and Tourism 1-20-3

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. Prerequisites: TRVM 1300 and TRVM 1349.

## WDWK Maintenance Technology

### WDWK 1413 Cabinet Making 2-5-4

Includes the design and construction of base cabinets and wall cabinets for kitchens and bathrooms. Emphasis on the safe use of portable and stationary power tools. Finishing techniques include proper sanding, sealing, staining, and finishing techniques. Recommended prerequisite: CRPT 1429 .

### WDWK 2451 Cabinet Making II 3-3-4

Advanced skills in machine woodworking and hand craftsmanship. Emphasizes advanced design and door and drawer construction, laminate laying, and customer and co-worker relations. Recommended prerequisite: WDWK 1413.

## WLDG Welding

### WLDG 1413 Introduction to Blueprint Reading for Welders 3-3-4

A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes, including systems of measurements and industry standards. Interpretation of plans and drawings used by industry. Recommended prerequisite or co-requisite: WLDG 1423.

### WLDG 1423 Welding Safety, Tools, and Equipment 3-3-4

An introduction to welding careers and safety practice, including welding safety; OSHA and the Hazardous Communication Act; Material Safety Data Sheets (MSDS); basic mathematics; measuring systems; shop operations; use and care of precision measuring tools; and the use and care of the hand and power tools. Instruction on various types of welding equipment and processes, basic welding gases, fluxes, rods, electrodes, symbols, and blueprints.

### WLDG 1425 Introduction to Oxy-Fuel Welding and Cutting 3-3-4

An introduction to oxy-fuel welding and cutting, including history and future in welding, safety, set up and maintenance of oxy-fuel welding, and cutting equipment and supplies. Recommended prerequisite or co-requisite: WLDG 1423.

### WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW) 3-3-4

An introduction to shielded metal arc welding process. Emphasis is placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions. Recommended prerequisite or co-requisites: WLDG 1423 and WLDG 1425.

### WLDG 1430 Introduction to Gas Metal Arc (GMAW) Welding 3-3-4

A study of the principles of gas metal arc welding, setup and use of GMAW equipment, and safe use of tools and equipment. Instruction in various joint designs. Recommended prerequisites: WLDG 1423 and WLDG 1428.

### WLDG 1434 Introduction to Gas Tungsten Arc (GTAW) Welding 3-3-4

An introduction to the principles of gas tungsten arc welding GTAW) set up and use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs. Recommended prerequisites: WLDG 1423 and WLDG 1428.

### WLDG 1435 Introduction to Pipe Welding 3-3-4

An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment set up, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes. Recommended prerequisite: WLDG 1457.

### WLDG 1457 Intermediate Shielded Metal Arc Welding (SMAW) 3-3-4

A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. Recommended prerequisite: WLDG 1428.

**WLDG 2406 Intermediate Pipe Welding 3-3-4**  
 A comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds will be 1G, 2G, 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices. Recommended prerequisite: WLDG 1435.

**WLDG 2413 Intermediate Welding Using Multiple Processes 2-7-4**  
 Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shielded metal arc welding, gas metal arc welding, flux-cored arc welding, gas tungsten arc welding or any other approved welding process. Recommended prerequisite: Consent of Welding Instructor or Department Chair.

**WLDG 2435 Advanced Layout and Fabrication 3-3-4**  
 A continuation of the Intermediate Layout and Fabrication course which covers production and fabrication of layout tools and processes. Emphasis on application of fabrication and layout skills. Recommended prerequisite: Satisfactory completion of all WLDG courses in the program except WLDG 2488.

**WLDG 2439 Advanced Oxy-Fuel Welding and Cutting 3-3-4**  
 A study of all position welding on ferrous and nonferrous metals using oxyacetylene welding process including welding and cutting, brazing, and soldering operations. Recommended prerequisite: WLDG 1423 and WLDG 1425.

**WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW) 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. Recommended prerequisite: WLDG 1423 and WLDG 1457.

**WLDG 2447 Advanced Gas Metal Arc (GMAW) Welding 3-3-4**  
 Advanced topics in GMAW welding, including welding in various positions and directions. Recommended prerequisite: WLDG 1430.

**WLDG 2451 Advanced Gas Tungsten (GTAW) Welding 3-3-4**  
 Advanced topics in GTAW in various positions and directions. Recommended prerequisite: WLDG 1434.

**WLDG 2453 Advanced Pipe Welding 3-3-4**  
 Advanced topics involving welding of pipe using the shielded metal arc welding process. Topics include electrode selection, equipment set up, and safe shop practices. Emphasis on weld positions 5G and 6G using various electrodes. Recommended prerequisite: WLDG 2406.

**WLDG 2488 Internship - Welder/Welding Technologist 1-18-4**  
 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Recommended prerequisite: Satisfactory completion of all other technical courses in the program.

**MTHO, MTMS Military Science (Europe Campus Only)**

**MTHO 1370 Historical Principles of War 3-0**  
 This course focuses on the history of the United States Military and the professional values and ethics of the military profession. Strategies and tactics used by the United States Military in selected engagements throughout its history will be covered.

**MTMS 1170 Military Science I 1-0**  
 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.

**MTMS 1270 Military Science II 2-0**  
 A 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: MTMS 1101 or consent of the instructor.

**MTMS 1271 Setting Goals, and Objectives 2-0**  
 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.

**MTMS 1272 Job Performance and Motivation 2-0**  
 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.

**MTMS 1273 Fundamentals of Leadership 1-0**  
 An introduction to the theories of motivation, with a focus on their practical application reflected in current military leadership fundamentals. This course includes an overview of the traits, techniques, and styles common to all effective leaders.

**MTMS 1274 Professionalism and Responsibility 2-0**  
 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.

**MTMS 1275 Personnel Counseling 2-0**  
 Personnel Counseling is intended to provide managers and other pro-fessionals with a systematic set of skills to help them and their subordinates cope effectively with the challenges and problems of the organization, the job, and the people.

**MTMS 2270 Professional Development of the Manager 2-0**  
 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.

**MTMS 2271 Military Science III 2-0**  
 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.

**MTMS 2272 Management and Learning Strategies 2-0**  
 An course for leaders who want to explore further into the arena of training in organizations, including needs assessment, instruction techniques, and evaluation procedures. Also addressed is training for career changes, cross training, and the implications of fair labor standards.

**MTMS 2370 Advanced Leadership 3-0**  
 Advanced management study with an in-depth look at the differences and similarities of leadership and management. This course includes all elements of the management function, leadership styles, and communication.

**MTMS 2371 Management Problems 3-0**  
 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.

**MTMS 2372 Ethics in Management 3-0**  
 The purpose of this course is to study the major ethics theories and their relationship to business management. The course provides actual case studies in which ethical principles are used in solving today's business management problems.

# Personnel

## Deans

William C. Alexander, Dean, Continental Campus

Barbara Grice, Dean, Pacific Far East Campus

Fred J. Ostertag, Dean, Europe Campus

Jim M. Yeonopolus, Deputy Chancellor for Continental and International Campus Operations/Dean, Navy Campus

## Continental Campus Personnel

Maureen Abel, Site Director, Schofield Barracks/Kaneohe Bay, HI

Mark Alexander, Site Director, Fort Riley, KS

Janice Allen, Online Mentor/Advisor

Joe Anderson, Director, FORSCOM Foreign Language, Fort Hood, TX

Dave Bakey, Site Director, Fort Stewart/Hunter Army Airfield, GA

Craig Balch, Associate Dean, Continental Campus

Cynthia Burrus, Online Mentor/Advisor

Diana Castillo, eArmyU Institutional Liaison

Bob Crawford, Program Manager, MOS Enhancement, Fort Bragg, NC

Wendy Davis, FORSCOM Foreign Language, Fort Bragg, NC

Lesia Egeston, Online Mentor/Advisor

Edilyn Freitas, Site Director, Fort Bragg, NC

Richard Gates, Site Director, Fort Lee, VA

Paula Hawk, Online Mentor/Advisor

Seung Hee Holtrop, Online Mentor/Advisor

Paul Illian, Site Director, Fort Leonard Wood, MO

Mark Johnson, Site Director, Bolling Air Force Base/Bethesda National Naval Medical Center, Washington, DC/MD

Darlene Lee, Continental DL Quality Assurance Manager

Susan F. Manaskie, Contract Manager, Fort Shafter, HI

Claudia Matamoros, Site Coordinator, Pope Air Force Base, NC

Kathleen Moorhead, Site Director, Fort Wainwright, AK

Gwen Price, Site Director, Camp Pendleton, CA

Louis R. Pylant, Program Manager, Alaska Education Services

Margaret Pylant, Site Director, Fort Richardson, AK

Coraline Rodriguez, Marine Corps Air Station Miramar, CA

Elaine Singley, Site Director, Holloman Air Force Base

Neil Teske, Site Director, Fort Polk, LA

Ulla Torres, Site Director, Fort Lewis, WA

Joan M. Waldrop, Site Director, Fort Knox, KY

Alan Watson, Site Director, Fort Lewis College, WA

Jennifer Wolverton, Director, Continental Online Learning Operations & Embassy Education Programs

Tanya Woodcock, Associate Dean, FORSCOM Foreign Language, Fort Lewis, WA

## Europe Personnel

Hillary Andrelichik, Supervisor, Student Services, Europe Campus  
Cynthia Armstrong, Data Analyst, Europe Campus  
Jennifer Arnold, Foreign Language Program Manager, Mannheim, Germany  
Lindsay Bibus, Academic Program Manager, Hanau, Germany  
Terry Bouren, Automation Technician, Hanau, Germany  
Sidney Bunzendahl, Director of Administrative Services, Europe Campus  
Brian Campany, Academic Program Manager, Schweinfurt, Germany  
Kevin Ceryes, Senior Regional Student Services Officer, Schweinfurt, Germany  
Charles Chester, Regional Student Services Officer, Mannheim, Germany  
Gladwin Clark, Senior Instructor, SAM-31 Training Program, Vilseck, Germany  
David Cole, Senior Instructor, MD-310 Training Program, Vilseck, Germany  
Susan Conrique, Senior Foreign Language Program Manager, Hanau, Germany  
Teresa Cramer, Regional Student Services Officer, Vicenza, Italy  
Jacqueline Curran, Area Manager, Northern Mediterranean, Vicenza, Italy  
Debra Faerber, Technical Services Program Manager, Mannheim, Germany  
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Wade Jackson, Liaison Officer, Installation Management Agency-Europe  
Danny Johnson, Financial Aid Specialist, Europe Campus  
Dr. Ronald Johnson, Director, Educational Programs & Support Services, Europe Campus  
Jim Keiser, Program Coordinator, Europe Campus  
Gary Kindred, Director, Military Training Programs, Europe Campus  
Marci Lattuca, Regional Student Services Officer, Mannheim, Germany  
Gregory Linnebur, Regional Director, Hanau & Schweinfurt Regions, Germany  
Philip Madlang, Technical Services Program Manager, Schweinfurt, Germany  
Dawn Mayfield, Business Manager, Europe Campus  
Hilliary McAdams, Technical Services Program Manager, Mannheim, Germany  
George Mulligan, Senior Academic Program Manager, Mannheim, Germany  
Erik Nordman, Automation Programmer, Europe Campus  
Cordelia Perry, Librarian, Europe Campus  
Norbert Pieper, Foreign Language Program, Schweinfurt, Germany  
Thomas Salas, Area Manager, UK & Iceland, RAF Mildenhall, UK  
Julia Sibilla, Regional Director, Mediterranean Region, Naples, Italy  
Andrew Smith, Senior Instructor, HEM-311 Training Program, Vilseck, Germany  
Brian Smith, Automation Technician/Webmaster, Europe Campus  
Sandra Spatera, Foreign Language Program Manager, Naples, Italy  
Michael Spruell, Senior Technical Services Program Manager, Hanau, Germany  
Stephanie Teague, Regional Director, Mannheim & UK Regions, Mannheim, Germany  
Robin Ulrich, Supervisor, Human Resource Services, Europe Campus

## **Navy Campus Personnel**

Milton W. Alexander, Associate Dean/ATC Maint-NAS Pensacola, Florida  
Ken Austin, Associate Dean, Navy Atlantic  
Eric Baron, Distance Learning Manager, Sasebo, Japan, Navy Pacific  
Susan Barrett, Site Manager, Bremerton, Washington, Navy Pacific  
Carlton Blaisdell, Distance Learning Site Coordinator, Bangor, WA, Navy Pacific  
Violeta C. Briody, Site Coordinator, Norfolk, Virginia, Navy Atlantic  
Margaret Everett, Registrar/Site Coordinator, San Diego, CA, Navy Pacific  
Amanda Fracker, Distance Learning Manager, San Diego, CA, Navy Pacific  
David Geist, Coordinator, Materials Management, Navy Pacific  
Bart Gillard, Registrar/Site Coordinator, San Diego, CA, Navy Pacific  
Betsy Good, Distance Learning Manager, Navy Atlantic  
William Grace, Site Manager, Pearl Harbor, HI, Navy Pacific  
Larry Hefflefinger, Coordinator, Materials Management, Navy Atlantic  
Norbert Hopkins, Coordinator, Student Services, Navy Atlantic  
Terrilyn M. Jackson, Coordinator, Support Services, Navy Campus  
Karl Jaeger, Distance Learning Coordinator, Kingsbay, GA, Navy Atlantic  
Larry James, ASHORE Coordinator, Navy Atlantic  
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Oliver Miller, Puerto Rico Area Director and Site Director, Fort Buchanan  
Tracy Mulcahy, Distance Learning Coordinator, Norfolk, VA, Navy Atlantic  
Linda C. Norton, Coordinator, Support Services, Navy Atlantic  
Mark Phelan, Site Director/ASHORE Coordinator, San Diego, CA, Navy Pacific  
Michael Plemmons, Afloat Faculty Coordinator, Navy Atlantic  
Bernard A. Ray, Associate Dean, San Diego, CA, Navy Pacific  
Delwin Richey, Afloat Faculty Coordinator, San Diego, CA, Navy Pacific  
Brett Scarlett, Distance Learning Coordinator, San Diego, CA, Navy Pacific  
George Schieck, Coordinator, Student Services, San Diego, CA, Navy Pacific  
Lynn A. Stivison-Gibson, Coordinator, Support Services, San Diego, CA, Navy Pacific  
Robert Walker, Distance Learning Coordinator, Groton, CT, Navy Atlantic

## **Pacific Far East Campus Personnel**

Terry L. DeMoss, Director API/CNC  
Orazio G. Florenza, Director, Mainland Japan  
Adam Marcotte, Associate Dean, Support Services  
Bobby J. Massey, Director, Korea  
Dean W. Moore, Director, Student Services  
Elizabeth A. Pyon, Director, Human Resources  
Cecilia Reardon, Director, Okinawa  
Gary Stover, Associate Dean, Operations  
Kenneth W. Washington, Director, Business Services  
Shawn M. Whiteside, Director, Marketing/Logistics

## Student Services Support Personnel - Systems and Central Campus

Gina Aponte, Testing Supervisor

Jose Aponte, Coordinator, Disability Support Services

Mary Carr, Admissions Counselor

Pamela Dancer, Coordinator, Continental and International Campus Records

George Erskine, Director of Testing Services

Robert Figueredo, Evaluator/Advisor (Continental Students)

Bunny Gunn-Johnson, Coordinator, Student Developmental Services

Debbie Hansen, Coordinator, Evaluations (Degrees and Certificates)

Denise Hazlett, Director of Evaluations

Cheryl Hendricks-Barnes, Coordinator of eArmyU Evaluations

Rebecca Inge, eArmyU Evaluator

Larry Jordan, Assistant Director, Offices of Student Financial Assistance

Cindy Kendall, Distance Learning Counselor

Jennise Leafa, Coordinator, Military Student Support Services (Continental and Navy/PFE Students)

Denise Pergl, Coordinator, Learning Disabilities Services

Cheryl Riley, Supervisor, Transcript Services

Elaine Riley, Director, Career Planning and Placement

Brad Rogers, Assistant Director of Testing Services

Annette Skinner, Director, Student Support Services

Annabelle L. Smith, Director, Offices of Student Assistance/VA Services

Geneva Weedon, Coordinator, Project PASS

Johnelle L. Welsh, Dean, Student Developmental Services

Linda Young, Assistant Systems Registrar

# Faculty

## Continental Campus

**Gene Y. Bryant** (2002)

Computer Science/Social and Behavioral Sciences -  
*Economics*

B.S., Texas A&M University

M.S., Texas A&M University

M.S., Texas A&M University

**Marget L. Hagen** (2002)

Social and Behavioral Sciences

B.A., University of Texas at Arlington

B.A., University of Texas at Arlington

M.A., University of Texas at Arlington

**Delmar J. Reck** (1982)

Automotive

A.A.S., Central Texas College

## Europe Campus

**Michelle G. Collantes** (2004)

Emergency Medical Technology

B.S., San Francisco State University

B.S., Long Island University

**Teresa M. Cramer** (2003)

Criminal Justice

A.A.S., Portland Community College

B.A., Southern Oregon State College

M.A., Antioch University Seattle

**Felipe D. Gonzalez**, Department Manager (2003)

Emergency Medical Technology

B.A., Claremont Men's College

M.D., University of California, Los Angeles

**Stephen W. Waller**, Department Manager (2003)

Food Service Management

A.A.S., Central Texas College

**Brian P. Williams**, Department Manager (2003)

Automotive Technology

A.A.S., Central Texas College

A.A., University of Maryland University Campus

B.S., University of Maryland University Campus

## Pacific Far East Campus

**David R. Brown** (2004)

Computer Science

B.S., United States Military Academy

**Rita E. Chung** (2004)

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B.S., Georgetown University

M.A., George Washington University

**John H. Cleary** (2004)

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B.A., St. John's University

M.A., St. John's University

**Nicole O. Conrad** (2001)

Fine Arts - *Humanities*

B.F.A., Arizona State University

M.F.A., Arizona State University

**Sally L. Donaldson** (2004)

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B.S., Texas A&I University at Kingsville

M.A., Texas A&I University at Kingsville

**John B. Eberl** (2004)

Communications - *English*

B.A., Humboldt State University

B.S., Humboldt State University

M.A., Humboldt State University

**Kenneth A. Gualtier** (2002)

Computer Science

A.S., University of Maryland University College

B.S., University of Maryland University College

**In Young Jung** (2003)

Computer Science

B.S., University of Connecticut

M.S., University of Haven

**Russell W. Krogh** (1997)

Business Administration and Management/Criminal Justice

A.G.S., Central Texas College

**Stephen A. McKean** (1999)

Criminal Justice

A.A., The University of the State of New York

B.A., The University of the State of New York

**Robert T. Queen (2004)**

Business Administration and Management  
A.A., University of Maryland University College  
B.S., University of Maryland University College  
M.P.A., University of Oklahoma

**Steven D. Unruh (2004)**

Criminal Justice  
A.A., University of Maryland University College  
A.G.S., Central Texas College  
B.S., University of Maryland University College

**Douglas M. West (2004)**

Criminal Justice  
A.S., College of Great Falls  
B.S., College of Great Falls

**Dana C. Wiggins (2004)**

Social and Behavioral Sciences - History  
B.A., Augusta State University  
M.Ed., Augusta State University