

Central Texas College



Continental & Overseas Services

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Catalog Supplement

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CENTRAL TEXAS COLLEGE

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CONTINENTAL AND OVERSEAS CAMPUS ADDRESSES

CENTRAL CAMPUS

Central Texas College - Continental & Overseas Services
P.O. Box 1321
Killeen, Texas 76541

ALASKA

Central Texas College - Fort Richardson
Building 658 - Kiska Hall
Fort Richardson, Alaska 99505
&
Central Texas College - Fort Greely
Building 661 - Army Education Center
Fort Greely, Alaska 99709

EUROPE

Central Texas College - Europe
Yorkhof Kaserne
Hanau Military Community
APO New York 09165

FAR EAST

Central Texas College - Far East
APO San Francisco 96301

FORT LEE

Central Texas College - Fort Lee
P. O. Box B
Fort Lee, Virginia 23801

FORT LEONARD WOOD

Central Texas College - Fort Leonard Wood
Truman Education Center - Box 216
Fort Leonard Wood, Missouri 65473

PACE

Central Texas College - PACE (Pacific)
P. O. Box A82568
San Diego, California 92138

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GENERAL INFORMATION

CONTINENTAL AND OVERSEAS PROGRAMS

Central Texas College Continental and Overseas Programs serve military personnel throughout Europe, the Far-East and the Continental United States. The main office is located on the Central Texas College campus at Killeen, Texas. Programs of study vary with each location, and not all programs are available at each location. This Catalog Supplement provides information concerning the policies, procedures and programs applicable to off-campus branches and extensions operated under the auspices of Continental and Overseas Services. Individuals interested in programs which are not locally available, should consult with the local Education Services Officer or Central Texas College Field Registrar.

LOCATION OF CAMPUS

Central Texas College is a public two-year institution. The campus is located on U.S. Highway 190 between Killeen, Texas and Copperas Cove, Texas. The population in a ten-mile radius of Killeen is estimated to be 125,000. The 560-acre campus is within minutes of streams and lakes in what is considered to be an outstanding recreation area.

HISTORICAL BACKGROUND

The Central Texas College District was created in July, 1965, and composed of the Killeen Independent School District, The Copperas Cove Independent School District, and the Nolanville Common School District. The bond issue to construct and equip the plant followed in October, 1965. In January, 1966, the Board of Trustees employed the President of the College, and offices were opened in Killeen. The first several months were spent establishing the legal, financial, and academic framework for the College. Final plans and specifications for some of the buildings were completed in June and July of 1966 and construction of a Library Building, a Science Building, an Academic Classroom Building, a Technology Building, a Physical Education Building, an Administration Building, a Student Center and a Maintenance Technology Building was begun. A Telecommunications Building was added in 1967, two dormitories were added in 1968, and in 1970 the Lady Bird Johnson Center for the Performing Arts was completed.

Nursing Facilities were completed in April, 1971. An additional dormitory was added in 1972. Fifty-two married student apartments were completed in the fall, 1974. In the fall of 1975, the College opened a multimillion dollar Advanced Technology Building, and additional student recreational facilities are now provided. In December of 1974, a new 24-acre reservoir was completed adjacent to the educational facilities on the Central Texas College campus. The reservoir provides needed irrigation for the Farm and Ranch Program, and a controlled environment for a Science Department research project to measure the impact of various species and subspecies of black bass on area lakes.

Central Texas College opened its doors for the first time in September, 1967 and over 2,000 students enrolled to become the historic first student body. The College was tabbed by national news media as the "Cinderella Story". Enrollments at Killeen campus now average approximately 5,000 per semester.

In 1972, the Department of Defense invited Central Texas College to Europe to conduct

the "Project Transition" program. From December, 1972 through May, 1974, Central Texas College provided job skill training for Army and Air Force personnel at thirteen sites in Germany and England. It trained more than 2,000 servicemen in Europe in five vocational-technical programs. In May, 1974 funding for Project Transition was discontinued by Executive Order. In January, 1974, Central Texas College was invited by the U.S. Military in Europe to offer the Associate Degree programs in technical fields. From that time to the present, Central Texas College has supported military educational goals of the United States Army in Europe and United States Air Force in Europe. In October, 1975, Central Texas College added course offerings for the United States Navy and Marines in Europe.

During 1976, Central Texas College expanded its Certificate and Associate Degree programs both in the United States and world-wide. In February, Central Texas College initiated a program at Fort Leonard Wood, Missouri and in April, Central Texas College Overseas opened its Far East Division with programs in the Republic of Korea. Programs with the U.S. Navy in the Pacific started in October, 1976, at Fort Lee, Virginia in August, 1977, and Alaska in 1978.

EDUCATIONAL PHILOSOPHY

Central Texas College is dedicated to the philosophy that in a democracy, the well-being of the individual, as well as the whole of the society, depends upon the sound moral and educational development of its people. Since education is an individual, evolutionary, and never-ending process, the College curricula are necessarily both flexible and extensive.

In order to ensure the fullest service possible to the civilians of the surrounding area, to the personnel of the large military installation adjacent to the home campus and to the personnel of military installations around the world, the educational programs of the College are geared to meet the needs of full-time as well as part-time civilian and military students. In order to accommodate the diverse educational needs of both the civilian and military sectors, Central Texas College necessarily provides an uncommonly greater variety of educational programs than might be expected. The objective of Central Texas College is to become a total learning environment, encompassing traditional and non-traditional forms of education. The guiding principle of the total learning environment is the College's commitment to meet the real educational needs of all the people. The College proposed to make available in its total environment the opportunity to succeed in life, which is the birthright of every American. Central Texas College is dedicated "to the service of the people. . .".

EDUCATIONAL OBJECTIVES

1. **UNIVERSITY TRANSFER EDUCATION** - The College provides the first two years of college work for those students planning to achieve a baccalaureate or higher degree.
2. **GENERAL EDUCATION** - The College provides general education courses which will develop competence, skills, and attitudes essential to effective performance as an individual, as a citizen, and as a productive member of society. Within this academic framework are studies in communication and languages.

social sciences and humanities, mathematics, and physical and social development, as well as a program of co-curricular activities.

3. **OCCUPATIONAL EDUCATION** - The College provides courses which qualify students in vocational and/or technical fields, and equips them for occupational competency.
4. **AREA SERVICE** - The College provides life-long education for adults, opportunities for cultural enrichment, special interest courses, lectures, and meetings designed to satisfy the special needs of business, of the military and of area groups.
5. **PERSONAL GUIDANCE** - The College provides guidance services which will enable the student to select, with proper perspective, the educational program that is compatible with his abilities, aptitudes, and ambitions.
6. **PLACEMENT** - The College provides a Student Placement Center on the Killeen campus to assist graduating students and alumni in bringing their qualifications to the attention of possible employers. Students who expect to receive an Associate Degree or a Certificate of Completion and wish to register for this service may register with the Placement Office.

THE CATALOG SUPPLEMENT

The supplement is an official bulletin of Central Texas College containing policies, regulations, procedures, and fees in effect as the publication went to press. The 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 fee changes when required.

Students are urged to study the contents of the supplement carefully, for they are responsible for observing the regulations contained herein.

EQUAL OPPORTUNITY POLICY

Central Texas College has been held to be and presently is in compliance with Title VI of the Civil Rights Act of 1964, as amended, with respect to the admission and education of students, with respect to the employment and promotion of teaching and non-teaching personnel, with respect to student and faculty activities conducted on premises owned or occupied by the College, and with respect to student housing situated on premises owned or occupied by the College. Central Texas College shall not discriminate either in favor of, or against, any person on account of his or her race, religion, ancestry, sex, national origin, or color.

ACCESS TO STUDENT RECORDS

Central Texas College complies with the provisions of The Family Rights and Privacy Act of 1974, as amended. In general, this act provides access to a student's records only upon the written consent of the student, parents or sponsors. For specific Central Texas College records review procedures, requests should be submitted in writing to the Director of Student Services of the appropriate campus.

ADMISSIONS & REGISTRATION

HOW TO BEGIN

COUNSELING

Students wishing to attend Central Texas College - Continental and Overseas, should visit the local military Education Center to consult with the Education Services Officer about educational goals. Education Centers provide diagnostic, aptitude and placement testing to assist students in selecting programs of study and educational goals. Once the student has identified and chosen an appropriate degree and program of study, the admission and registration process may begin.

HOW TO BECOME A STUDENT

ADMISSIONS REQUIREMENTS

To be admitted to Central Texas College - Continental and Overseas, a student must meet one or more of the following criteria:

- Hold a diploma from an accredited secondary (high) school; or
- Hold a GED equivalency certificate; or
- Be eligible to return to college of last attendance if a Transfer Student.
- **VETERANS, MILITARY PERSONNEL and ADULTS** who have not completed a high school course, but who, by reason of special attainments, are prepared to undertake post high school work, may be admitted, on an individual basis, to certain areas of study, if, in the opinion of the college officials, such study will be of value to the student. **NOTE: ADULT**, for purposes of admission, is defined as an individual 18 years of age or older, U.S. Armed Forces personnel on active duty, or Veterans eligible for VA educational benefits.

OVERSEAS ADMISSIONS - SPECIAL NOTE: Personnel not sponsored in the overseas command by the U.S. Armed Forces are not normally permitted to attend Central Texas College - Continental and Overseas classes. Proof of this sponsorship is generally accepted as having one of the Identity Cards issued by the Armed Forces for active duty personnel, their dependents and certain civilians. Other applicants may attend classes but must be referred to the Education Services Officer for necessary military and inter-governmental approval prior to being permitted to file application for admission.

EARLY ADMISSION PROGRAM

The Early Admission Program offers the opportunity for high school juniors or seniors to earn college credits while concurrently enrolling in high school. The program is available to any high school junior or senior, currently enrolled for a sufficient number of credits for high school graduation, subject to the following conditions:

- The student must have written approval of the high school principal.
- The student must satisfy the daily attendance policy of the high school.

- The student must furnish written approval of a parent or guardian.
- The student generally will be limited to not more than one college credit course per term.
- The student will be expected to adhere to all policies of the College and the high school.

Students who meet the above criteria will be accepted in Central Texas College - Continental and Overseas on individual approval by college officials.

NOTE: Central Texas College assumes no responsibility for loss of eligibility of high school students enrolled under this program to participate in Interscholastic League activities.

TRANSCRIPTS AND TEST SCORES REQUIRED FOR ADMISSION

- High School Graduates - must submit official high school transcript or GED scores.
- College transfer students - must also provide official high school transcripts, unless they have completed nine (9) or more semester hours of previous college work. Official transcripts must then be provided for all previous college study.
- Individual Admissions Students - must provide official transcripts for all previously attended institutions, high school and/or college.

NOTE: TO BE OFFICIAL, SCORES AND TRANSCRIPTS MUST BE SENT DIRECTLY FROM THE REPORTING INSTITUTION TO THE DIRECTOR OF STUDENT SERVICES AT THE BRANCH CAMPUS ADMINISTRATIVE OFFICES. (STUDENTS IN EUROPE HAVE SCORES AND TRANSCRIPTS SENT TO THE EUROPEAN OFFICE; STUDENTS IN KOREA, TO THE KOREAN OFFICE: ETC., ADDRESSES ARE LISTED IN THE FRONT OF THIS CATALOG SUPPLEMENT).

WHEN TO REGISTER FOR CLASS

REGISTRATION PERIODS

Central Texas College - Continental and Overseas conducts an academic year beginning late in August and ending in July. It is based on terms and varies considerably in different locations to meet military schedules. Course lengths are six, eight, ten and twelve weeks. Varying course lengths or the special needs of the community may alter the generally established registration periods at a given site. The Education Center publicizes registration periods, term dates, and course offerings. Students should consult their local schedules for times and dates of registration and classes.

WHO TO SEE FOR CLASSES

FIELD REGISTRAR

Central Texas College - Continental and Overseas normally assigns a Field Registrar to each Education Center 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 - Continental and Overseas Field Registrar at the Education Center.

HOW TO SIGN UP FOR CLASSES

REGISTRATION REQUIREMENTS

Official registration with Central Texas College - Continental and Overseas is required before any student may begin course work. The following items must be completed before the student will be officially registered:

1. Application for Admission (first registration)
2. Class Registration Card (each registration)
3. Payment of fees and tuition

NOTE: Step 3 may include providing completed military Tuition Assistance forms or completed Veterans Administration forms if this method of financial aid is chosen to pay for course work.

All forms necessary for admission and registration are available from the Central Texas College Field Registrar at each site.

LATE REGISTRATION

Students are permitted to register through Friday of the week in which the class begins. 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 for classes after Friday of the first week in which the class starts.

CHANGING REGISTRATION

ADDING/DROPPING CLASSES

Students wishing to register for additional courses or to change course enrollments after registering must have the Field Registrar indicate such amendments on the registration card. Such changes must be completed and initialed by the student before the announced end of the registration period - Friday of the first week in which the class begins.

WITHDRAWAL - See page 17

COST OF CLASSES

TUITION AND FEES

Costs of providing classes at Central Texas College - Continental and Overseas campuses are defrayed by student tuition and fees and vary with the level of support provided by the sponsoring agency at each branch campus.

Tuition and fee schedules are frequently adjusted based on local conditions during the period this Catalog Supplement is in effect. For tuition and fee schedules effective at the time of publication see the Tuition and Fee Schedule at the end of this Supplement. For current tuition and fees consult the C.T.C. Field Registrar.

Students will be charged tuition at the rate established with the supporting agency which requests classes:

EXAMPLE: Students attending classes at an Air Force installation would pay tuition rates established with the Air Force.

EXAMPLE: Students attending classes at an Army installation would pay tuition rates established with the Army.

PAYMENT

METHOD OF PAYMENT

No cash is accepted. Checks or money orders should be made payable to Central Texas College. Central Texas College - Continental and Overseas requires payment of tuition and applicable fees prior to attendance of the first class meeting.

GETTING YOUR MONEY BACK

REFUNDS

The refund policy applies to tuition only. All refunds for students will be computed from the date the Application for Withdrawal/Refund is filed at the local Education Center (not from the date of the last class attended) according to the following schedule:

- If not more than one-eighth of the class meetings have elapsed at the time the withdrawal form is filed, the College will refund 75% of the tuition.
- If one-eighth to one-quarter of the class meetings have elapsed at the time the withdrawal form is filed, 25% of the tuition will be refunded.
- If more than one-quarter of the class meetings have elapsed at the time the withdrawal form is filed, no tuition will be refunded. Refunds will be processed upon receipt at the Student Services Office of the properly completed Application for Withdrawal/Refund form.

HOW TO OBTAIN STUDENT FINANCIAL AID

Information and application forms for military tuition assistance and VA benefits are available at military Education Centers. The two forms of financial aid are not part of the same program. Students interested in using such aid should be aware of the liabilities incurred.

TYPES OF AID

GI BILL: Central Texas College is an approved college for those who wish to attend and receive benefits under the Veterans Readjustment Benefits Act or other Veteran's Administration assistance.

MILITARY TUITION ASSISTANCE: Many military personnel, whether or not eligible to participate under the Veterans Readjustment Benefits Act, may wish to attend Cen-

tral Texas College under the Tuition Assistance Program, which pays for 75% of Tuition.

(Department of Defense Appropriations Act of 1966, P.L. 89-213)

Active duty military students (approved) under this program will have 75% of tuition costs paid by the government, but will be responsible for paying the remaining 25% as well as all fees and book costs.

Students who receive aid under Tuition Assistance incur a liability to the government. Each recipient should make sure that he or she is informed of all conditions of the Tuition Assistance agreement. Information about such conditions may be obtained at the military Education Center from the Education Services Officer or Counselor.

ARMY AND AIR FORCE

Both the Army and the Air Force have Tuition Assistance programs. The Army Tuition Assistance form is DA 2171, and the Air Force form is AF 1227. Air Force students attending classes at an Army site and Army students attending classes at an Air Force site should complete their appropriate service form and mail it to the appropriate Army or Air Force Education Center. The signature of the student's unit commander (or authorized representative) and the approving signature of the Education Services Officer are required on all forms. The Field Registrar will assist students in this matter, as local procedures may vary.

NAVY

Each applicant for Navy Tuition Assistance is required to complete a Tuition Assistance application - NAVEDTRA 1560/1 (2-74), which is to be forwarded through the student's Commanding Officer (for endorsement in accordance with BUPERS INST-1560. 10c). One copy of this form, signed by the student and the student's commander, must be forwarded to the College at registration. It is important that all navy students submit their requests for tuition assistance promptly, since requests received after the end of the term in question are subject to disapproval. Students should understand that in the event tuition aid requests are disapproved by the Navy, they must personally pay Central Texas College - Continental and Overseas for the balance of the tuition.

MARINES

Each Marine Corps applicant for tuition assistance is required to complete a Request for Tuition Aid, which is to be forwarded through the student's Commanding Officer (for endorsement in accordance with Marine Corps Order 1560. 1A) to the agency having funding authority for the activity concerned. One copy of this form, signed by the student and the student's commander, must be forwarded to the College at registration.

DEPARTMENT OF DEFENSE CIVILIANS

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 Education Services Officer and/or Civilian Personnel Office.

One copy of the approved Tuition Assistance form must be provided to the Field Registrar at the time of registration.

COLLEGE POLICIES AND REGULATIONS

ACADEMIC POLICY

HOW MANY CREDIT HOURS SHOULD YOU TAKE

ACADEMIC LOAD

Students are responsible for determining the academic load they can master during each term. Typical course loads, based on eight week terms, are as follows:

Half (1/2) time	- 3 semester hours
Three quarter (3/4) time	- 4 semester hours
Full (1/1) time	- 6 semester hours

NOTES:

1. For terms other than eight (8) weeks, consult with the Field Registrar.
2. Final determination of academic load for purposes of VA benefits payments is the prerogative of the Veterans Administration, not the institution. Questions about VA payments must be sent by the student directly to the VA office serving the student's campus.

Working students and students who may have difficulty with college level courses are encouraged to consult with the Education Center counselors for advice on the number of hours that should be taken.

ATTENDANCE POLICY

ABSENCES AND TARDINESS

Students are required to attend classes regularly. No unexcused absences or "cuts" are allowed. You are responsible for all class work covered during an absence from class, even in cases where you were able to satisfy the instructor that the absence was unavoidable. Failure to attend class regularly may result in administrative withdrawal of a student from a class or from the College. This type of non-attendance withdrawal results in the student receiving a grade of "F". Under these conditions a student attending the class under Tuition Assistance or Veterans Administration aid may be required to pay back a part or all of the tuition aid. Excusable absences are those resulting from personal illness, emergencies arising within the family, and military duties or orders requiring brief absences.

Students are expected to be in class on time.

The following specific rules apply to absences:

- A. Each instructor shall keep a record of class attendance and shall determine when a student's absence is excused.

- B. An administrative withdrawal may be initiated by the instructor after a student has six consecutive or ten total unexcused absences. The instructor will record the grade of "F" in Column 1 and "Non-Attendance" in Column 4 of the Final Class Report. Absences are computed on class hours of instruction. Example: A class meeting for 1 1/2 hours results in 1 1/2 absences.

Regardless of the nature of absence, students are responsible for all work covered during the absence. Students attending on-duty classes are reminded that unexcused class absences may result in disciplinary action by the unit commander, as the student may be considered absent without leave in such cases.

ARE YOU OFFICIALLY ENROLLED

CLASS MEMBERSHIP

The only way to become an official member of a class at Central Texas College-Continental and Overseas is by following the established procedures for registering and paying tuition and fees. No person is an official student until all charges have been paid in full. Installment paying of tuition and fees is not permitted. When a student officially withdraws from a course, she/he is not entitled to remain in class on an unofficial basis. Only those students who are officially enrolled have the privilege of attending classes.

YOUR CLASSIFICATION IS

FRESHMAN - with thirty semester hours or less recorded on your permanent record.

SOPHOMORE - with thirty-one semester hours or more recorded on your permanent record.

CREDIT AT CONTINENTAL AND OVERSEAS CAMPUSES

RESIDENT CREDIT

Since both instructors and courses offered by Continental and Overseas meet the same academic standards as those of the Killeen campus, Continental and Overseas courses carry the same resident credit as that earned for Killeen campus courses. A student may earn an Associate Degree entirely through study at Continental and Overseas Branch campuses or in combination with study at the Killeen campus, as long as twelve semester hours are earned by formal study under Central Texas College auspices.

CREDIT TRANSFERS

TO OTHER COLLEGES AND UNIVERSITIES

Central Texas College is accredited by the Southern Association of Colleges and Schools. Credits earned at Central Texas College - Continental and Overseas will transfer to other institutions in accordance with policies of the receiving institution. 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 transferring school for degree requirements and transfer policy.

CREDIT TRANSFER LIMITS

MAXIMUM HOURS FOR TRANSFER TO OTHER COLLEGES

As a general rule, senior colleges will accept a maximum of sixty-six (66) semester hours of transfer credit from junior colleges. A student should not take more than this number of hours with the objective of transfer of credit unless written permission is secured from the chosen senior college.

HOW TO CHOOSE COURSES

COURSE NUMBERS

The unit of credit for Central Texas College - Continental and Overseas is the semester hour. Course numbers contain three digits. If the first digit reading from the left is a "1" it indicates a freshman level course. If the first digit is a "2" it indicates a sophomore level course. The second digit indicates the semester hour value of the course. The third digit indicates the recommended order in which the course is to be taken.

WHAT TO DO ABOUT COURSE PREREQUISITES

COURSES OUT OF SEQUENCE

Certain courses offered by Central Texas College require prerequisites. A student who takes the advanced course first may have difficulty in completing course requirements. Students are advised not to take advanced courses prior to completion of the prerequisite courses.

Students who, for scheduling reasons, find it desirable to take an advanced course prior to completing the prerequisite course should consult with the instructor teaching the course and obtain the instructor's approval. The final responsibility for taking advanced courses without completing the required prerequisites rests with the students.

HOW YOU RECEIVE GRADES

GRADE REPORTING

Grades are assigned by faculty members based on attendance, class and laboratory performance, test scores and other academic factors. Students are encouraged to become familiar with each instructor's requirements for grades.

Grades are reported in two methods:

Grade Reports are provided by faculty members at the end of each term. This informal method of reporting grades permits students to judge their performance at the end of each course.

Transcripts are provided by the Student Services Office and are the official report of completed courses, grades, and credit awarded by the College. For information on ordering transcripts, see page 16.

GRADES AND POINT AVERAGE

Grading at Central Texas College is as follows:

<i>Numerical Value</i>	<i>Grade</i>
90 - 100	A - Superior (4 points per semester hour)
80 - 89	B - Above Average (3 points per semester hour)
70 - 79	C - Average (2 points per semester hour)
60 - 69	*D - Passing, but Unsatisfactory (1 point per semester hour)
	**F - Failure (0 points per semester hour)
	***I - Incomplete
	****W - Withdrawal
	*****N - No Credit

*Students who receive a "D" grade are advised not to enroll in the next course for which this course was a prerequisite.

**The grade of "F" may be given for academic failure or nonattendance.

INCOMPLETE GRADES - TIME LIMITS FOR REMOVAL

***An incomplete grade may be given in those cases where, because of personal illness, death in the immediate family, or military orders, the student is unable to complete all the requirements for a course, and prior notice with documentation has been given to the instructor regarding these circumstances. In awarding the grade of "I" the instructor may set a deadline for completing the remaining course requirements; in no case will the deadline exceed 90 days after the scheduled end of the class.

NOTE: In calculating the grade-point average for graduation or other purposes, the "I" grade is calculated as an "F" unless course requirements are met within this specified period.

The instructor makes the final decision concerning the granting of the Incomplete. In recording the grade of "I", the instructor states on a grade report the quality of the student's work to date, the requirements remaining and the deadline for completion.

REMOVING AN INCOMPLETE GRADE:

It is the responsibility of the student, not of the Education Center nor of Central Texas College to arrange with the instructor for the assignment of work necessary to complete the course and change the "I" grade within the time specified. An "I" cannot be removed by the mark of "W". If the student elects to repeat the course, she/he must register, pay full fees and repeat the entire course.

****If a student officially withdraws from Central Texas College a grade of "W" will be given.

*****The grade of "N" is normally reserved for those students enrolled in non-traditional, modular, self-paced courses who have made satisfactory progress, but lack the completion of certain modules required for course completion. The grade of "N" in-

icates 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 normal tuition and fees for the course.

A student's grade point average may be calculated by dividing the total quality points by the total accumulated semester hours. Grades of "W" and "N" are not included in these calculations.

The student attending college with military tuition assistance, tuition aid, or VA benefits should be familiar with the requirements and possible obligations incurred particularly upon receiving a grade of "F", "I", "W" or "N".

HOW TO CHANGE YOUR GRADE

CHANGE OF GRADES

Should a student feel that there has been a computational error in regard to the grade received for a course, she/he must immediately contact and consult the instructor for that course. If the instructor finds that an error has been made, the administrative offices must be notified by the instructor in the proper manner. Administrative personnel of Central Texas College are not authorized to change an instructor's grade. It is the responsibility of the student to contact the instructor in regard to this matter.

GRADES FOR REPEATED COURSES

REPEATING A COURSE

If a student repeats a course in which she/he has already earned a passing grade, the subsequent attempt will not increase the total hours earned toward a degree. The latter grade will be used in computing the final grade point average for graduation. Registration and fees for repeated courses are the same as for regular courses.

ACADEMIC STANDARDS

STUDENT RESPONSIBILITY

Students are expected to be aware of their grade point average. Calculation of grade point average is noted above. Students are encouraged to compute their GPA. Students who receive grades below "C" (2.0) for any courses should seek academic counseling to determine the causes of unsatisfactory work and on methods to improve grades in subsequent classes. Counseling for Central Texas College - Continental and Overseas students is provided at military Education Centers by the Education Services Officer or Counselor.

GRADE REQUIREMENTS

MINIMUM FOR SATISFACTORY PROGRESS

GRADUATION - requires an overall grade point average of 2.0.

GRADE POINT AVERAGES - A student at Central Texas College must achieve a 2.0 cumulative grade point average regardless of the number of courses taken.

IF YOU DON'T MAKE THE GRADE

PROBATION will be imposed when the student fails to maintain a 2.0 cumulative grade point average. Probation will be imposed during the next term in which the student registers. Students who do not maintain a "C" or 2.0 grade point average during the probation period will be suspended and cannot register for classes until completing requirements for return to class, listed below.

SUSPENSION will also be imposed if the student fails to achieve a 1.0 cumulative grade point average during any term. Suspended students cannot register for classes until completing requirements for return to class, listed below.

NOTE: Students who use VA benefits and who are suspended will be reported to the Veterans Administration. Current VA regulations require suspended students to receive counseling from the VA prior to re-instatement of VA benefits.

OVERSEAS STUDENTS NOTE: CURRENTLY NO VA COUNSELING SERVICES ARE AVAILABLE IN OVERSEAS AREAS OTHER THAN THE REPUBLIC OF PHILIPPINES. AS A RESULT OF SUSPENSION, YOU MAY BE UNABLE TO RECEIVE VA BENEFITS UNTIL YOU RETURN TO THE U.S.A. FOR VA COUNSELING.

HOW YOU MAY RETURN

RETURN TO CLASS AFTER SUSPENSION

Students attending Central Texas College - Continental and Overseas, who have been suspended, will be permitted to re-enter the college on an individual basis. Students wishing to re-enter must:

1. Receive counseling and be recommended, in writing, by the Education Services Officer, for return to classes.
2. Complete a re-entry petition and send it with the Education Services Officer's recommendation to the Director of Student Services.

RE-ENTRY PETITIONS WILL BE PROVIDED TO EACH STUDENT AT THE TIME OF SUSPENSION NOTIFICATION.

Students who have been suspended will be readmitted under **PROBATION** and must meet academic standards required while on probation.

ARE CLASSROOM VISITS ALLOWED

VISITORS IN CLASS

Permission to visit a class may be granted by a local college administrator. 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. College policy does not permit a student to audit courses.

REGULATIONS GOVERNING STUDENT ACTIVITIES

STUDENT RESPONSIBILITIES

ADDRESS CHANGE

Students attending Central Texas College - Continental and Overseas must keep current permanent and local mailing addresses on file with the College. Address changes must be reported promptly to the Director of Student Services. Students are responsible for all communication mailed to the last addresses on file. Address change notification forms are available from the Field Registrar.

ALCOHOL, NARCOTICS AND DRUGS

Students are not to use intoxicating beverages, narcotics or non-prescription drugs on campus or while attending any school-sponsored activity. Any student on campus or at a school-sponsored function who is under the influence or in possession of any of these items will be subject to disciplinary dismissal from the College.

Anyone found in possession of, using, or distributing illegal drugs or aiding those involved in such activities will be immediately subject to expulsion from the College.

CLASS BEHAVIOR

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

FALSIFICATION OF RECORDS

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

HARASSMENT

Harassment, whether verbal or by action, by any student enrolled at Central Texas College, of any member of the student body, faculty, administration, or any other college employee, will be considered a serious breach of discipline and shall be treated accordingly.

Any action, whether in the classroom or laboratory, at the administrative offices or at a school approved activity, subjecting a person to humiliation, indignity, discomfort, or that interferes with any process in which the College is engaged may be considered harassment.

SCHOLASTIC HONESTY

All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all course work and in examinations. The following will be considered examples of scholastic dishonesty and should be avoided:

1. Plagiarism - The taking of passages from writings of others without giving proper credit to the sources.
2. Collusion - (a) using another's work as one's own, or (b) working together with another person in the preparation of work unless such joint preparation is specifically approved in advance by the instructor.
3. Cheating - giving or receiving information on examinations, as well as using such information during examinations.

Students guilty of scholastic dishonesty will be dropped from the course with a grade of "F".

TEXTBOOKS

Students are expected to buy the textbook(s) designated for each course. Textbooks may be purchased from the Field Registrar during the registration period. This period is normally two weeks prior to the class starting date and during the first week of classes. After the registration period, students may obtain textbooks by sending a check or money order in the amount of the textbook plus ten percent for handling and shipping to: Central Texas College - Continental and Overseas, Attn: Book Department. Addresses for the Book Department serving your area are available from the Field Registrar.

HOW TO OBTAIN CTC TRANSCRIPTS

TRANSCRIPT ORDERING

A student's records are considered to be confidential in the personal sense (not as a military security matter). Therefore, it is necessary to have a request signed by the student before one or more transcripts can be released. Forms for requesting transcripts are available at Education Centers. An official transcript may be sent only to the officials of an accredited institution. *Graduates are automatically issued an information transcript free of charge.*

The fee for all other transcripts is \$2.00 each, which should accompany the written request. Information copies and official copies may be sent to address as requested by the student. Requests for transcripts should be addressed as follows: Director of Student Services, Central Texas College - Continental and Overseas at the address of the administrative offices serving your area. (See front of catalog or your Field Registrar for the correct address). The transcript request should include the student's full name, social security number, date of birth, and last date, month and year, and location, the student attended classes as well as the complete address to which the transcript is to be sent.

Records of each student participating in Continental and Overseas classes are maintained at the administrative offices serving your area until the Director of Student Services is informed by the student in writing that she/he has returned to the United States. Then

the permanent record is transferred to the Killeen, Texas offices.

NOTE: Transcripts may be provided only upon the written request of the student.

WITHDRAWALS

Any student who desires to, or must, withdraw from a course, after the first class meeting, must submit an Application for Withdrawal/Refund. The withdrawal form must be signed by the student, the instructor, and the Education Services Officer before it is considered official. If a student withdraws from a course because of reasons other than official military duties which prevent attendance in the class, she/he may be obliged to repay any Tuition Assistance or VA benefits received as payment for course costs.

A student who fails to withdraw officially will automatically receive an "F", and will lose any refund to which normally entitled.

Withdrawal is prohibited after the conclusion of the course. Field Registrars or Education Center personnel will provide information or furnish applications to any Student seeking to withdraw.

REGULATIONS GOVERNING DISCIPLINARY ACTION

DISCIPLINARY PHILOSOPHY

The philosophy of discipline at Central Texas College is a positive one. Disciplinary action is not considered to be primarily a punishment for violation of regulations, but an action taken on the basis of the judgment of College officials as to whether a particular student, at a particular time, has the attitudes and conduct which will enable the student to profit from the educational processes of the institution.

As students discover their rights, they must also recognize their responsibilities. The proper balance of rights and privileges with duties, responsibilities and obligations is essential to the development and maintenance of a creative college community.

To achieve an atmosphere conducive to the receipt, exchange and application of ideas, the faculty and administration of Central Texas College must first achieve an atmosphere free from disruptions and distractions that will interfere with or intrude upon the educational processes of the institution. In order to achieve this atmosphere the administration and faculty have the authority necessary to establish and maintain standards of ethical, moral, and personal conduct for all students enrolled in the College.

DISCIPLINARY PROCEDURES - CONTINENTAL AND OVERSEAS

1. The Director of Student Services or designated College official will notify the student of the date and time for the proposed disciplinary hearing and furnish a complete statement of those charges to be considered.
2. If witnesses are to appear on behalf of the student, a list of names must be provided by the student to the Director of Student Services or designated College official at least 48 hours prior to the hearing.
3. An Administrative Disciplinary Committee will hear the case. The committee

will be formed under the authority of the Dean, Continental and Overseas Services and will consist of the senior administrator of the branch campus, the Director of Student Services and the Chairman of the Department in which the student is studying. In the event these members are not available, or in locations where these positions are not authorized, the committee membership will be established by the senior administrator and the Dean, Continental and Overseas Services.

4. The Director of Student Services or designated College official will be required to present charges and information supporting the charges at the disciplinary hearing.
5. The student will be required to present her/his own information and witnesses and may review the information presented by the Director of Student Services or designated College official.
6. All hearings will be conducted on the College campus in "closed session" and shall be attended only by those persons authorized to be present. Members of any press or public communications media, and legal counsel, for the College and for the student, will be excluded from such a hearing. Information obtained in such hearings is considered to be privileged communication.
7. A transcript of the hearing will be obtained through use of a stenographer or tape recording.
8. The student will be permitted to examine the transcript of the hearing. The Director of Student Services or designated College official, and the student, will signify the accuracy of the transcript, when both are satisfied, by their respective signatures.
9. The Administrative Disciplinary Committee, at its discretion, may request that the Faculty-Student Advisory Committee be convened for the purpose of hearing the information in the case and recommending the disciplinary action to be taken. The Faculty-Student Advisory Committee is an ad hoc committee appointed by the President of the College. The Administrative Disciplinary Committee will make the final determination of the action to be taken and so notify the student in writing.
10. The student may appeal the decision by submitting a request to the Director of Student Services or designated College official indicating the reasons for the appeal. The request will then be submitted to the Dean, Continental and Overseas Services and the Dean of the College, who will act as the Appellate Committee. The Appellate Committee will decide whether to reconsider the charges and/or action taken and will notify the student, via the Director of Student Services or designated College official, of its decision.

DISCIPLINARY ACTION

Disciplinary action may be a written reprimand, disciplinary probation, suspension, or expulsion from the College.

Students on disciplinary probation may receive no honors from Central Texas College. The probation status is permanent unless the student has earned the privilege of being released from disciplinary probation.

CERTIFICATE & DEGREE REQUIREMENTS

WHAT DEGREES ARE OFFERED

DEGREES CONFERRED

The Board of Trustees of Central Texas College, realizing the possibility that students may have taken the majority of their course work at one educational area and then, because of military orders or other circumstances beyond their control, complete their degree requirements at a second education unit, has authorized each educational unit to process applications for the degree of Associate in Arts, Associate in Science, Associate in Applied Science and Associate in General Studies.

WHAT REQUIREMENTS MUST BE MET FOR

ASSOCIATE IN ARTS DEGREE

Complete a minimum of sixty-one semester hours which must include:

1. Twelve semester hours of English
2. Six semester hours of American History
3. Six semester hours of American Government
4. Two years of foreign language or one year of foreign language and one year of science
5. Four semesters of Physical Education
6. Psychology 111
7. A minimum of eighteen semester hours of sophomore courses
8. A minimum of twelve semester hours of credit earned anywhere within the Central Texas College system
9. Have a minimum overall grade-point average of 2.0 ("C" average)
10. Meet all other college requirements

ASSOCIATE IN SCIENCE DEGREE

Complete a minimum of sixty-six semester hours which must include:

1. Twelve semester hours of English
2. Six semester hours of American History
3. Six semester hours of American Government
4. Four courses of Science
5. Six semester hours of Math
6. Four semesters of Physical Education

7. Psychology 111
8. A minimum of fifteen semester hours of sophomore courses
9. A minimum of twelve semester hours credit earned anywhere within the Central Texas College system
10. Have a minimum overall grade-point average of 2.0 ("C" average)
11. Meet all other college requirements

ASSOCIATE IN GENERAL STUDIES DEGREE

Complete a minimum of sixty-one semester hours in courses chosen from the total curricular offerings of the College. Selections should include courses from the social sciences, humanities, communications, and sciences and may include courses from the vocational and technical curricula. A minimum overall grade-point average of 2.0 ("C") is required. A minimum of twelve semester hours must be completed at Central Texas College.

ASSOCIATE IN APPLIED SCIENCE DEGREE

The Associate in Applied Science Degree will be awarded to students who meet curricular requirements in a number of technology programs. The number of semester hour requirements vary according to the curriculum involved. A minimum overall grade-point average of 2.0 ("C") is required. A minimum of twelve semester hours must be completed in traditional study at Central Texas College.

Courses taken in Developmental Studies may not be used to satisfy degree requirements.

HOW TO EARN A CERTIFICATE

CERTIFICATES CONFERRED

Since the duties of military personnel normally prohibit them from full-time student status the College provides indicators of progress toward the Associate Degree in the form of certificates. The College presents the Certificate of Award at two levels, 15 hours and 30 hours, to indicate skills obtained by the student through course work as outlined in the program chosen by the student.

The student is eligible to receive the 15 hour Certificate of Award upon completion of 15 semester hours of credit in one program area. Nine of these hours must be taken with Central Texas College by traditional (classroom) methods (including video study). An additional 15 semester hours of credit in the same program area of study will qualify the student for the 30 hour Certificate of Award.

REQUIREMENTS FOR CERTIFICATES

Certificate of Award Level I

1. Minimum of 15 semester hours in same Associate Degree Program.
2. Minimum of 9 semester hours taken with C.T.C. (in class).

Certificate of Award Level II

1. Meet requirements of Level I above.
2. Minimum of 15 semester hours additional credit in the same Degree Program Plan.

WHEN ARE CERTIFICATES & DEGREES AWARDED

CERTIFICATE/DEGREE AWARD

Central Texas College - Continental and Overseas awards Certificates and Degrees in January and June of each year.

HOW TO APPLY FOR CERTIFICATE/DEGREE

Request for Certificate/Degree with appropriate fees must reach the Director of Student Services

for Certificate or Degree in January, by October 1st

for Certificate or Degree in June, by February 1st

NOTE: All course requirements must be complete prior to Certificate/Degree award. Students must be enrolled in their last classes before the cut off dates listed above. Requests from students who have not completed course requirements and who are not enrolled in remaining courses by the deadline above will not be processed.

WHEN IS COMMENCEMENT HELD

GRADUATION

Central Texas College - Continental and Overseas will hold one consolidated graduation exercise annually for each branch campus for recipients of certificates and degrees. Degrees and certificates will be awarded twice a year for students who, by virtue of their military duties or other valid reasons, are unable to attend the graduation exercise.

HONORS PROGRAM

GRADUATION WITH HONORS

Candidates for degrees from Central Texas College may graduate with HIGHEST HONORS or HONORS based upon the following criteria:

1. 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 course work taken.
2. In computing the candidate's grade point average, the grades in all courses taken at Central Texas College - Continental and Overseas and all courses taken at other accredited institutions of higher learning are included.
3. In any graduating class the student with the highest grade point average above 3.5 and no grade below "B" will be designated as graduating with HIGHEST HONORS.

HOW YOU RECEIVE CREDIT BY EVALUATION

SERVICEMEN'S OPPORTUNITY COLLEGE

Central Texas College is one of nearly 300 colleges and universities recognized as Servicemen's Opportunity College (SOC) institutions. Central Texas College is a charter participant in the SOC Associate Degree Program, a means of extending degree completion opportunities which fully utilizes credit based on military schools and experience. SOC is a network of colleges whose goal is to provide service personnel with educational opportunities. Members of SOC are selected on the basis of exhibiting college policies and procedures which meet both the educational needs of military personnel and the exigencies of service. Such institutions are not limited to those serving at local posts or bases nor those serving the military overseas. Each SOC college or university cooperates with other members of the network to lessen the impact of required mobility on the military student. Admission policies, transfer of credits, residency requirements, liberal recognition of credit for military education or experience all of which were obstacles to educational ambitions of members of the military forces in the past, are coordinated in a general framework of cooperation to aid in the military student's program completion.

The college recognizes that educational needs of service personnel are unique and that their education is often acquired through non-traditional methods. College credit can be granted for validated education acquired by non-traditional methods. Among the non-traditional methods of earning credits applicable toward a degree at Central Texas College are:

- A. American College Testing Program
- B. College Board Admission Testing Program
- C. College Level Examination Program
- D. Credit for Military Schools Attended
- E. Credit for Physical Education for Military Service
- F. Evaluated Credit for Civilian and/or Military Occupational Training Experience
- G. Institutional Course Challenge Examinations
- H. USAFI and/or DANTES Course and Subject Standardized Tests
- I. Non-Commissioned Officer Academy

Central Texas College accepts credit earned at other institutions of higher learning and accredited technical schools which are applicable to the degree program of the student. Through various combinations of these modes of non-traditional learning and transfer credits, a student may earn the major portion of required credits for an Associate Degree. A minimum of 12 semester hours must be compiled through traditional methods with a 2.0 (C) grade point average with Central Texas College (either Killeen campus, U.S. locations, or overseas) but not necessarily the last 12 semester hours of course work.

TRANSFER CREDIT FROM COLLEGES & UNIVERSITIES

TRADITIONAL CREDIT

Credit may be accepted from accredited colleges and universities when the grade earned was "C" or better. The course must also apply to the student's curriculum and be equivalent to a course offered by Central Texas College.

IS CREDIT AWARDED FOR CORRESPONDENCE COURSES

CORRESPONDENCE STUDY/EXTENSION COURSES

Central Texas College does not grant transfer credit for courses from non-accredited proprietary institutions offering correspondence and/or extension courses. However, it does accept for transfer correspondence course credit offered by accredited institutions holding membership in the National University Extension Association.

NON-TRADITIONAL CREDIT

Credit by means other than traditional course enrollment may be assigned to the student's permanent record when education is evaluated to numerical course equivalent. The methods of obtaining such credit are explained on the following pages.

CREDIT BY TESTING

CREDIT BY EXAMINATION

Credit by Examination has become a widely accepted means of obtaining college credit. There are many testing programs available to military personnel, several of which are administered by Military Education Centers. Those testing programs which are accepted by Central Texas College are explained below. A more detailed explanation of each of these programs is found in the *Central Texas College Manual for the Evaluation of Non-Traditional Educational Experience*.

The awarding of credit by examination by Central Texas College must meet the following general criteria:

1. The student must have earned six (6) semester hours by traditional methods through Central Texas College with a minimum 2.0 (C) grade point average on a 4.0 system.
2. The test score being evaluated must fall within the range of scores accepted by Central Texas College for each category of tests.

3. The subject matter covered by the test must equate in content to a specific Central Texas College course required for degree completion.
4. Application for any credit by examination must be made within seven (7) years following the testing date.
5. Credit cannot be granted on the basis of test scores for a course in which the student has been previously or is presently enrolled.
6. Test scores must be provided on official score report forms.

The test programs acceptable at Central Texas College and the specific criteria of each program follow:

1. THE AMERICAN COLLEGE TEST (ACT)

Application for credit must be made within seven (7) years following the testing date. The policy of granting credit based on ACT scores went into effect September 1974, and it is not retroactive for scores dated prior to September 1974.

<i>Minimum ACT Test</i>	<i>Score</i>	<i>Central Texas College Course</i>
English	22	ENGL 131 Composition and Rhetoric
English	24	ENGL 131 Composition and Rhetoric
English	26	ENGL 132 Composition and Rhetoric
Mathematics	27	MATH 131 Intermediate Algebra
Natural Science	28	BIOL 141 General Biology

2. COLLEGE BOARD ADMISSION TESTING PROGRAM (SAT)

Application for credit must be made within seven (7) years following the testing date. The policy of granting credit based on SAT scores went into effect September 1974, and it is not retroactive for scores dated prior to September 1974. If a student has repeated testing, the highest score rather than the most recent will be evaluated.

<i>Minimum SAT Test</i>	<i>Score</i>	<i>Central Texas College Course</i>
English	550	ENGL 131 Composition and Rhetoric
Mathematics	550	MATH 131 Intermediate Algebra

THE COLLEGE BOARD ACHIEVEMENT TEST (ACH) and THE COLLEGE BOARD ADVANCE PLACEMENT PROGRAM (APP) are accepted at Central Texas College. The specific criteria for these testing programs are in the Central Texas College Evaluation Manual cited above.

3. COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Application for credit must be made within seven (7) years following the testing date. The College Level Examination Program offers two types of tests: General Examinations covering five basic areas of the liberal arts. Subject Examinations measuring achievement in specific college level courses. The criteria for evaluating the General Examination are below. The criteria for

evaluating the Subject Examinations are found in the Central Texas College Evaluation Manual cited above. Credit only is awarded.

<i>Minimum General Exam</i>	<i>Score</i>	<i>Central Texas College Course</i>
English Composition I	427	ENGL 131 & 132 Composition and Rhetoric
Social Sciences History II	422	HIST 134 and SOC 231 History of Western Civilization Introduction to Sociology
Natural Sciences III	422	BIOL 141 and GEOL 141 General Biology Physical Geology
Humanities IV	422	ART 138 or ENGL 233* History & Appreciation of Art World Literature
Mathematics V	424	MATH 131 & 133 Intermediate Algebra Trigonometry

*Credit for ENGL 131 and ENGL 132 must be earned prior to receiving credit.

4. USAFI and/or DANTES COURSES AND SUBJECT STANDARIZED TESTS

The United States Armed Forces Institute (USAFI) was replaced in 1974 by The Defense Activity for Non-Traditional Education Support (DANTES). DANTES maintains USAFI records. Application for credit from Central Texas College for USAFI or DANTES tests or courses must be made within seven years following the test date. USAFI & DANTES Subject Standardized Tests (SST) - Results are reported as percentiles, and credit is awarded when the examinee attains a percentile of 20 or above.

USAFI Courses -

End of Course Tests - Credit is awarded when the examinee has achieved a rating of S (Satisfactory) or D (with Distinction).

Subject Examinations - Credit is awarded when the examinee has achieved a rating of S (Satisfactory).

A list of those SSTs and USAFI Courses for which Central Texas College has an equivalent course is found with the specific course awarded in the Central Texas College Evaluation Manual cited previously.

5. INSTITUTIONAL CHALLENGE EXAM

Challenge Examinations are available only for certain Central Texas College courses. Challenge Examination Request forms are maintained by Central Texas College Field Registrars. Students must obtain and complete Challenge Examination Requests and forward them with a fifty dollar (\$50) non-

refundable challenge fee to the address given on the request form. The student will then be notified of the time and place to take the examination.

Failure to show for the examination will result in loss of the challenge fee. Students are not permitted to receive credit by examination in courses for which they are presently enrolled or have been previously enrolled. Credit is granted only for examinations with grades of "B" or better.

NOTE: Students must be prepared to travel at their own expense to the examination center designated by the College.

EVALUATION OF MILITARY EDUCATION AND EXPERIENCES

- GENERAL POLICY

The process of evaluation of military education and experience is widely misunderstood. No institution is able to grant credit toward completion of the programs of any other institution. That is, an evaluation of military education and experience grants credit only toward the fulfillment of a program within the single institution granting the credit. Central Texas College cannot offer assurance to any student that the credit granted for his or her military education and experience may be transferred directly into other programs or other institutions.

The Central Texas College - Continental and Overseas evaluation process is necessarily divided into two phases, each of these having its special purposes.

1. **Field Evaluation.** When a student registers initially, she/he should contact the counselor at the Education Center for a field evaluation of military education and experience. While this evaluation does not grant credit, it can help the student avoid taking courses in which she/he has already mastered the course content.
2. **Official Evaluation.** When a student has completed 6 semester hours of course work through traditional methods with Central Texas College with a grade of C, she/he may request an Official Evaluation and Certificate or Degree Plan. Forms are available from the Central Texas College Field Registrar. Forms should be submitted to the Director of Student Services, Central Texas College - Continental and Overseas, at the administrative headquarters serving your area. The address is listed in the front of this catalog. Several conditions must exist before the official evaluation is rendered.
 - A. All official transcripts of work in previous institutions, including high school, must have been received directly from those institutions.
 - B. Six semester hours of work through traditional methods with Central Texas College in a single program must have been completed with a grade C or better.
 - C. The Form DD 295 signed by an authorized representative of the Education Center must have been received and verified by an officer at the student's personnel center; other documents may be required, depend-

ing on the student's branch of service.

- D. The student must have initiated a request via a Central Texas College Evaluation Request.

When all documents are received and evaluated at the administrative headquarters, the student folder is officially completed by the granting of credit for military education and experience, and the remaining requirements for the certificate or degree are set forth. Students may complete the requirements at Central Texas College - Continental and Overseas and Killeen campus, or in other institutions when they return to the United States under the provisions of an SOC Contract for Degree Completion. In general, the policy is that all evaluations of military education are the responsibility of the Director of Student Services.

SOC DEGREE COMPLETION CONTRACTS

Students can continue their Central Texas College degree programs regardless of location. Through the "credit bank" provisions of the Servicemen's Opportunity College, a student may study at any other accredited college and apply the work toward Central Texas College degree requirements, so long as 12 semester hours have been completed with Central Texas College, and the courses taken at other institutions satisfy the requirements of the Central Texas College degree program. The course work must be approved in advance by the Central Texas College SOC counselor. Request for SOC contracts for degrees should be addressed to the Director of Student Services.

The Servicemen's Opportunity College advisor for Continental and Overseas students is the Director of Student Services for the branch serving your area. Please consult the front of the supplement for address of the branch serving your area.

CENTRAL TEXAS COLLEGE - CONTINENTAL & OVERSEAS SERVICES

Not all programs of study are available at all locations. Programs approved at the various locations are shown on the diagram below. Students interested in programs other than at locations shown should consult Education Services Officers and/or CTC Representatives.

Associate in Applied Science Degree Programs	Locations					
	Alaska	Europe	Far East	Ft. Lee	Ft. Leonard Wood	PACE Pacific
Administrative Secretarial		●	●		●	
Air Conditioning & Refrigeration		●	●		●	●
Appliance Service and Repair		●	●		●	
Automotive Body Repair	●	●	●		●	
Automotive Service & Repair	●	●	●		●	●
Career Pilot	●	●	●		●	●
Computer Science			●	●		●
Consumer Electronics Servicing		●	●		●	
Diesel Mechanics		●	●		●	●
Drafting & Design	●	●	●		●	●
Electronics Technology		●	●		●	●
Environmental Control		●	●		●	
Fire Protection Technology		●	●		●	
Food Service Management	●	●	●	●	●	●
Hotel/Motel Management		●	●	●	●	
Information Systems Specialist		●	●		●	●
Law Enforcement Technology	●	●	●	●	●	●
Maintenance Technology		●	●		●	
Applied Management	●	●	●	●	●	●
Applied Management w/Technical Options*		●	●		●	
Management (Business Management Option) (Real Estate & Insurance Option)		●	●		●	
Office Management		●	●		●	
Petroleum Technology		●	●			
Photography	●	●	●		●	●
Real Estate		●	●		●	●
Small Gas Engine Repair	●	●	●		●	●
Telecommunications		●			●	
Welding Technology	●	●	●		●	●

*Applied Management / Technical Options: Automotive Tune-Up, Electronics Servicing, Food Service Operations, Home Appliances Servicing, Home Entertainment Servicing, Residential Air Conditioning Servicing, Small Engine Servicing.

PROGRAMS OF STUDY

PROGRAM OFFERING

Program requirements to earn a degree are listed alphabetically. Course descriptions, for all courses offered are listed in numerical order, alphabetically by program.

COURSE AVAILABILITY

Courses are offered to students at Military Education Centers which have sufficient student interest. However, not all courses are available, every term, due to the specialized nature of the course content, equipment requirement and/or faculty availability.

Student need and interest are major factors in scheduling course sequences. Students should express their requirements to the local Education Services Officer. This will assist in scheduling courses which will aid the majority of students pursuing a program of study. The Central Texas College Field Registrar can furnish convenient planning brochures for most programs.

PREREQUISITE COURSES

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

Example, ET 132 - Technical Math II requires that ET 131 - Technical Math I be successfully taken and passed prior to registering for ET 132.

Students who cannot schedule prerequisites must obtain prior approval to enroll in these courses from the instructor.

SEMESTER CREDIT HOURS

One semester hour of credit represents 1 hour of lecture class time or 2 hours of laboratory class time per week for 16 weeks. Lecture and lab proportions may vary depending on the nature of the course. The relationship of lecture to lab is included, in parenthesis, with each course description. For example, (3-0) for a 3 semester hour course means there are 3 lecture hours per week for one 16 week semester. (2-4) means there are 2 lecture hours and 4 lab hours per week for the same 16 week semester. This weekly requirement will be adjusted as necessary to compensate for courses with lengths other than 16 weeks.

TECHNICAL ELECTIVES

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

APPROVED ELECTIVES

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

ADMINISTRATIVE SECRETARIAL

FIRST YEAR

GENERAL SECRETARIAL

First Semester			Credit Hours	Second Semester			Credit Hours
OA	135	Clerical Practice	3	OA	136	Secretarial Practice	3
OA	131	Beginning Shorthand	3	OA	132	Intermediate Shorthand	3
OA	133	Beginning Typewriting	3	OA	134	Intermediate Typewriting	3
MATH	137	Business Mathematics	3	OA	139	Business Machines and Calculations	3
ENGL	137	Business English	3	OA	138	Business Correspondence	3
PSYC	111	Psychology of Personal & Social Development	1	PE		Physical Education	1
PE		Physical Education	1				
			17				16

SECOND YEAR

ADMINISTRATIVE SECRETARY

First Semester			Credit Hours	Second Semester			Credit Hours
OA	234	Bookkeeping I	3	OA	235	Bookkeeping II	3
OA	231	Advanced Shorthand	3	OA	233	Advanced Transcription	3
OA	232	Advanced Typewriting	3	OA	237	Office Administration & Procedures	3
BUS	231	Principles of Economics I	3	CS	130	Computers & Society	3
CS	131	Beginning Key Punch	3	ELECTIVE		Approved Elective	3-4
			<hr/> 15				<hr/> 15-16
						TOTAL	<hr/> 62-63

Levels of Typewriting, Shorthand, and Transcription will be determined by the student's previous training in these skills and/or by placement tests. Students who receive advanced standing in these courses may select approved electives to fulfill hour requirements. Electives appropriate to the student's major will be determined by the appropriate college official.

APPROVED ELECTIVES may be chosen from: BUS 131-Introduction to Business, BUS 232-Principles of Economics II, BIOL 141-General Biology, CHEM 140-Introductory Chemistry, LE 131-Introduction to Law Enforcement, LE 134-Criminal Procedures and Evidence, MGMT 135-Introduction to Management, MGMT 235-Business Law OA 238-Office Occupations Internship, OA 239-Office Administration Internship, PE 235-Safety and First Aid, PSYC 231-Introduction to Psychology.

AIR CONDITIONING AND REFRIGERATION

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours	
AC	140	Air Conditioning & Refrigeration Theory & Application	4	AC	142 Household Refrigeration	4
				AC	143 Heating Systems	4
				AC	144 Residential Air Conditioning	4
AC	141	Basic Electrical Circuits	4			
WELD	146	Welding Fundamentals	4	DD	130 Blueprint Reading	3
TMTH	130	Technical Mathematics I	3			
PSYC	111	Psychology of Personal & Social Development	1			
						15
						<hr/>
						16

SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
AC	241	Control Theory and Application	4	AC	243	Commercial Air Conditioning Systems	4
AC	242	Commercial Refrigeration Systems	4	AT	145	Automotive Air Conditioning	4
*DD	134	Architectural Blueprint Reading	3	MGMT	136	Human Relations	3
BUS	131	Introduction to Business	3	*ENGL	239	Technical Writing	3
ENGL	137	Business English	3				
			<hr/>				<hr/>
			17				14
			<hr/>				<hr/>
				TOTAL			62

*ELECTIVES: AC 244 - Fundamentals of Solar Heating and cooling or other electives approved by the appropriate college official may be substituted for DD 134 - Architectural Blueprint Reading or ENGL 239 -Technical Writing.

APPLIANCE SERVICE AND REPAIR

FIRST YEAR

First Semester				Second Semester			
		Credit Hours				Credit Hours	
APPR	141	Introduction to Major Appliances	4	APPR	142	Resistance Heating Appliances	4
ET	141	Direct Current Circuits	4	ET	142	Alternating Current Circuits	4
ET	144	Basic Test Equipment	4	DD	130	Blueprint Reading	3
TMTH	130	Technical Mathematics I	3	ENGL	137	Business English	3
PSYC	111	Psychology of Personal & Social Development	1	PE		Physical Education	1
PE		Physical Education	1				
			<hr/>				
			17				

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
APPR 241	Motor Driven Appliances	4	APPR 242	Motor Driven Appliances II	4
APPR 243	Air Conditioning and Refrigeration I	4	APPR 244	Air Conditioning and Refrigeration II	4
APPR 245	Microwave Cooking Devices I	4	APPR 246	Microwave Cooking Devices II	4
ET 135	Assembly Methods	3	APPR 248	Small Appliance Servicing	4
ELECTIVE	Approved Elective	3	ELECTIVE	Approved Elective	3
PE	Physical Education	1	PE	Physical Education	1
		<hr/> 19			<hr/> 20
				TOTAL	<hr/> 71

APPROVED ELECTIVES: As approved by appropriate college official.

AUTOMOTIVE BODY REPAIR

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
AB 141	Shop Practices	4	AB 144	Frame Straightening	4
AB 142	Body & Frame Construction	4	AB 145	Body Finishing	4
AB 143	Roughing & Alignment	4	AB 146	Painting	4
WELD 146	Welding Fundamentals	4	AB 147	Body Repair	4
PSYC 111	Psychology of Personal & Social Development	1			<hr/> 16
		<hr/> 17			

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
AB 241	Upholstery & Vinyl Top Repair	4	AB 242	Glass, Electrical & Power Accessory Service	4
AT 143	Brakes & Steering	4	AB 243	Management & Estimating	4
ENGL 137	Business English	3	AT 145	Automotive Air Conditioning	4
TMTH 130	Technical Mathematics	3	ENGL 239	Technical Writing	3
		<hr/> 14			<hr/> 15
				TOTAL	<hr/> 62

AUTOMOTIVE SERVICE AND REPAIR

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
AT 140	Shop Practices and Safety	4	AT 141B	Internal Combustion Engine Service	4
AT 141A	Internal Combustion Engine Fundamentals	4	AT 144	Fuel Systems	4
AT 142	Automotive Electrical Systems	4	AT 147	Brake Systems	4
TMTH 130	Technical Mathematics I	3	ELECTIVE	Approved Elective	3-4
PSYC 111	Psychology of Personal & Social Development	1	PE	Physical Education	1
PE	Physical Education	1			<hr/> 16-17
		<hr/> 17			

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours		
AT	148	Steering and Suspension Systems	4	AT	145	Automotive Air Conditioning	4
AT	149	Ignition, Starting, and Charging Systems	4	AT	146	Engine Diagnosis and Emission Control	4
AT	241A	Standard Transmissions and Differentials	4	AT	241B	Automotive Transmissions	4
ELECTIVE		Approved Elective	3-4	ELECTIVE		AUTO/DIEM Elective	4
ENGL	139	Communication Skills	3	PE		Physical Education	1
PE		Physical Education	1				
			19-20				
						TOTAL	69-71

ELECTIVES: DIEM 141 - Fuel Injection Systems; DIEM 241 - Diesel Engine Auxiliary Systems; DIEM 242 - Diesel Engine Service and Repair; AT 242 - Shop Organization and Management; WELD 141 - Beginning Gas Welding; WELD 146 - Welding Fundamentals; MGMT 135 - Introduction to Management or other electives approved by the appropriate college official.

CAREER PILOT

FIRST YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
CP	130	Basic Flight	3	CP	132	Propulsion Systems	3
CP	131	Aircraft Science	3	CP	134	Intermediate Flight	3
CP	133	Air Navigation	3	CP	135	Advanced Air Navigation	3
ENGL	131	Composition & Rhetoric I	3	CP	232	Meteorology	3
MATH		Approved Mathematics	3	ENGL	132	Composition & Rhetoric II	3
PSYC	111	Psychology of Personal & Social Development	1	PE		Physical Education	1
PE		Physical Education	1				16
			17				

SECOND YEAR

First Semester				Credit Hours	Second Semester				Credit Hours
CP	230	Commercial Aviation		3	CP	233	Air Transportation		3
CP	231	Aerodynamics		3	CP	235	Commercial Flight		3
CP	234	Advanced Flight		3	CP	237	Aviation Radio System		3
GOVT	231	State & Federal Government		3	GOVT	232	State & Federal Government		3
PHY	140	Survey of Physics		4	ELECTIVE		Approved Elective		3
PE		Physical Education		1	PE		Physical Education		1
				17					16
TOTAL									66
(cont)									

APPROVED MATHEMATICS: as approved by the appropriate college official.

APPROVED ELECTIVES: CP 236 - Multi-Engine Flight; CP 238 Instructor Rating; CP 238A - Instrument Flight Instructor; 238B - Multi-Engine Flight Instructor; CP 238C -Commercial Helicopter Rating; CP 238D -Helicopter Instructor Rating; CP 239 - Airline Transport Pilot; CP 239I - Instrument Flight; BUS 131 - Introduction to Business; BUS 231 - Principles of Economics I; BUS 232 - Principles of Economics II; BUS 237 - Principles of Accounting I; BUS 238 - Principles of Accounting II; MGMT 135 - Introduction to Management; MGMT 138R -Real Estate Fundamentals; MGMT 232 - Personnel Management; MGMT 235 - Business Law I; BUS 236 -Business Law II.

CP 235A - Commercial Transition Flight I; CP 235B - Commercial Transition Flight II are substitutes for CP 234 -Advanced Flight and CP 235 - Commercial Flight for Rotary Wing Transition Students.

COMPUTER SCIENCE

FIRST YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
CS	135	Introduction to Systems Analysis	3	CS	138	COBOL Programming	3
CS	143	Introduction to Computer Science and Computer Programming	4	CS	138A	RPG Programming	3
ENGL	131	Composition & Rhetoric I	3	CS	139	Computer Organization	3
*MATH		Mathematics Option	3	ENGL	132	Composition & Rhetoric II	3
**ELECTIVE		Approved Elective	3	*MATH		Mathematics Option	3
PSYC	111	Psychology of Personal & Social Development	1	PE		Physical Education	1
PE		Physical Education	1				
			18				

SECOND YEAR

First Semester				Credit Hours	Second Semester				Credit Hours
CS	234	Advanced COBOL	3	CS	238	Systems Analysis	3		
CS	243	Assembler Language		CS	239A	Introduction to Operating			
		Programming	4			Systems and Job Control			
BUS	237	Principles of Accounting I	3			Language	3		
GOVT	231	State and Federal		BUS	238	Principles of Accounting II	3		
		Government	3	GOVT	232	State and Federal			
**ELECTIVE		Approved Elective	3			Government	3		
PE		Physical Education	1	**ELECTIVE		Approved Elective	3		
			17	PE		Physical Education	1		
									16

*Students without a strong mathematics background should enroll in MATH 131 - Intermediate Algebra and MATH 135 - Finite Mathematics I. All other students should take MATH 135 - Finite Mathematics I and MATH 136 - Finite Mathematics II, or MATH 138 - Elementary Statistics.

*Electives must be approved by the appropriate college official.

CONSUMER ELECTRONICS SERVICING

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours		
TV	141	Home Music Systems	4	TV	145	Electronics Communica-	
ET	135	Assembly Methods	3			tions Fundamentals	4
ET	141	Direct Current Circuits	4	ET	142	Alternating Current	
ET	144	Basic Test Equipment	4			Circuits	4
PSYC	111	Psychology of Personal &		ET	143	Introduction to Electronic	
		Social Development	1			Devices	4
PE		Physical Education	1	CM	241	Digital Circuits	4
				PE		Physical Education	1
			17				17

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
TV	149	Television Theory and Servicing	4	TV 235 TV Shop Practices	3
				TV 246 Sound Systems	4
TV	242	Radio Systems	4	TV 249 Advanced Television	
TV	248	CATV & MATV Systems	4	Servicing	4
BUS	131	Introduction to Business	3	ELECTIVE Approved Elective	3-4
PE		Physical Education	1	*ENGL Approved English	3
				PE Physical Education	1
			16		18-19
					68-69

APPROVED ELECTIVES - TV 241-Music Systems Servicing, TV 247-Closed Circuit TV, ET 245-Communications Circuits I, ET 247-Communications Circuits II, or other courses as approved by appropriate college officials.

*APPROVED ENGLISH - as approved by appropriate college official.

DIESEL MECHANICS

FIRST YEAR

First Semester				Second Semester			
			Credit Hours				Credit Hours
AT	140	Shop Practices and Safety	4	DIEM	141	Fuel Injection Systems	4
AT	141A	Internal Combustion		AT	141B	Internal Combustion	
		Engine Fundamentals	4			Engine Service	4
AT	147	Brake Systems	4	AT	144	Fuel Systems	4
AT	149	Ignition Starting and		AT	241A	Standard Transmissions	
		and Charging Systems	4			and Differentials	4
PSYC	111	Psychology of Personal &		PE		Physical Education	1
		Social Development	1				
PE		Physical Education	1				17
			18				

(cont)

SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
DIEM	241	Diesel Engine Auxiliary Systems	4	DIEM	242	Diesel Engine Service and Repair	4
AT	148	Steering and Suspension Systems	4	AT	146	Engine Diagnosis and Emission Control	4
ENGL	139	Communication Skills	3	MGMT	134	Work Organization	3
ELECTIVE		Approved Elective	3-4	ELECTIVE		Approved Elective	3-4
PE		Physical Education	1	PE		Physical Education	1
			15-16				15-16
							65-67

APPROVED ELECTIVES: AT 142 - Automotive Electrical Systems; AT 145 - Automotive Air Conditioning; AT 241B - Automotive Transmissions; MGMT 135 - Introduction to Management; TMTH 130 - Technical Mathematics I; WELD 141 - Beginning Gas Welding; WELD 146 - Welding Fundamentals, or other courses approved by appropriate college official.

DRAFTING AND DESIGN

FIRST YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
DD	131	Engineering Graphics	3	DD	143	Machine Drawing	4
DD	132	Advanced Drafting	3	DD	232	Descriptive Geometry	3
DD	133	Technical Illustration	3	DD	244	Structural Drafting	4
TMTH	130	Technical Mathematics I	3	ENGL	137	Business English	3
PSYC	111	Psychology of Personal & Social Development	1	TMTH	131	Technical Mathematics II	3
PE		Physical Education	1	PE		Physical Education	1
ELECTIVE		Approved Elective	3-4				18
			17-18				

SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
DD	241	Sheetmetal and Pipe Drafting	4	DD	245	Topographic Drafting	4
DD	242	Architectural Drafting	4	DD	246	Industrial Practice	4
DD	243	Electronic Drafting	4	DD	248	Principles of Design	4
PE		Physical Education	1	PE		Physical Education	1
ELECTIVE		Approved Elective	3-4	ELECTIVE		Approved Elective	3-4
			16-17				16-17
				TOTAL			67-70

APPROVED ELECTIVES - DD 130-Blueprint Reading DD 134-Architectural Blueprint Reading, MATH 131 -Intermediate Algebra, MATH 132-College Algebra, MATH 133-Trigonometry, ENGL 131-Composition and Rhetoric I, ENGL 132-Composition and Rhetoric II, MT 143-Machine Shop Practices, ART 131-Freehand Drawing, OP 131-Introduction to Offset Printing, TV 145-Electronic Communications Fundamentals, or other courses approved by appropriate college officials.

ELECTRONICS TECHNOLOGY

FIRST YEAR

First Semester				Credit Hours	Second Semester				Credit Hours
ET	131	Technical Mathematics I	3	ET	132	Technical Mathematics II	3		
ET	135	Assembly Methods	3	ET	142	Alternating Current			
ET	141	Direct Current Circuits	4			Circuits	4		
ET	144	Basic Test Equipment	4	ET	143	Introduction to Electron			
ENGR	131	Engineering Graphics	3			Devices	4		
PSYC	111	Psychology of Personal &		TV	149	Television Theory &			
		Social Development	1			Servicing	4		
PE		Physical Education	1	ENGL	137	Business English	3		
				PE		Physical Education	1		
			19					19	

SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
ET	244	Solid State Devices	4	ET	243	Special Intensive Study	4
ET	245	Communications Circuits I	4	ET	247	Communications Circuits II	4
CM	241	Digital Circuits	4	ELECTIVE		Approved Elective	3-4
ENGL		Approved English	3	ELECTIVE		Approved Elective	3-4
PE		Physical Education	1	PE		Physical Education	1
			<hr/>				<hr/>
			16				15-17
							<hr/>
				TOTAL			69-71

APPROVED ELECTIVES - ET 234-Broadcast Equipment Maintenance, ET 242-Advanced Test Equipment, ET 246-Integrated Devices, ET 248-Industrial Electronic Control circuits, ET 249-Electronic Systems Troubleshooting, TV 246-Sound System Design and Servicing.

APPROVED ENGLISH - ENGL 239-Technical Writing, OA 138-Business Correspondence, or other courses as approved by appropriate college officials.

ENVIRONMENTAL CONTROL

FIRST YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
EC	131	Water and Waste Water Technology	3	EC	135	Environmental Control	3
EC	133	Solid Waste Management	3	EC	136	Chemical & Tertiary Waste Water Treatment	3
EC	243	Water and Waste Water Chemistry	4	EC	144	Pest Control	4
TMTH	130	Technical Mathematics I	3	ENGL	137	Business English	3
PHY	140	Survey of Physics	4	BIOL	144	Microbiology	4
PSYC	111	Psychology of Personal & Social Development	1	P E		Physical Education	1
P E		Physical Education	1				
			19				

(cont)

SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
EC	221	Pollution Abatement Seminar	2	EC	222	Pollution Abatement Seminar	2
EC	231	Air Pollution	3	EC	233	Instrumentation	3
EC	232	Industrial Waste Control	3	EC	234	Water Quality Control	3
GOVT	231	State & Federal Government	3	ENGL	239	Technical Writing	3
MGMT 137A		Safety (OSHA)	3	ELECTIVE		Approved Elective	3
PE		Physical Education	1	SPCH 233		Business Speech	3
			15	PE		Physical Education	1
							18
				TOTAL			70

EC 132-Aquatic Biology may be substituted for EC 135.

APPROVED ELECTIVES - BUS 231-Principles of Economics, MATH 137-Business Mathematics, or other courses approved by appropriate college officials.

FIRE PROTECTION TECHNOLOGY

FIRST YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
FPRT	131	Fundamentals of Fire Protection	3	FPRT	132	Fire Prevention	3
FPRT	133	Fire Protection Systems	3	FPRT	135	Fire Administration II	3
FPRT	134	Fire Administration I	3	*FPRT	138	Fire Service Chemistry II	3
*FPRT	137	Fire Service Chemistry I	3	MATH	137	Business Mathematics	3
ENGL	137	Business English	3	SPCH	131	Fundamentals of Speech	3
PSYC	111	Psychology of Personal & Social Development	1	PE		Physical Education	1
PE		Physical Education	1				16
			17				

SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
FPRT	231	Industrial Fire Protection I	3	FPRT	232	Industrial Fire Protection II	3
FPRT	233	Hazardous Material I	3	FPRT	236	Fire and Arson Investigation	3
FPRT	235	Building Codes and Construction	3	FPRT	244	Fire Fighting Tactics and Strategy	4
ENGL	239	Technical Writing	3	**ELECTIVE		Fire Protection Technology Elective	3
GOVT	239	Introduction to Political Science	3	***ELECTIVE		Approved Elective	3-4
PE		Physical Education	1	PE		Physical Education	1
			16				17-18
				TOTAL			66-67

*CHEM 141 & CHEM 142 may be substituted for FPRT 137 & FPRT 138.

**FIRE PROTECTION TECHNOLOGY ELECTIVES: FPRT 238 - Hazardous Material II; FPRT 239 - Fire Safety Education.

***EMT 141 - Emergency Medical Technician or other elective approved by appropriate college official.

FOOD SERVICE MANAGEMENT

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
RMGT 131	Food Preparation and Serving	3	RMGT 135	Food Purchasing	3
RMGT 132	Nutrition	3	RMGT 136	Menu Planning	3
RMGT 133	Sanitation and Safety	3	RMGT 137	Meat Science	3
HM 130	Food and Beverage Management	3	MATH 137	Business Mathematics	3
ENGL 137	Business English	3	MGMT 136	Human Relations	3
PSYC 111	Psychology of Personal & Social Development	1	PE	Physical Education	1
PE	Physical Education	1			
		<hr/> 17			<hr/> 16

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
*RMGT 221	Food Service Terminology	2	RMGT 233	Cafeteria Management	3
RMGT 234	Marketing & Sales Promotion	3	RMGT 235	Financial Management	3
MGMT 232	Personnel Management	3	RMGT 236	Layout and Design	3
MGMT 234	Labor-Management Relations	3	MGMT 235	Business Law I	3
MGMT 239	Supervision	3	ELECTIVE	Approved Elective	3-4
PE	Physical Education	1	PE	Physical Education	1
		<hr/> 15			<hr/> 16-17
					<hr/> 16-17
					<hr/> 64-65
				TOTAL	64-65

*RMGT 241 - Classical Food Preparation or RMGT 242 - Exhibition Work may be substituted for RMGT 221 or used to fulfill elective requirement. APPROVED ELECTIVES: As approved by appropriate college official.

HOTEL/MOTEL MANAGEMENT

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
HM 130	Food & Beverage Management	3	HM 133	Front Office Procedures	3
HM 132	Hotel/Motel Organization & Administration	3	HM 144	Hotel/Motel Sales Promotion	4
RMGT 131	Food Preparation & Serving	3	RMGT 133	Sanitation & Safety	3
MATH 137	Business Mathematics	3	MGMT 136	Human Relations	3
ENGL 137	Business English	3	BUS 237	Principles of Accounting I	3
PSYC 111	Psychology of Personal & Social Development	1	PE	Physical Education	1
PE	Physical Education	1			
		<hr/> 17			<hr/> 17

(cont)

SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
HM	232	Supervisory Housekeeping	3	HM	231	Hotel/Motel Law	3
RMGT	135	Food Purchasing	3	HM	235	Hotel/Motel Maintenance	3
RMGT	235	Financial Management	3	RMGT	232	Restaurant Merchandising	3
MGMT	232	Personnel Management	3	RMGT	236	Layout and Design	3
MGMT	234	Labor-Management Relations	3	ELECTIVE		Approved Elective	3-4
PE		Physical Education	1	PE		Physical Education	1
			<hr/>				<hr/>
			16				16-17
							<hr/>
				TOTAL			<hr/>
							66-67

ELECTIVES: Courses appropriate to the student's major as determined by the appropriate college official.

INFORMATION SYSTEMS SPECIALIST

FIRST YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
CS	130A	Introduction to Computer Concepts	3	CS	238	Systems Analysis	3
CS	135	Introduction to Systems Analysis	3	MGMT	135	Introduction to Management	3
BUS	131	Introduction to Business	3	MGMT	235	Business Law I	3
ENGL	131	Composition and Rhetoric I	3	BUS	237	Principles of Accounting I	4
*MATH		Approved Mathematics	3	*MATH		Approved Mathematics	3
			<hr/>				<hr/>
			15				16

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours	
CS	244	MIS and Information Storage and Retrieval	4	CS	245 Data Information Structures	4
MGMT	136	Human Relations	3	MGMT	232 Personnel Management	3
BUS	238	Principles of Accounting II	4	BUS	235 Introduction to Managerial Accounting	3
ENGL	239	Technical Writing	3	ELECTIVE	Approved Elective	3-4
MATH	138	Elementary Statistics	3	ELECTIVE	Approved Elective	3-4
			17			16-18
						64-66
				TOTAL		

*APPROVED MATHEMATICS: MATH 131 - Intermediate Algebra; MATH 132 - College Algebra or MATH 135 - Finite Mathematics I; MATH 136 - Finite Mathematics II.

APPROVED ELECTIVES: CS 136 - Introduction to Computer Operations; CS 138 - COBOL Programming; CS 138A - RPG PROGRAMMING; CS 143 - Introduction to Computer Science & Computer Programming; MGMT 234 - Labor-Management Relations; MGMT 239 - Supervision; PSYC 231 - Introduction to Psychology or other courses approved by appropriate college official.

LAW ENFORCEMENT TECHNOLOGY

FIRST YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
LE	131	Introduction to Law Enforcement	3	LE	137	Police-Community Relations	3
LE	132	Criminal Investigation	3	LE	138	Police Role in Crime and Delinquency	3
LE	133	Legal Aspects of Law Enforcement	3	LE	139	Police Organization and Administration	3
LE	134	Criminal Procedures and Evidence	3	ENGL	132	Composition & Rhetoric II	3
ENGL	131	Composition & Rhetoric I	3	SOC	231	Introduction to Sociology	3
PSYC	111	Psychology of Personal & Social Development	1	PE	218A	Health and First Aid	1
PE	218	Physical Conditioning	1				16
			17				

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
*LE	Law Enforcement Elective	3	*LE	Law Enforcement Elective	3
LE 234	Juvenile Procedures	3	LE 238	Patrol Administration	3
OVT 231-232	State & Federal Government	3	SPCH 233	Business Speech	3
PSYC 231	Introduction to Psychology	3	*ELECTIVE	Approved Elective	3
*ELECTIVE	Approved Elective	3	*ELECTIVE	Approved Elective	3
PE 218B	Defensive Tactics	1	PE 218C	Firearms	1
		<hr/>			<hr/>
		16			16
		<hr/>			<hr/>
			TOTAL		65

*Students concentrating on PATROL/TRAFFIC Option should select from LE 135, LE 233, LE 236, and/or LE 239.

Students concentrating on CORRECTIONAL/COURTS Option should select from LE 136, LE 231, LE 237, and/or LE 239A.

**EMT 141-Emergency Medical Technician, Social Science courses, or other Law Enforcement courses, with approval of appropriate college official.

MAINTENANCE TECHNOLOGY

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MTNT 141	Carpentry I	4	MTNT 142	Carpentry II	4
MTNT 143	Electricity I	4	MTNT 144	Electricity II	4
AC 140	Air Conditioning & Refrigeration Theory & Application	4	AC 141	Basic Electrical Circuits	4
			DD 130	Blueprint Reading	3
APPR 141	Introduction to Major Appliances	4	SGER 141	Gas Engine Fundamentals	4
MATH 137	Business Mathematics	3			
PSYC 111	Psychology of Personal & Social Development	1			
		20			19

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MTNT 141	Masonry I	4	MTNT 242	Masonry II	4
MTNT 243	Plumbing I	4	MTNT 244	Plumbing II	4
AC 142	Household Refrigeration Systems	4	MTNT 245	Painting and Refinishing	4
WELD 146	Welding Fundamentals	4	AC 143	Heating Systems	4
ENGL 137	Business English	3	MGMT 137A	Safety (OSHA)	3
		<hr/>			<hr/>
		19			19
					<hr/>
				TOTAL	<hr/>
					77

APPLIED MANAGEMENT

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 135	Introduction to Management	3	BUS 236	Personal Finance	3
MGMT 136	Human Relations	3	MATH 137	Business Mathematics	3
BUS 132	Consumer Economics	3	OA 138	Business Correspondence	3
CS 130A	Introduction to Computer Concepts	3	SPCH 131	Fundamentals of Speech	3
ENGL 137	Business English	3	ELECTIVE	Approved Elective	3
PSYC 111	Psychology of Personal & Social Development	1	PE	Physical Education	1
PE	Physical Education	1			<hr/>
		<hr/>			16
		17			<hr/>

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 232	Personnel Management	3	MGMT 232A	Law and Legal Assistance	3
MGMT 239	Supervision	3	MGMT 239A	Personnel Counseling	3
BUS 237	Principles of Accounting I	3	HIST 231	International Relations & U.S. Foreign Policy	3
SPCH 233	Business Speech	3			<hr/>
ELECTIVE	Approved Elective	3	ELECTIVE	Approved Elective	3
PE	Physical Education	1	ELECTIVE	Approved Elective	3
		<hr/>	PE	Physical Education	1
		16			<hr/>
					16
					<hr/>
				TOTAL	<hr/>
					65

APPROVED ELECTIVES: BUS 131-Introduction to Business, BUS 238-Principles of Accounting II, MGMT 130A Organization and Management, MGMT 134-Work Organization, MGMT 134A-Fundamentals of Industrial Management, MGMT 137-Insurance, MGMT 137A-Safety (OSHA), MGMT 138R-Real Estate Fundamentals, MGMT 139-Income Tax, MGMT 231-Marketing and Sales, MGMT 232B-Fundamentals of Systems Management, MGMT 233R-Real Estate Finance, MGMT 234-Labor-Management Relations, MGMT 235-Business Law I, MGMT 236-Business Law II, MGMT 238R-Real Estate Law, MGMT 239B-Military & Statistical Accounting, OA 237-Office Administration Procedures, SOC 239-Race or Minority Relations.

APPLIED MANAGEMENT WITH TECHNICAL OPTIONS AUTOMOTIVE TUNE-UP

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 135	Introduction to Management	3	MGMT 134	Work Organization	3
MGMT 137A	Safety (OSHA)	3	MGMT 136	Human Relations	3
AT 141	Automotive Engines	4	AT 144	Fuel Systems	4
AT 142	Automotive Electrical Systems	4	AT 146	Engine Diagnosis & Emission Control	4
BUS 131	Introduction to Business	3	MATH 137	Business Mathematics	3
PE	Physical Education	1	PE	Physical Education	1
		<hr/> 18			<hr/> 18

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 137	Insurance	3	MGMT 139	Income Tax	3
ENGL 137	Business English	3	MGMT 235	Business Law I	3
OA 234	Bookkeeping I	3	AT 242	Shop Organization &	
SPCH 233	Business Speech	3		Management	4
ELECTIVE	Approved Elective	3-4	OA 235	Bookkeeping II	3
PE	Physical Education	1	ELECTIVE	Approved Elective	3-4
		16-17	PE	Physical Education	1
					17-18
TOTAL					69-71

APPROVED ELECTIVES: BUS 231-Principles of Economics I, BUS 232-Principles of Economics II, BUS 236-Personal Finance, ET 131-Technical Math I, MATH 130-Fundamentals of Mathematics, MGMT 230-Credit and Collections, MGMT 231-Marketing and Sales, MGMT 236-Business Law II, MTNT 141-Carpentry I, MTNT 142- Carpentry II, MTNT 143-Electricity I, MTNT 144-Electricity II, MTNT 243-Plumbing I, MTNT 244-Plumbing II, OA 133-Beginning Typewriting, OA 134-Intermediate Typewriting, OA 138-Business Correspondence, OA 139-Business Machines and Calculations, TMTH 130-Technical Mathematics I.

ELECTRONICS SERVICING

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 135	Introduction to Management	3	MGMT 134	Work Organization	3
MGMT 137A	Safety (OSHA)	3	MGMT 136	Human Relations	3
ET 151	Basic Electricity for Electronics	5	ET 135	Assembly Methods	3
BUS 131	Introduction to Business	3	ET 152	Intermediate Electricity for Electronics	5
PE	Physical Education	1	ENGL 137	Business English	3
		<hr/> 15	PE	Physical Education	1
					<hr/> 18
					(cont)

SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
MGMT	137	Insurance	3	MGMT	139	Income Tax	3
ET	143	Introduction to Electron Devices	4	MGMT	235	Business Law I	3
ET	153	Advanced Electricity for Electronics	5	ET	144	Basic Test Equipment	4
OA	235	Bookkeeping I	3	OA	235	Bookkeeping II	3
SPCH	233	Business Speech	3	ELECTIVE		Approved Elective	3-4
PE		Physical Education	1	PE		Physical Education	1
			19				17-18
				TOTAL			69-70

APPROVED ELECTIVES: BUS 231-Principles of Economics I, BUS 232-Principles of Economics II, BUS 236-Personal Finance, ET 131-Technical Math I, MATH 130-Fundamentals of Mathematics, MGMT 230-Credit and Collections, MGMT 231-Marketing and Sales, MGMT 236-Business Law II, MTNT 141-Carpentry I, MTNT 142-Carpentry II, MTNT 143-Electricity I, MTNT 144-Electricity II, MTNT 243-Plumbing I, MTNT 244-Plumbing II, OA 133-Beginning Typewriting, OA 134-Intermediate Typewriting, OA 138-Business Correspondence, OA 139-Business Machines and Calculations, TMTH 130-Technical Mathematics I.

FOOD SERVICE OPERATIONS

FIRST YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
MGMT 135	Introduction to Management	3		MGMT 134	Work Organization	3	
MGMT 137A	Safety (OSHA)	3		MGMT 136	Human Relations	3	
HM 130	Food and Beverage Management	3		RMGT 132	Nutrition	3	
RMGT 131	Food Preparation & Serving	3		RMGT 133	Sanitation & Safety	3	
BUS 133	Introduction to Business	3		MATH 137	Business Mathematics	3	
PE	Physical Education	1		PE	Physical Education	1	
			16				16

SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
MGMT 137	Insurance		3	MGMT 139	Income Tax		3
RMGT 135	Food Purchasing		3	MGMT 235	Business Law I		3
ENGL 137	Business English		3	RMGT 136	Menu Planning		3
OA 234	Bookkeeping I		3	OA 235	Bookkeeping II		3
SPCH 233	Business Speech		3	ELECTIVE	Approved Elective		3-4
PE	Physical Education		1	PE	Physical Education		1
			<hr/> 16				<hr/> 16-17
							<hr/>
				TOTAL			<hr/> 64-65

APPROVED ELECTIVES: BUS 231-Principles of Economics I, BUS 232-Principles of Economics II, BUS 236-Personal Finance, ET 131-Technical Math I, MATH 130-Fundamentals of Mathematics, MGMT 230-Credit and Collections, MGMT 231-Marketing and Sales, MGMT 236-Business Law II, MTNT 141-Carpentry I, MTNT 142-Carpentry II, MTNT 143-Electricity I, MTNT 144-Electricity II, MTNT 243-Plumbing I, MTNT 244-Plumbing II, OA 133-Beginning Typewriting, OA 134-Intermediate Typewriting, OA 138-Business Correspondence, OA 139-Business Machines and Calculations, TMTH 130-Technical Mathematics I.

HOME APPLIANCE SERVICING

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 135	Introduction to Management	3	MGMT 134	Work Organization	3
MGMT 137A	Safety (OSHA)	3	MGMT 136	Human Relations	3
APPR 141	Introduction to Major Appliances	4	ET 141	Direct Current Circuits	4
APPR 142	Resistance Heating Appliances	4	ET 142	Alternating Current Circuits	4
BUS 131	Introduction to Business	3	MATH 137	Business Mathematics	3
PE	Physical Education	1	PE	Physical Education	1
		18			18

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 137	Insurance	3	MGMT 139	Income Tax	3
APPR 241	Motor Driven Appliances I	4	MGMT 235	Business Law I	3
ENGL 137	Business English	3	APPR 248	Small Appliance Servicing	4
OA 234	Bookkeeping I	3	OA 235	Bookkeeping II	3
SPCH 233	Business Speech	3	ELECTIVE	Approved Elective	3-4
PE	Physical Education	1	PE	Physical Education	1
		17			17-18
TOTAL					70-71

APPROVED ELECTIVES: BUS 231-Principles of Economics I, BUS 232-Principles of Economics II, BUS 236-Personal Finance, ET 131-Technical Math I, MATH 130-Fundamentals of Mathematics, MGMT 230-Credit and Collections, MGMT 231-Marketing and Sales, MGMT 236-Business Law II, MTNT 141-Carpentry I, MTNT 142-Carpentry II, MTNT 143-Electricity I, MTNT 144-Electricity II, MTNT 243-Plumbing I, MTNT 244-Plumbing II, OA 133-Beginning Typewriting, OA 134-Intermediate Typewriting, OA 138-Business Correspondence, OA 139-Business Machines and Calculations, TMTH 130-Technical Mathematics I.

HOME ENTERTAINMENT SERVICING

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 135	Introduction to Management	3	MGMT 134	Work Organization	3
MGMT 137A	Safety (OSHA)	3	MGMT 136	Human Relations	3
TV 141	Home Music Systems	4	ET 141	Direct Current Circuits	4
TV 145	Electronic Communications Fundamentals	4	ET 142	Alternating Current Circuits	4
BUS 131	Introduction to Business	3	MATH 137	Business Mathematics	3
PE	Physical Education	1	PE	Physical Education	1
		18			18

(cont)

SECOND YEAR

SECOND YEAR						
First Semester			Credit Hours	Second Semester		Credit Hours
MGMT 137	Insurance	3	MGMT 139	Income Tax	3	
TV 246	Sound Systems	4	MGMT 235	Business Law I	3	
ENGL 137	Business English	3	TV 149	Television Theory &		
OA 234	Bookkeeping I	3		Servicing	4	
SPCH 233	Business Speech	3	OA 235	Bookkeeping II	3	
PE	Physical Education	1	ELECTIVE	Approved Elective	3-4	
		17	PE	Physical Education	1	
					17-18	
TOTAL					70-71	

APPROVED ELECTIVES: BUS 231-Principles of Economics I, BUS 232-Principles of Economics II, BUS 236-Personal Finance, ET 131-Technical Math I, MATH 130-Fundamentals of Mathematics, MGMT 230-Credit and Collections, MGMT 231-Marketing and Sales, MGMT 236-Business Law II, MTNT 141-Carpentry I, MTNT 142-Carpentry II, MTNT 143-Electricity I, MTNT 144-Electricity II, MTNT 243-Plumbing I, MTNT 244-Plumbing II, OA 133-Beginning Typewriting, OA 134-Intermediate Typewriting, OA 138-Business Correspondence, OA 139-Business Machines and Calculations, TMTH 130-Technical Mathematics I.

RESIDENTIAL AIR CONDITIONING SERVICING

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 135	Introduction to Management	3	MGMT 134	Work Organization	3
MGMT 137A	Safety (OSHA)	3	MGMT 136	Human Relations	3
AC 140	Air Conditioning & Refrigeration Theory & Servicing	4	AC 142	Household Refrigeration Systems	4
AC 141	Basic Electrical Circuits	4	AC 143	Heating Systems	4
BUS 131	Introduction to Business	3	MATH 137	Business Mathematics	3
PE	Physical Education	1	PE	Physical Education	1
		<hr/> 18			<hr/> 18

SECOND YEAR

First Year			Credit Hours	Second Year			Credit Hours
MGMT 137	Insurance	3		MGMT 139	Income Tax	3	
ENGL 137	Business English	3		MGMT 235	Business Law I	3	
OA 234	Bookkeeping I	3		AC 144	Residential Air Conditioning	4	
SPCH 233	Business Speech	3		OA 235	Bookkeeping II	3	
ELECTIVE	Approved Elective	3-4		ELECTIVE	Approved Elective	3-4	
PE	Physical Education	1		PE	Physical Education	1	
			<hr/>				<hr/>
			16-17				17-18
			<hr/>				<hr/>
				TOTAL			69-71

APPROVED ELECTIVES: BUS 231-Principles of Economics I, BUS 232-Principles of Economics II, BUS 236-Personal Finance, ET 131-Technical Math I, MATH 130-Fundamentals of Mathematics, MGMT 230-Credit and Collections, MGMT 231-Marketing and Sales, MGMT 236-Business Law II, MTNT 141-Carpentry I, MTNT 142-Carpentry II, MTNT 143-Electricity I, MTNT 144-Electricity II, MTNT 243-Plumbing I, MTNT 244-Plumbing II, OA 134-Intermediate Typewriting, OA 138-Plumbing II, OA 133-Beginning Typewriting, OA 134-Intermediate Typewriting, OA 138-Business Correspondence, OA 139-Business Machines and Calculations, TMTH 130-Technical Mathematics I.

SMALL ENGINE SERVICING

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 135	Introduction to Management	3	MGMT 134	Work Organization	3
MGMT 137A	Safety (OSHA)	3	MGMT 136	Human Relations	3
SGER 141	Gas Engine Fundamentals	4	SGER 143	Shop Practices	4
SGER 142	Ignition Systems	4	SGER 144	Carburetion, Fuel & Lubricating Systems	4
BUS 131	Introduction to Business	3	MATH 137	Business Mathematics	3
PE	Physical Education	1	PE	Physical Education	1
		<hr/> 18			<hr/> 18

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 137	Insurance	3	MGMT 139	Income Tax	3
SGER 145	Motorcycle Engine Service	4	MGMT 235	Business Law I	3
ENGL 137	Business English	3	SGER 146	Lawn Care Equipment	4
OA 234	Bookkeeping I	3	OA 235	Bookkeeping II	3
SPCH 233	Business Speech	3	ELECTIVE	Approved Elective	3
PE	Physical Education	1	PE	Physical Education	1
		<hr/> 17			<hr/> 17
					<hr/>
				TOTAL	70

APPROVED ELECTIVES: BUS 131-Introduction to Business, BUS232-Principles of Economics II, BUS 236-Personal Finance, ET 131-Technical Math I, MATH 130-Fundamentals of Mathematics, MGMT 230-Credit and Collections, MGMT 231-Marketing and Sales, MGMT 236-Business Law II, MTNT 141-Carpentry I, MTNT 142-Carpentry II, MTNT 143-Electricity I, MTNT 144-Electricity II, MTNT 243-Plumbing I, MTNT 244-Plumbing II, OA 133-Beginning Typewriting, OA 134-Intermediate Typewriting, OA 138-Business Correspondence, OA 139-Business Machines and Calculations, TMTH 130-Technical Mathematics I.

MANAGEMENT

MANAGERIAL ASSISTANT

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 134	Work Organization	3	MGMT 136	Human Relations	3
MGMT 135	Introduction to Management	3	MGMT 232	Personnel Management	3
OA 135	Clerical Practice	3	OA 133	Beginning Typewriting	3
OA 139	Business Machines and Calculations	3	OA 138	Business Correspondence	3
ENGL 137	Business English	3	MATH 137	Business Mathematics	3
PSYC 111	Psychology of Personal & Social Development	1	PE	Physical Education	1
PE	Physical Education	1			<hr/> 16
		<hr/> 17			

(Cont)

BUSINESS MANAGEMENT OPTION

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 235	Business Law I	3	MGMT 234	Labor-Management Relations	3
MGMT 239	Supervision	3	MGMT 236	Business Law II	3
CS 130	Computers and Society	3	ELECTIVE	Approved Management Elective	3
OA 234	Bookkeeping I	3	OA 235	Bookkeeping II	3
SPCH 233	Business Speech	3	OA 237	Office Administration and Procedures	3
		15			15
					63
				TOTAL	

Level of Typewriting will be determined by the student's previous training in these skills, and/or by placement tests. Students who receive advanced standing in typewriting may select an approved Management Elective to fulfill hour requirements.

APPROVED ELECTIVES: MGMT 137-Insurance, MGMT 139 - Income Tax, MGMT 231 - Marketing and Sales, MGMT 137A - Safety.

Electives appropriate to the student's major will be determined by the appropriate college official.

REAL ESTATE AND INSURANCE MANAGEMENT OPTION

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 137	Insurance	3	MGMT 233R	Real Estate Finance	3
MGMT 138R	Real Estate Fundamentals I	3	MGMT 237	Life Insurance	3
MGMT 230	Credit & Collections	3	MGMT 238R	Real Estate Law	3
MGMT 231	Marketing and Sales	3	OA 235	Bookkeeping II	3
OA 234	Bookkeeping I	3	OA 237	Office Administration and Procedures	3
		15			15
					63
				TOTAL	

Level of Typewriting will be determined by the student's previous training in these skills, and/or by placement tests. Students who receive advanced standing in typewriting may select an approved Management Elective to fulfill hour requirements.

APPROVED ELECTIVES: MGMT 139 - Income Tax, MGMT 234 - Labor-Management Relations. Electives appropriate to the student's major will be determined by the appropriate college official.

OFFICE ASSISTANT
FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
OA 133	Beginning Typewriting	3	OA 134	Intermediate Typewriting	3
OA 135	Clerical Practice	3	OA 138	Business Correspondence	3
OA 234	Bookkeeping I	3	OA 235	Bookkeeping II	3
MATH 137	Business Mathematics	3	OA 139	Business Machines and Calculations	3
ENGL 137	Business English	3			
PSYC 111	Psychology of Personal & Social Development	1	MGMT 135	Introduction to Management	3
PE	Physical Education	1	PE	Physical Education	1
		<hr/> 17			<hr/> 18

OFFICE MANAGEMENT OPTION SECOND YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
MGMT 134	Work Organization	3	MGMT 232	Personnel Management	3		
MGMT 136	Human Relations	3	MGMT 236	Business Law II	3		
MGMT 235	Business Law I	3	MGMT 239	Supervision	3		
CS 130	Computers and Society	3	OA 237	Office Administration and Procedure	3		
SPCH 233	Business Speech	3	ELECTIVE	Approved Elective	3		
			—				—
			15				15
							==
			TOTAL				63

Levels of Typewriting will be determined by the student's previous training in these skills, and/or by placement tests. Students who receive advanced standing in Typewriting may select approved elective to fulfill hour requirements.

APPROVED ELECTIVES: MGMT 231-Marketing Sales, MGMT 239A-Personnel Counseling. OA 238-Office Occupations Internship. OA 239-Office Administration Internship.

Electives appropriate to the student's major will be determined by appropriate college officials.

PETROLEUM TECHNOLOGY

FIRST YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
PETT	131	Introduction to Petroleum Technology	3	PETT	133	Rotary Drilling Fluids	3
PETT	132	Petroleum Geology	3	PETT	134	Oil Field Records	3
PETT	141	Rig & Drilling Equipment	4	PETT	142	Petroleum Logging & Mapping	4
CHEM	141	General Chemistry	4	CHEM	142	General Chemistry	4
TMTH	130	Technical Mathematics I	3	ENGL	137	Business English	3
PSYC	111	Psychology of Personal & Social Development	1				17
			18				

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SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
PETT 231	Pumping Equipment	3	PETT 233	Natural Gas Production	3
PETT 232	Well Completion Methods	3	ELECTIVE	Petroleum Technology	
PETT 241	Petroleum Production			Elective	3
	Methods	4	ELECTIVE	Petroleum Technology	
ENGL 239	Technical Writing	3		Elective	3
MGMT 137A	Safety (OSHA)	3	PETT 242	Petroleum Refining Meth-	
			ods and Operations		4
		16	MGMT 239	Supervision	3
					16
					67
			TOTAL		

Petroleum Technology Electives - PETT 234 - Petroleum Transportation, PETT 235 - Petroleum Pollution Control, PETT 236 - Hydraulics, PETT 237 - Refinery Operations.

PHOTOGRAPHY

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
PHOT 141	Introduction to		PHOT 143	Advanced Photography	4
	Photography	4	PHOT 144	Commercial Photography	4
PHOT 142	Portrait Photography	4	PHOT 145	Advanced Printmaking	4
*PHOT 146	Color Photography I	4	**PHOT 147	Color Photography II	4
ENGL 139	Communication Skills	3	ELECTIVE	Approved Elective	3
MATH 137	Business Mathematics	3	PE	Physical Education	1
PSYC 111	Psychology of Personal &				20
	Social Development	1			
PE	Physical Education	1			
		20			

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
PHOT 231	Photography Internship I	3	PHOT 232	Photography Internship II	3
PHOT 243	Portrait Retouching	4	PHOT 244	Photographic Production	4
ENGL 239	Technical Writing	3	BUS 131	Introduction to Business	3
JOUR 141	Communications Media	4	OA 234	Bookkeeping I	3
ELECTIVE	Approved Elective	3	ELECTIVE	Approved Elective	3
PE	Physical Education	1	PE	Physical Education	1
		18			17
					75
			TOTAL		

*TELE 231 - Television Film I may substituted for PHOT 146 - Color Photography I.

**TELE 237 - Television Film II/Electronic News Gathering may be substituted for PHOT 147 - Color Photography II.

APPROVED ELECTIVES: ART 130 - Printing for Advertising Art; SPCH 131 - Fundamentals of Speech; OP 132 - Camera and Darkroom Procedures, Stripping and Platemaking I; TELE 133 - Beginning Television Production; TELE 232 - Advanced Television Production; TELE 238 - Telecommunications Practicum or other electives approved by appropriate college official.

REAL ESTATE

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
MGMT 138R	Real Estate Fundamentals I	3	MGMT 139R	Real Estate Fundamentals II	3
MGMT 135	Introduction to Management	3	MGMT 239	Supervision	3
MGMT 136	Human Relations	3	BUS 231	Principles of Economics I	3
BUS 131	Introduction to Business	3	MATH 137	Business Mathematics	3
ENGL	English Elective	3	SOC	Social Science Elective	3
PSYC 111	Psychology of Personal & Social Development	1			
		<hr/> 16			<hr/> 15

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
	REAL ESTATE ELECTIVE	3		REAL ESTATE ELECTIVE	3
	REAL ESTATE or MANAGEMENT ELECTIVE	3		REAL ESTATE or MANAGEMENT ELECTIVE	3
BUS 232	Principles of Economics II	3	MGMT 231	Marketing and Sales	3
BUS 237	Principles of Accounting I	3	BUS 238	Principles of Accounting II	3
ELECTIVE	Approved Elective	3	SPCH	Speech Elective	3
		<hr/> 15			<hr/> 15
			TOTAL		<hr/> <hr/> 61

ENGLISH ELECTIVES: ENGL 130, ENGL 131, or ENGL 137.

SOCIAL SCIENCE ELECTIVES: Must be approved by the appropriate college official.

SPEECH ELECTIVES: SPCH 131, SPCH 233.

APPROVED ELECTIVES: As approved by the appropriate college official.

SMALL GAS ENGINE REPAIR

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
SGER 141	Gas Engine Fundamentals	4	SGER 144	Carburetion, Fuel & Lubrication Systems	4
SGER 142	Ignition Systems	4	SGER 145	Motorcycle Engine Service	4
SGER 143	Shop Practices	4	SGER 146	Lawn Care Equipment Service	4
TMTH 130	Technical Mathematics	3	ENGL 137	Business English	3
PSYC 111	Psychology of Personal & Social Development	1	WELD 146	Welding Fundamentals	4
		<hr/> 16			<hr/> 19

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SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
SGER 241	Advanced Motorcycle Service	4	SGER 244	Stationary Power Plant Service	4
SGER 242	Chain Saw Service	4	SGER 245	Recreational Vehicle Engine Service	4
SGER 243	Marine Inboard/Outboard Service	4	SGER 246	Special Projects	4
MGMT 137A	Safety (OSHA)	3	MGMT 239	Supervision	3
		<hr/> 15			<hr/> 15
			TOTAL		<hr/> <hr/> 65

TELECOMMUNICATIONS

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
TELE 131	Introduction to Broadcasting	3	TELE 133	Beginning Television Production	3
TELE 132	Beginning Radio Production	3	TELE 134	Station Sales/Management	3
TELE 135	Radio-Television Announcing	3	JOUR 142	News Writing	4
JOUR 141	Communications Media	4	ENGL 132	Composition & Rhetoric II	3
ENGL 131	Composition & Rhetoric I	3	SPCH 131	Introduction to Speech	3
PSYC 111	Psychology of Personal & Social Development	1			<hr/> 16
		<hr/> 17			

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
TELE 231	Television Film I	3	TELE 232	Advanced Television Production	3
TELE 233	Advanced Radio Production	3	TELE 236	Communications Law	3
TELE 239A	Technical Aspect of Broadcasting	3	TELE 237	Television Film II/ Electronic News Gathering	3
TELE 235	Broadcast Writing	3	TELE 238	Telecommunications Practicum	3
ELECTIVE	Approved Elective	3	ELECTIVE	Approved Elective	3
		<hr/> 15			<hr/> 15
			TOTAL		<hr/> <hr/> 63

APPROVED ELECTIVES: TELE 234-Broadcast Operations, TELE 239B-Telecommunications Field Projects, TELE 239C-Telecommunications Seminar, TELE 239D-Telecommunications Field Projects, or other courses as approved by appropriate college officials.

Prerequisites or their equivalents are required for non-broadcasting majors taking Telecommunications courses above the Freshmen level.

WELDING TECHNOLOGY

FIRST YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
WELD 141	Beginning Gas Welding	4	WELD 151	Advanced Arc Welding	5
WELD 142	Beginning Arc Welding	4	WELD 152	Advanced Welding Processes (MIG & TIG)	5
DD 134	Blueprint Reading	3	ENGL 137	Business English	3
TMTH 130	Technical Mathematics	3	DD 131	Engineering Graphics	3
PSYC 111	Psychology of Personal & Social Development	1			
		<hr/> 15			<hr/> 16

SECOND YEAR

First Semester		Credit Hours	Second Semester		Credit Hours
WELD 153	Weld Test Methods	5	WELD 155	Advanced Fabrication Methods	5
WELD 154	Welding Fabrication and Lay-Out	5	WELD 156	Pipe Welding	5
MGMT 137A	Safety (OSHA)	3	WELD 157	Structural Welding	5
ENGL 239	Technical Writing	3	MGMT 239	Supervision	3
		<hr/> 16			<hr/> 18
			TOTAL		<hr/> 65

COURSE DESCRIPTIONS

AIR CONDITIONING & REFRIGERATION (AC)

AC 140 Air Conditioning and Refrigeration Theory and Application (2-4) Credit: 4

This course deals with the basic physical principles of an air conditioning system. Introduction to heat, heat movement, temperature, pressure, refrigerants, temperature pressure relationship to refrigerants, the refrigeration cycle, the major components of refrigeration systems and their relationship to each other. Introduction to the basic electrical devices found in air conditioning systems, i.e., motors, controls, etc. Use of special air conditioning tools and equipment, soldering and welding equipment. The use and care of specialized electrical testing and recording instruments is stressed.

AC 141 Basic Electrical Circuits (2-4) Credit:4

Instruction in basic electricity and its application. Introduces the student to the various electrical devices, their importance in electrical circuits, including those used in residential wiring. Methods of wire connections for new and repair service, making and testing electrical circuits and the use of electrical measuring and testing equipment.

AC 142 Household Refrigerations Systems (2-4) Credit:4

Application of the refrigeration cycle to household refrigeration, including refrigerators, home freezers, and window air conditioning units. Instruction in service procedures for locating and correcting problems in the mechanical and electrical systems of units. Trouble shooting, repairing and charging refrigeration equipment. Development of shop skills in the use of special refrigeration tools and equipment.

AC 143 Heating Systems

(2-4) Credit: 4

The study of types of heating equipment and their application. Service procedures for locating and correcting problems in heating systems. Study of manufacturers' information on various heating units and equipment to enable the student to determine proper installation.

AC 144 Residential Air Conditioning

(2-4) Credit: 4

Instruction in heat transfer through material, heat loss and heat gain calculations for residential heating and air conditioning systems, equipment selection and locations, duct sizing and layout, controls and control circuits, installation and service procedures.

AC 241 Control Theory and Application

(2-4) Credit: 4

Instruction in the operation of control devices, how they can be applied and varied to achieve the designed conditions. Includes interpretations and drawings of schematic and pictorial control circuit diagrams.

AC 242 Commercial Refrigeration Systems

(2-4) Credit: 4

Types of commercial refrigeration units and systems. Instruction in controls and control circuits in commercial refrigeration. Heat loss and heat gain calculations for commercial applications, equipment selections, locating and piping procedures. Instruction in installation and service procedures for different systems.

AC 243 Commercial Air Conditioning Systems

(2-4) Credit: 4

A course designed to cover heat transfer, heat loss and heat gain calculations as applied to commercial heating and air conditioning. Psychometrics of conditioned air, duct design and layout, equipment selection and location, shop drawings, controls and control circuits for automatic conditioning of air.

AC 244 Fundamentals of Solar Heating and Cooling

(3-3) Credit: 4

An introductory course covering the fundamentals of solar heating and cooling. Topics of instruction include the economics of solar energy systems; introduction to basic solar systems, collector design and construction, heat storage, heat exchangers, systems control, air systems, liquid systems, heat pumps and absorption cooling; calculation and sizing of collectors and storage tanks; solar water heaters; and regulations and standards governing solar heating and cooling systems.

APPLIANCE SERVICE AND REPAIR (APPR)

APPR 141 Introduction to Major Appliances

(2-4) Credit: 4

This course covers an introduction to the theory and application of the different types of major appliances. Practical shop applications, safety procedures, use of power and hand tools, test instruments, and use of repair manuals are also included.

APPR 142 Resistance Heating Appliances

(2-4) Credit: 4

This course covers the theory, repair procedures and trouble shooting techniques on heaters, baking ovens and other types of resistance heating appliances. Prerequisite: APPR 141.

APPR 241 Motor Driven Appliances I

(2-4) Credit: 4

This course covers the theory and application of home laundry units. Practical experiences include service procedures on the repair of automatic washing machines and both gas and electric clothes dryers. Prerequisite: APPR 141.

APPR 242 Motor Driven Appliances II

(2-4) Credit: 4

This course covers the theory of operation of home type automatic dishwashers, garbage disposals, and trash compactors. Practical experiences include service procedures in the repair of these appliances. Prerequisite: APPR 241.

APPR 243 Air Conditioning and Refrigeration I

(2-4) Credit: 4

This course covers the basic theory of the refrigerant cycle and the theory of the operation of all home type refrigeration appliances. Practical experiences include service procedures on freezers, refrigerators, ice-making machines, domestic air conditioners and other refrigeration related appliances.

APPR 244 Air Conditioning and Refrigeration II

(2-4) Credit: 4

This course covers the basic theory of self-contained and remote controlled condensing units, low and medium temperature walk-in boxes, store fixtures and other commercial refrigeration units. Practical experiences include service procedures in the repair of these appliances. Prerequisite: APPR 243.

APPR 245 Microwave Cooking Devices I

(2-4) Credit: 4

This course covers the theory of operation of microwave cooking devices. Practical experiences include service procedures in the repair of these appliances. Special consideration is given to safety precautions on these devices.

APPR 246 Microwave Cooking Devices II

(2-4) Credit: 4

This course is a continuation of APPR 245 - Microwave Cooking Devices I. Prerequisite: APPR 245.

APPR 248 Small Appliance Servicing

(2-4) Credit: 4

This course covers the theory of operation of toasters, hair dryers, electric knives and other small repairable appliances. Practical experiences include service procedures in the repair of these appliances.

ART

ART 130 Printing for Advertising Art

(2-4) Credit: 3

Fundamentals of various graphic techniques, classification of printing methods, composition, copy and art preparation, paper selection, type and letter styles and usage, trademarks, handlettering.

ART 131 Freehand Drawing

(2-4) Credit: 3

A study of the basic drawing skills, including both abstraction and expressive drawing in charcoal, pencil, pen, wash, conte crayon and mixed media.

AUTOMOTIVE BODY REPAIR (AB)

AB 141 Shop Practices

(3-3) Credit: 1

This course is an introduction to Shop safety methods (OSHA) and practices in the modern body shop, proper use of hand and power tools and precision measuring devices.

AB 142 Body and Frame Construction

(2-4) Credit: 4

A course designed to provide an understanding of body frame construction of both conventional and unit bodies. Special emphasis will be placed on repair equipment and procedures to diagnosis, repair and align collision-damaged frames.

AB 143 Roughing and Alignment**(2-4) Credit: 4**

A course designed to provide an understanding of roughing and shaping procedures on automotive sheet metal necessary to make satisfactory body repairs with special emphasis on alignment of component parts such as hoods, doors, fenders, etc.

AB 144 Frame Straightening**(2-4) Credit: 4**

A course designed to provide the student with a working knowledge of the types of body frames, misalignment, frame alignment and straightening and the use of special equipment and measuring devices.

AB 145 Body Finishing**(2-4) Credit: 4**

A course designed to provide an understanding of the use of body fillers, metal preparation, finishing to the original contour and paint preparation.

AB 146 Painting**(2-4) Credit: 4**

A course designed to provide a working knowledge of the sanding, masking, cleaning of material to be painted, the proper use of the paint gun, pattern settings, spraying techniques and the uses of exotic paint materials. The course also covers paint problems such as blistering, wrinkling, bleeding and blushing.

AB 147 Body Repair**(2-4) Credit: 4**

A course designed to provide an understanding of body sheet metal repair with emphasis on the use of body materials and replacement of body parts including glass, hardware and trim.

AB 241 Upholstery and Vinyl Top Repair**(2-4) Credit: 4**

A course designed to provide the student with a knowledge of upholstery and head lining service and the recovering, repair of vinyl and convertible tops.

AB 242 Glass, Electrical & Power Accessory Service**(2-4) Credit: 4**

A course designed to provide the student with a knowledge in all types of glass and weathersealing devices and service, and various types of power assist repair.

AB 243 Management and Estimating**(3-3) Credit: 4**

A course designed to provide the student with the experiences of body shop management as it pertains to facilities, personnel, cost accounting, purchasing and stocking of supplies. The student will also receive instruction in collision repair estimation and the use of flat rate and material manuals.

AUTOMOTIVE SERVICE & REPAIR (AT)

AT 140 Shop Practices and Safety**(2-4) Credit: 4**

A course designed to provide the student with basic automotive skills involving shop safety, automotive lifting devices, use of shop and flat rate manuals, measuring devices, fasteners, hand and power tool use, thread repair soldering, automotive terminology, cleaning methods, and the basic nine systems of the automobile.

AT 141 Automotive Engines**(2-4) Credit: 4**

A course designed to provide an understanding of the fueled internal combustion engine with emphasis on the operation, maintenance, and overhaul of the power plant and its component parts and systems. The proper use of hand tools, measuring tools, and other equipment necessary to effect repairs or rebuilding of the engine with established procedures and proper testing equipment. Special emphasis will be placed on the servicing of the valve train.

AT 141A Internal Combustion Engine Fundamentals**(2-4) Credit: 4**

This course is designed to provide the student with a knowledge of the internal combustion engine

including the types, engine nomenclature, basic minor tune-up, pretear down diagnosis and engine removal procedures. Valve train service and valve grinding operations are also included. Prerequisite or corequisite: AT 140.

AT 141B Internal Combustion Engine Service (2-4) Credit: 4

This course covers a brief review of combustion engine fundamentals. Work experience in valve train service, engine disassembly, repair and replacement of pistons, rings, crankshafts, camshafts, timing gears and chains, lubrication and cooling system service, and engine rebuilding procedures are included in this course.

AT 142 Automotive Electrical Systems (2-4) Credit: 4

This course is designed to provide the student with a working knowledge of basic automotive electricity including Ohm's Law, wiring and wiring service, wiring diagrams, lighting circuits, magnetism, electrical accessory service and the use of basic electrical test instruments. Prerequisite or corequisite: AT 140.

AT 143 Brake and Steering Systems (2-4) Credit: 4

A course designed to provide an understanding of the theory of operation and service procedures involved in the brake system. The use of the brake drum lathe, shoe grinder, bleeder and other equipment necessary to effect brake repairs will be taught with emphasis on power brake and dual braking systems. The theory of operation, adjustment and overhauling of various types of steering and suspension systems utilizing the front end alignment unit and other equipment necessary for complete steering service.

AT 144 Fuel Systems (2-4) Credit: 4

A course designed to provide an understanding of the theory, fundamentals of operation, and construction of the various types of carburetors, fuel pumps, and components of the fuel system, using established procedures, measuring tools, hand tools, and special testing equipment for testing and adjusting overhauled carburetors.

AT 145 Automotive Air Conditioning (2-4) Credit: 4

A course designed to provide an understanding of the principles, design, construction, installation, and service procedures involved in automotive air conditioning, with special emphasis on system re-charging and compressor service.

AT 146 Engine Diagnosis and Emission Control (2-4) Credit: 4

A course designed to provide an understanding of engine trouble-shooting procedures, utilizing the oscilloscope analyzer and the theory of operation, adjustment, diagnosis, and repair of all types of emission control devices. Prerequisites: AT 140, AT 141A, AT 141B, AT 142, AT 144.

AT 147 Brake Systems (2-4) Credit: 4

A course designed to provide an understanding of the nomenclature, theory of operation and service procedures involved in the brake system. The use of the brake drum lathe, shoe grinder, bleeder, and other equipment necessary to effect brake repairs will be taught with emphasis on power brake and dual braking systems.

AT 148 Steering and Suspension Systems (2-4) Credit: 4

A course designed to provide the student with an understanding of the function, theory of operation, maintenance, diagnosis and service procedures involved in the automotive steering and suspension systems, wheels, tires, steering gears and linkages, wheel alignment factors, diagnosis repair and alignment procedures on live automobiles.

AT 149 Ignition, Starting and Charging Systems (2-4) Credit: 4

This course covers a review of automotive electrical systems, starting motor operations and service, charging system theory and service, ignition system theory and service including conventional and transistor systems and engine operating principles. Prerequisite or corequisite: AT 140.

AT 241A Standard Transmissions and Differentials

(2-4) Credit: 4

A course designed to provide an understanding of the function, construction operation and maintenance of manual shift transmissions, clutches, drive lines and differentials.

AT 241B Automatic Transmissions

(2-4) Credit: 4

A study of the theory of operation, construction and maintenance of fluid couplings and various automatic transmissions used in the modern automobile. This course emphasizes diagnostic repair, and overhaul techniques applied on live units. Prerequisite: AT 241A

AT 242 Shop Organization and Management

(3-3) Credit: 4

A course designed to provide information and actual experiences in shop management, customer relations, warranty provisions, service salesmanship, organization and lay-out, general business practices, and in the use of time, rate and parts manuals. This course places special emphasis on established business principles and preparation for employment.

BIOLOGY (BIOL)**BIOL 141 General Biology**

(3-3) Credit: 4

Fundamental principles of living organisms, including chemical and physical properties of life, tissue organization and function, cellular processes and genetics.

BIOL 144 Microbiology

(3-3) Credit: 4

Fundamental principles of microbiology; includes study of morphology, physiology, and classification of microbes and their relations to soil, food, water, disease, and immunology.

BUSINESS ADMINISTRATION (BUS)**BUS 131 Introduction to Business**

(3-0) Credit: 3

Provides overall picture of business operations; includes analysis of specialized field within business organizations; identifies role of business in modern society.

BUS 132 Consumer Economics

(3-0) Credit: 3

A study of consumer goods and services as related to the home and family problems and pitfalls associated therewith. This includes a study of family purchasing, advertising, commodity information, sales approaches from a consumer viewpoint and includes sources of advice and counseling. A course to permit the supervisor to better advise his subordinates on economic problems.

BUS 231 Principles of Economics I

(3-0) Credit: 3

Introduction to economics 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 debt; the theory of economic growth and population on economic problems. (Macroeconomics)

BUS 232 Principles of Economics II

(3-0) Credit: 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; foreign economic policy. (Microeconomics)

BUS 235 Introduction to Managerial Accounting

(3-0) Credit: 3

A study of the methods by which accounting data is used by management in planning, coordinating, and controlling the operations of a business. Measurement of financial position; analysis of financial statements; cost accumulation and analysis; budgeting; product costing; and quantitative decision techniques. Prerequisite: Business 238.

BUS 236 Personal Finance

(3-0) Credit: 3

Personal and family accounts budgets, budgetary control, bank accounts, charge accounts, borrowing, investing, insurance, standards of living, renting, home ownership, wills, trust plans.

BUS 237 Principles of Accounting I

(3-0) Credit: 3

Analysis and recording of business transactions; use of journal and ledgers; accounting statements; payroll records and payroll taxes, introduction to partnership accounting, special journals and ledgers, voucher system.

BUS 238 Principles of Accounting II

(3-0) Credit: 3

Continuation of Principles of Accounting I. Internal control; partnership and corporation accounting; accounting for manufacturing concerns; analysis and interpretation of statements. Prerequisite: BUS 237.

CHEMISTRY (CHEM)

CHEM 140 Introduction to General Chemistry

(3-3) Credit: 4

The course covers the fundamentals of general and descriptive chemistry with applications from modern living, medicine, agriculture, etc. This course is designed for the non-science major, the agriculture major, the home economics major, the nursing major and any student needing a laboratory science credit.

CHEM 141, 142 General Chemistry

(3-4) Credit: 4

A thorough study of the modern concepts and fundamental principles of chemistry. Quantitative experiments are stressed during the first semester of laboratory and the qualitative analysis of the common cation and anions and an introduction to quantitative analysis is studied in the second semester laboratory. The course is designed for science majors and minors. The course includes three hours lecture, one hour recitation and three hours of laboratory per week.

CAREER PILOT (CP)

CP 130 Basic Flight

(.8-2.8) Credit: 3

Flight training for completion of the Private Pilot Certificate. A minimum of 57 hours of instruction is provided, including 25 hours of dual flight, of which two hours will be in the simulator. Twenty hours of solo flight and twelve hours of oral instruction and briefings. The instruction in the course more than meets the requirements for a Private Pilot Certificate. Prerequisite: CP 133, or concurrent enrollment.

CP 131 Aircraft Science

(3-0) Credit: 3

This course serves as an introduction to the study of several basic sciences in the aeronautical field, as applied to their theoretical and practical use in aircraft construction and design.

CP 132 Propulsion Systems

(3-0) Credit: 3

Aircraft engine theory and principles of operation of various types of aircraft engines; reciprocating, turboprop, turbojet, and turbofan. Consideration is also given to thermal, mechanical and volumetric efficiencies, supercharges, engine accessories, controls and instrumentation.

CP 133 Air Navigation

(3-0) Credit: 3

The principles of flight, basics of air traffic control, weather facts, navigational procedures and airplane operation as are pertinent for the Private Pilot. Upon successful completion of this course, the student has sufficient knowledge to pass the FAA written examination for the Private Pilot Certificate.

CP 134 Intermediate Flight**(.8-3.1) Credit: 3**

First phase of Commercial Pilot training. A minimum of 63 hours of instruction is provided, including 15 hours of dual, of which 2 hours will be in the simulator. Thirty-five hours of solo flight and thirteen hours of oral instruction and briefings.

CP 135 Advanced Air Navigation**(3-0) Credit: 3**

The Federal Aviation Regulations covering the privileges, limitations and operations of a commercial pilot, Basic Aerodynamics and the principles of flight which apply to airplanes. Inspection and certification requirements will be covered and operating limitation, high altitude operations, physiological considerations, weight and balance computations, significance of the use of airplane performance speeds, cruise control, and the Airman's Information Manual will be emphasized. Prerequisite: CP 133.

CP 230 Commercial Aviation**(3-0) Credit: 3**

This course covers air traffic control procedures pertaining to Commercial Pilot, aviation weather and advanced navigational procedures. Advanced flight maneuvers, low altitude enroute charts, approach plates, and Airman's Information Manual. Also, airplane performance factors on a high performance aircraft with retractable gear and flaps and constant speed propeller. Prerequisite: CP 135

CP 231 Aerodynamics**(3-0) Credit: 3**

This course covers the physical properties of air, airflow, standard atmosphere, forces on solids moving through air, lift, drag, planeform, air foil selection, and performance factors.

CP 232 Meteorology**(3-0) Credit 3**

Aviation meteorological phenomena affecting aircraft flight. Interpretation of the basic concepts of temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing and fog. Analysis and use of weather data for flight planning and safe flying.

CP 233 Air Transportation**(3-0) Credit: 3**

The development and present status of air transportation, federal legislation, characteristics and classification of air carriers; the organization and functions of the FAA and the Civil Aeronautics Board are reviewed.

CP 234 Advanced Flight**(.9-3.4) Credit: 3**

Commercial and instrument flight training to prepare the student for the FAA Commercial Pilot Certificate with Instrument Rating. A minimum of 69 hours of instruction is provided, including 20 hours of dual instruction with 4 hours in the simulator, 35 hours of solo, and 14 hours of oral briefings. Prerequisites: CP 134 and CP 230, or concurrent enrollment.

235 Commercial Flight**(.8-3.1) Credit: 3**

Commercial and instrument flight training to prepare the student for the FAA Commercial Pilot Certificate with Instrument Rating. A minimum of 63 hours of instruction is provided, including 30 hours of dual flight of which 5 hours will be in the simulator, twenty hours of solo flight and thirteen hours of oral instruction and briefings. Prerequisite: CP 234 and CP 237, or concurrent enrollment.

CP 235A Commercial Transition Flight I**(.8-3.1) Credit: 3**

This is the first half of two courses to transition Commercial Rotorcraft Helicopter Pilots to Commercial Airplane Single Engine Land Rated Pilots. The course covers 63 hours of instruction which includes 20 hours of dual flight with 1 hour in the simulator. 30 hours of solo flight and 13 hours of oral instruction and briefings. Prerequisite: FAA Commercial Rotorcraft Helicopter Rating, Class II, FAA Medical and CP 230, or concurrent enrollment.

CP 235B Commercial Transition Flight**(.8-3.1) Credit: 3**

A continuation of CP 235A to complete the requirements for a Commercial Single Engine Land

Aircraft Rating. The course consists of 63 hours of instruction which includes 30 hour of dual flight of which 5 will be in the simulator and 5 hours in a complex aircraft; 20 hours of solo flight with 5 hours in a complex aircraft and 13 hours of oral instruction and briefing. Prerequisite: CP 235A.

CP 236 Multi-Engine Flight

(.8-.8) Credit: 3

This course of flight training leads to the FAA Multi-Engine Pilot Rating. This course is designed to give the advanced pilot a greater depth of aircraft experience. A minimum of 24 hours of instruction is provided, including 12 hours of dual flight and 12 hours of oral instruction and briefings. Prerequisite: CP 235 or a Commercial Pilot Certificate.

CP 237 Aviation Radio System

(3-0) Credit: 3

Basic radio fundamentals as used by the pilot. A description and practical use of various radio aids to safe aerial navigation, including Very High Frequency Omni Direction Range (VOR). Instrument Landing System (ILS). Direction Finding (DF), and others. Charts and approach plates as adapted to the radio navigation, including the use of the Flight Information Manual and ATC procedures. Prerequisite: CP 230.

CP 238 Instructor Rating

(2.5-1.6) Credit: 3

This flight course prepares the experienced pilot for the FAA Certified Flight Instructor Certificate for airplane. Includes 25 hours of dual flight and 40 hours of oral instruction and briefings. Prerequisite: Commercial Pilot Certificate.

CP 238A Instrument Flight Instructor

(1.4-1.4) Credit: 3

A program of advanced flight training to prepare the experienced Instrument Pilot to pass the FAA requirements for the Instrument Flight Instructor Certificate for airplane. A minimum of 44 hours of instruction is provided, including 20 hours of dual flight and two hours for FAA check flight, and 22 hours of oral instruction and briefings. Prerequisite: Certified Flight Instructor Certificate and Instrument Rating.

CP 238B Multi-Engine Flight Instructor

(1.4-1.4) Credit: 3

This course is designed to prepare an applicant for the FAA Multi-Engine Flight Instructor Flight Test. A minimum of forty-four hours of instruction is provided, including twenty hours of dual flight instruction, two hours for the FAA check flight, and twenty-two hours of oral instruction and briefing. Prerequisites: FAA Multi-Engine Rating and FAA Flight Instructor Single-Engine Land Rating.

CP 238C Commercial Helicopter Rating

(.9-3.2) Credit: 3

Additional Category Commercial Helicopter Rating Course. A minimum of 66 hours of instruction is provided, including 30 hours of dual instruction, 20 hours solo, and 15 hours oral instruction briefing, and 1 hour for the FAA Check Flight. Prerequisites: FAA Commercial Pilot Rating Single - Engine Land.

CP 238D Helicopter Instructor Rating

(2.5-1.6) Credit: 3

This course prepares a pilot who is helicopter rated for the FAA Certified Flight Instructor Certificate for helicopter. This course includes 40 hours of ground training and 25 hours of instructor training which involves 20 hours dual flight in a helicopter and 5 hours of practice ground instruction by the student. Prerequisites: Commercial Pilot Certificate with a helicopter category rating.

CP 239 Airline Transport Pilot

(1.7-1.7) Credit: 3

The Airline Transport Rating is the most comprehensive rating issued by the Federal Aviation Administration. Flight and ground training to qualify for the instruction is provided, which includes 25 hours of dual flight and two flight hours for the FAA Check Flight and 27 hours of oral instruction and briefings. Prerequisite: First Class FAA Medical Certificate, Age 23, 1,500 hours of approved flight time, and Instrument Rating.

CP 2391 Instrument Flight

(1.9-2.2) Credit: 3

The necessary instruction to qualify for the FAA Instrument Rating. A minimum of 65 hours of instruction is provided, including 35 hours of dual flight and 30 hours of oral instruction and briefings. Prerequisite: Commercial Pilot Certificate.

COMPUTER MAINTENANCE (CM)**CM 241 Digital Circuits**

(3-3) Credit: 4

A review of the basic gates and gating networks used in digital circuits, and an intensive study of Boolean Algebra, as well as the theory of operation of flip-flop registers, and counter circuits. The course also covers numbering systems, arithmetical circuitry and control element circuitry.

COMPUTER SCIENCE (CS)**CS 130 Computers and Society**

(3-0) Credit: 3

A non-technical survey course intended for non-Computer Science majors which studies the role that computers play in our society. The purpose is to give a basic, general and accurate picture of what computers are, do and can do and to lay to rest myths and mystiques concerning computers. The effects the computers have had and are having on society are studied and used to project what effects they may have in the future. An introduction to data representation flow-charting and computer program logic is presented to the non-Computer Science major to write a simple computer program.

CS 130A Introduction to Computer Concepts

(3-0) Credit: 3

An overview of applications of computers. The course describes major computer system components; stresses the process of information system development, strength and limitations of the application of computer technology, and the relationship between the user of computer and information systems with the technical specialist.

CS 131 Beginning Keypunching

(1-3) Credit: 3

Elements of keypunch operation. Designed to give the typist beginning skills in keypunch operation. Recommended for all beginning keypunch operators. Drills and exercises to develop punching accuracy and speed. Prerequisite: Typing speed of 30 WPM.

CS 132 Advanced Data Entry

(1-3) Credit: 3

Advanced keypunch and verifier operation; program card design and preparation; direct data entry techniques; drills to develop maximum efficiency and speed; some on-the-job training is required for the completion of the course. Prerequisite: CS 131

CS 133 Computer Library Management

(2-3) Credit: 3

Concepts of data processing library management. Introduces card, tape and disk library management. Some on-the-job training is required for completion of the course.

CS 134 Computer Center Operations

(3-0) Credit: 3

This course covers operational theories, concepts, and terminology that is necessary for an understanding of how software and hardware interface together to provide a total system. Modern computer center workflow and throughput are emphasized in the course. Prerequisite: CS 140 and concurrent enrollment in CS 139.

CS 135 Introduction to Systems Analysis

(3-2) Credit: 3

Introduction to problems from business and science using logical and mathematical techniques

particularity suited to characteristics of the digital computer. Problems involve qualification of descriptive data, manipulation of these data, and expression of analysis in descriptive terms. Includes documentation and flow-charting methods. Prerequisite: CS 143, or concurrent enrollment.

CS 136 Introduction to Computer Operations (2-3) Credit: 3
Basic card handling procedures and machine applications with job execution at local and remote job entry stations. Includes concepts for operation of unit record and computer card systems.

CS 138 COBOL Programming (3-2) Credit: 3
This course is designed to provide the student with skills and fundamentals in solving business data processing problems using Full American National Standard COBOL. The student become effective in COBOL programming techniques involving sequential files. Table searching, control breaks, and a coverage of Indexed Sequential file handling are presented.

CS 138A RPG Programming (2-3) Credit: 3
Report Program Generator, a problem oriented language involving fixed program logic, file description, input, calculation, output of practical business oriented problems in card, tape, and disk systems.

CS 139 Computer Organization (3-2) Credit: 3
This course is designed to give the student an understanding of the fundamental principles by which computers work, and how these principles affect and govern programming techniques. Emphasis is placed on the IBM System 360/370 because of its prominence in the market place. Prerequisite: CS 143.

CS 140 Introduction to Computer Operations & Library Management (3-3) Credit: 4
This course includes modern concepts and operation of input and output devices and PCM equipment currently in use by the Data Processing Industry. The duties and responsibilities of I/O control clerks and the computer librarian are emphasized.

CS 141 Advanced Operations Lab (1-15) Credit: 4
This course consists of supervised work in the college computer center. The students learn to operate the computer and peripheral equipment. Prerequisites: CS 140; Corequisite: CS 134, and approval of appropriate college official.

CS 143 Introduction to Computer Science & Computer Programming (3-3) Credit: 4
This course is intended to be the first course for Computer Science majors and no prior knowledge of computers or programming is assumed. The programming language, FORTRAN, and flow-charting are introduced at the beginning of the course so that the student will have a better idea of what a computer does before investigating how it functions.

Approximately half of the lectures and nearly all of the laboratories are devoted to programming and flow-charting. Programming assignments will run concurrently with other fundamental topics such as historical development of computers, typical present day hardware and software and computer applications.

CS 231 Introduction to Computer Center Management (3-0) Credit: 3
Planning, organizing and controlling data processing installations. Managerial aspects in the introduction and use of computer systems and management concepts. Prerequisites: Twelve hours of Computer Science.

CS 232A FORTRAN Programming (3-2) Credit: 3
This course is designed for the Computer Science major to augment his algorithmic and programming talents, and to offer the non-Computer Science major a thorough coverage of the FORTRAN language to employ as a tool to solve business or scientific problems. Emphasis is placed on multi-dimensional arrays, use of functions and subprograms, searching and sorting techniques, and direct access processing. Prerequisite: 6 hours of Mathematics.

CS 232B Programming for Business Statistics

(3-2) Credit: 3

Relevance of data processing in business; impact of computer systems on decision making; heuristic and algorithmic computing techniques using FORTRAN or BASIC to include computation of means and standard deviations, simple regression, contingency tables and curve plottings. Prerequisite: MATH 135 and CS 143.

CS 234 Advanced COBOL

(3-2) Credit: 3

This course is designed to offer the student of COBOL programming an in-depth study of the theory, programming techniques, and needed programming efficiencies that will be required of the prospective COBOL programmer. A thorough coverage is given to file design and the special features of ANS COBOL language. Emphasis is placed on multi-dimensional table handling, searching and sorting techniques, and Indexed Sequential and Random file manipulation. Prerequisite: CS 138.

CS 235 PL/1 Programming

(3-2) Credit: 3

Business and scientific computer applications are developed using PL/1. Emphasis is placed on advanced programming concepts. Prerequisite: CS 143, CS 138.

CS 236 Conversational Languages

(3-2) Credit: 3

Programming and testing sample programs written in a remote terminal-oriented language, such as BASIC, Conversational FORTRAN and APL. Prerequisite: CS 143 or consent of instructor.

CS 237 Field Projects

(1-5) Credit: 3

Practical application coursework in systems analysis and commercial or scientific programming depending upon students degree options. Prerequisite: Consent of Instructor.

CS 238 Systems Analysis

(3-2) Credit: 3

The methodology, techniques and tools used in performing in-depth analysis of information systems destined for computer implementations are described in their relationships within the overall study. The use and requirements associated with decision tables, study plans, testing plans and documentation are emphasized. Prerequisite: CS 135, CS 138.

CS 239A Introduction to Operating Systems & Job Control Language

(2-2) Credit: 3

A study of computer operating system concepts including program libraries, program intercommunication and the structure and transportation of data sets. A Job Control Language (JCL) is taught in addition to the use of standard Utility Programs. Prerequisite: CS 234 and CS 243.

CS 239B Introduction to Teleprocessing Systems

(3-2) Credit: 3

Requirements and fundamentals of a teleprocessing system's design and programming; transmission capabilities and control; program protection and relocation; features and application of transmission devices. Prerequisite: CS 243.

CS 243 Assembler Language Programming

(3-3) Credit: 4

Assembler language programming for the current college system. Programming and debugging of business oriented problems with emphasis on the standard and decimal instruction set and the sequential access method. Prerequisites: CS 139 and CS 143.

CS 244 MIS and Information Storage and Retrieval

(3-2) Credit: 4

A study of file organizations and search strategy techniques. It will include the study of design, construction and use of MIS systems with an in-depth look at the advantages and disadvantages of such systems.

CS 245 Data and Information Structures

(3-2) Credit: 4

Basic concepts of data. Linear lists, strings, arrays, and orthogonal lists. Representation of trees and graphs. Storage systems and structures, and storage allocation and collection. Multi-linked structures. Symbol tables and searching techniques. Sorting (ordering) techniques. Formal specification of data structures, data structures in programming languages and generalized data management systems.

CONSUMER SERVICING ELECTRONICS (TV)

TV 141 Home Music Systems

(3-3) Credit: 4

A study in the specifications, theory of operation and the interrelationships of those components used in the modern home music system; including Stereo and Quad receivers and amps, turntables, tape decks, including reel to reel, eight track, and cassette formats, equalization networks, and mixing systems.

TV 145 Electronic Communications Fundamentals

(3-3) Credit: 4

Course covers those basic electrical and electronic fundamentals and circuits used in modern applications, such as communications, sound, and test equipment.

TV 149 Television Theory and Servicing

(3-3) Credit: 4

A study of electron tube and semiconductor circuits peculiar to television receivers and practical methods for troubleshooting and servicing. Prerequisite: TV 145, or equivalent.

TV 235 TV Shop Practices

(1-6) Credit: 3

An in-depth study of basic procedures used in the modern TV shop. Includes record keeping, stocking and order procedures, shop management, and advanced techniques of TV repair. Prerequisite: TV 149, or equivalent.

TV 241 Music System Servicing

(3-3) Credit: 4

A study in the analysis, diagnosis, and correction of a wide range of problems that appear in modern electronic music systems. Prerequisite: TV 242.

TV 242 Radio Systems

(3-3) Credit: 4

An in-depth study of the circuitry, both discrete and integrated, used in today's AM and FM tuner amps, including both two and four channel multiplexing. Prerequisite: TV 141, TV 145.

TV 245 Electronic Troubleshooting

(3-3) Credit: 4

A study of those troubleshooting techniques that apply to certain categories of electronic equipment. This course may be taken twice for credit with the approval of the program director, provided a different category of equipment is covered. Prerequisite: TV 242.

TV 246 Sound Systems

(3-3) Credit: 4

A fundamental course covering the components, specifications, and installation techniques of sound reinforcement, public address, paging, and sound distribution systems.

TV 247 Closed Circuit TV

(3-3) Credit: 4

The principles of closed circuit television systems and components, including the theory and servicing techniques as applied to cameras, monitors, and coupling networks. Prerequisite: TV 149.

TV 248 CATV and MATV Systems

(3-3) Credit: 4

Course covers fundamentals of design and servicing of TV antenna and head end systems and the distribution of TV signals in small or large "cable" systems.

TV 249 Advanced Television Servicing

(2-4) Credit: 4

The operation and service of the more complicated television receiver circuits are covered in this course. Special attention is given to the use of techniques and equipment for the most economical solutions to difficult problems. Includes an introduction to transistorized and color television. Prerequisite: TV 149.

DIESEL MECHANICS (DIEM)

DIEM 141 Fuel Injection Systems

(2-4) Credit: 4

A course of study designed to provide the student with an understanding of the theory of operation of the fuel injection system. The course of study includes the functions and applications of various injectors, nozzles, pumps, filters and distribution systems. Prerequisites: AT 140, AT 141A, AT 141B, AT 142 and AT 144.

DIEM 241 Diesel Engine Auxiliary Systems

(2-4) Credit: 4

A course designed to provide the student with an understanding of the theory of operation, construction, design, classification and application peculiar to diesel engines. The course of study includes two and four cycle diesel engine functions, systems and components, heat, combustion, lubrication, fuels intake and exhaust systems super-charging, scavenging and cooling systems. Prerequisite: DIEM 141.

DIEM 242 Diesel Engine Service and Repair

(2-4) Credit: 4

This course covers service techniques and a complete overhaul procedure of a diesel engine. Trouble-shooting, repairing, operating the engine, and performing test procedures are emphasized in this course. Prerequisite: DIEM 241.

DRAFTING AND DESIGN (DD)

DD 130 Blueprint Reading

(2-2) Credit: 3

The fundamentals of blueprint reading and sketching as they apply to machine drawing.

DD 131 Engineering Graphics

(2-4) Credit: 3

Freehand and instrument drawing, dimensioning, fastening, pictorial methods, charts and graphs, projection drawings, geometry of graphical construction. Required for beginning engineering students. This course is a prerequisite for all drafting courses except DD 130 and DD 134.

DD 132 Advanced Drafting

(2-4) Credit: 3

A course mainly concerned with pictorials. Includes the theory of oblique and isometric drawings. Also covered are one and two point perspectives of shade and shadow application. Prerequisite: DD 131.

DD 133 Technical Illustration

(2-4) Credit: 3

Introduction to pictorial drawings as used in industrial catalogs, assembly sheets, newspaper publications, and promotional literature. Work to be done in various media to include pencil, ink, transfer tapes, and air brush. Prerequisites: DD 131 and DD 132.

DD 134 Architectural Blueprint Reading

(2-2) Credit: 3

The fundamentals of blueprint reading for the construction trades. This course includes familiarization with standard terms, sizes, scales, estimating and commercial practice.

DD 143 Machine Drawing

(2-4) Credit: 4

Drawing and manufacturing processes: training in producing various kinds of advanced drawings; commercial practices, and economies, the use of standard part sizes, symbols, and abbreviations. Prerequisites: DD 131 and DD 132.

DD 232 Descriptive Geometry

(2-4) Credit: 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: DD 131.

DD 241 Sheetmetal and Pipe Drafting

(2-4) Credit: 4

Design and detailing of sheetmetal layout; design and detailing of pipe systems making use of standard practices and symbols; includes single line, double line, plan profile and isometric drawing of duct and pipe systems.

DD 242 Architectural Drafting

(2-4) Credit: 4

A study of the preparation of architectural plans; elevations; sections; site plans; various building details; room finish, door, and window schedules; and structural drawings. Prerequisite: DD 131.

DD 243 Electronic Drafting

(2-4) Credit: 4

A study of layout and preparation of finished electronic and electrical drawing, stressing modern representation used for pictorial drawings; wiring and connection diagrams; printed circuits; control circuits; and schematic diagrams. Some review of lettering and mechanical drawing principles. Prerequisite: DD 131.

DD 244 Structural Drafting

(2-4) Credit: 4

A study of A. I. S. C. specifications and standards; structural theory and data; designing and detailing structural members and connections. Design and development of details and specifications for light industrial structures to include structures steel, pipe, and reinforced concrete rods. Prerequisite: DD 131.

DD 245 Topographic Drafting

(2-4) Credit: 4

This is an introductory course in map drafting utilizing surveyors field notes as a basis for calculating bearing and closures and drawing plats, contours, and profiles. This course also includes a unit on surveying. Prerequisites: DD 131, DD 232, TMTH 130 and TMTH 131 or permission of Department Chairman.

DD 246 Industrial Practice

(2-4) Credit: 4

Note: Must be taken during last semester of the sophomore year.

This course is designed to give specialized practice to the student in his major field of interest. The student will complete actual jobs for area industries to gain realistic experience in his chosen career.

DD 248 Principles of Design

(2-4) Credit: 4

Theory and practice of design as related to engineering and technology. Analysis in the areas of architecture, machine design, structural design and product development. Prerequisite: DD 131

ELECTRONICS TECHNOLOGY (ET)

ET 131 Technical Mathematics I

(3-0) Credit: 3

A study of the basic concepts of math and algebra and the use of the slide rule and the electronic calculator in their manipulation.

ET 132 Technical Mathematics II

(3-0) Credit: 3

A study in the solution of trigonometric problems through the use of tables, slide rule and the electronic calculator. Prerequisite: ET 131, or equivalent.

ET 135 Assembly Methods

(1-5) Credit: 3

A study of modern assembly methods and practices used in industry, including the design, layout and construction of electronic apparatus.

ET 141 Direct Current Circuits

(3-3) Credit: 4

A study of the elementary principles of electronics, including DC circuits as related to series and parallel resistive, capacitive, and inductive networks, and the use of Ohm's Law, Kirchoff's Laws, and the power formulas in analyzing these networks.

- ET 142 Alternating Current Circuits** (3-3) Credit: 4
A study of single and polyphase AC circuits and the use of Kirchoff's Laws, as well as Thevenin's, Norton's and Superposition Theorems in analyzing these circuits. Prerequisite: ET 141, or equivalent.
- ET 143 Introduction to Electron Devices** (3-3) Credit: 4
An introduction to vacuum tubes, transistors, and other semiconductors, their composition, characteristics, theory of operation and circuit applications.
- ET 144 Basic Test Equipment** (3-3) Credit: 4
The use, theory of operation, and repair of the basic electronic test equipment, ranging from the VOM through the Dual Beam Oscilloscope.
- ET 151 Basic Electricity for Electronics** (4-3) Credit: 5
A study of the elementary principles of electricity including voltage, current, resistance, power, magnetism, their relationships and interactions. Mathematics topics covered will include decimals, fractions, scientific notation, roots, powers, exponents, Ohm's law, power formulas and the laws of series and parallel circuits.
- ET 152 Intermediate Electricity for Electronics** (4-3) Credit: 5
A study in principles of electricity as related to complex series, parallel, and series-parallel circuits. The use of Kirchoff's Law and Thevenin and Norton's theorems in their analysis. The course will include an introduction to inductance, inductive reactance, capacitance, capacitive reactance as applied to simple series and parallel circuits. Those principles of math to be covered include algebra for complex electronic circuits, simultaneous equation, powers of ten, percentages and an introduction to trigonometry.
- ET 153 Advanced Electricity for Electronics** (4-3) Credit: 5
A study of AC circuits containing inductive and capacitive reactance combined with resistance for single and polyphase sources and the application of laws and theorems for solving these complex circuits. Math topics covered in this course include trigonometry, efficiencies, impedance matching, inductive and capacitive reactance, Pythagorean theorem, resonant circuits, power factors, logarithmic and mathematical tables.
- ET 234 Broadcast Equipment Maintenance** (1-6) Credit: 3
The operation, preventive maintenance procedures, and troubleshooting of modern day radio and television broadcast equipment. The course gives the student that much needed practical experience that can only be gained in a live station atmosphere. Prerequisite: ET 245, or equivalent.
- ET 242 Advanced Test Equipment** (3-3) Credit: 4
The use and calibration of Test Equipment used in servicing complex electronic hardware. Observation of waveforms of electronic apparatus. Prerequisite: ET 144, or equivalent.
- ET 243 Special Intensive Study** (1-9) Credit: 4
An intensive study in the design, theory of operation, and construction techniques used in a field which holds special interest to the student. Prerequisite: Approval of appropriate college official.
- ET 244 Solid State Devices** (3-3) Credit: 4
The study of the solid state devices used throughout industry, their characteristics and relations to circuits in both low and high frequency application. Prerequisite: ET 143, or equivalent.
- ET 245 Communication Circuits I** (3-3) Credit: 4
A study of those basic circuits used throughout industry today. Prerequisite: ET 143, or equivalent.
- ET 246 Integrated Devices** (3-3) Credit: 4
A basic study of the many types of IC's in use today. The course will include digital, linear, and LED type devices.

ET 247 Communications Circuits II (3-3) Credit: 4
A study of communications circuits necessary for the successful acquisition of an FCC first class license. Prerequisite: ET 245 or equivalent.

ET 248 Industrial Electronic Control Circuits (3-3) Credit: 4
A study of special purpose electronic control circuits and systems as applied by industry today. This course will include theory and operation, maintenance, diagnostic troubleshooting, and repair of these special purpose circuits. Prerequisite: ET 142, or equivalent.

ET 249 Electronic Systems Troubleshooting (3-3) Credit: 4
This course includes theoretical and practical laboratory assignments in the study of techniques used in signal tracing and logical circuits diagnosis of different types of analog electronic systems.

EMERGENCY MEDICAL TECHNICIAN (EMT)

EMT 141 Emergency Medical Technician (2-4) Credit: 4
The objective of this course is to provide emergency medical theory and skills training to enable the student to function as an emergency medical technician and to be eligible to take the examination and become a Registered Emergency Medical Technician - Ambulance Technician.

ENGLISH (ENGL)

ENGL 131 Composition and Rhetoric I (3-0) Credit: 3
Composition of short papers, with emphasis on sentence structure, paragraph development, and paper organization. Analysis of expository prose.

ENGL 132 Composition and Rhetoric II (3-0) Credit: 3
An introduction to literature; the short story, poetry, drama, and the novel. Composition of short papers with emphasis on interpretation and analysis of literary selections, optional research paper. Prerequisite: ENGL 131 - Composition and Rhetoric or advanced standing.

ENGL 137 Business English (3-0) Credit: 3
Fundamentals of grammar, punctuation, and sentence structure as employed in written business communications. Word study; sentence analysis; punctuation; paragraphing; planning. Required for all students majoring in Office Administration.

ENGL 139 Communication Skills (3-0) Credit: 3
This course includes topics of instruction in grammatical construction, spelling, punctuation, writing effective business letters, preparation of technical reports, business forms, and blanks, speaking to groups, business meetings, personal interviews, telephone conversations and social speech situations.

ENGL 239 Technical Writing (3-0) Credit: 3
The writing of technical reports. Oriented toward the technical/vocational fields. Recommended for all technical/vocational students.

ENGINEERING GRAPHICS (ENGR)

ENGR 131 Engineering Graphics (2-4) Credit: 3
Freehand and instrument drawing, dimensioning, fastening, pictorial methods, charts, and

graphs, projection drawing, geometry of graphical construction, graphical design. Required for beginning Engineering students.

ENVIRONMENTAL CONTROL (EC)

EC 131 Water and Waste Water Technology (3-0) Credit: 3

A study of method of disease transmission, hygienic excreta disposal, municipal and industrial waste water collection and treatment, characteristics of water, water treatment, protection of ground water, insect and rodent control, solid waste collection and disposal, milk and food sanitation, swimming pool sanitation, and industrial hygiene.

EC 132 Aquatic Biology (2-3) Credit: 3

A study of fresh water as an environment, its physical and chemical characteristics; and characteristics of plant and animal communities which inhabit it. The morphology, life history and taxonomy of fresh water aquatic organisms. (Field trips required).

EC 133 Solid Waste Management (3-0) Credit: 3

Types of solid waste, physical and chemical method of handling solid waste possibilities of recycling, (re-using) solid waste material.

ET 135 Environmental Control (1-3) Credit: 3

A course in the basic techniques of lab analysis that are required under present state and federal regulations for the supervision and control of waste water treatment.

EC 136 Chemical and Tertiary Waste Water Treatment (3-1) Credit: 3

A course in fundamental methods of water and waste water treatment with emphasis on the use of chemicals and plant equipment operation and maintenance.

EC 144 Pest Control (3-1) Credit: 4

This course covers the fundamental principles of pest identification and control. A study of pesticides, application of pesticides, the operation and maintenance of pesticide equipment and a survey of safety regulations included in state and federal legislation are included.

EC 221 Pollution Abatement Seminar (2-0) Credit: 2

Particular problems involving pollution and control in our environment are to be presented and discussed by student in oral reviews. The "how, why and what-to-do" aspects of pollution are to be stressed.

EC 222 Pollution Abatement Seminar (2-0) Credit: 2

A continuation of EC 221.

EC 231 Air Pollution (2-3) Credit: 3

Sources of air pollution-industrial, municipal, automotive, physical and chemical nature of air pollutants. Laboratory techniques for detecting air pollutants. Control and treatment of air pollution.

EC 232 Industrial Waste Control (2-3) Credit: 3

Company policies, organizational problems, legal responsibilities in waste control; investigations into possible regional pollution, and preventive tactics that could be employed.

EC 233 Instrumentation (2-3) Credit: 3

An elementary study of hydraulic, pneumatic, mechanical, electronic control systems and components. It includes a basic description, analysis, and explanation of instrumental controls for a waste water plant. Typical performance characteristics, accuracy, and application are studied.

EC 234 Water Quality Control

(2-3) Credit: 3

A study of basic principles of water purification, including aeration, sedimentation, rapid sand filtration, chlorination, treatment chemicals, taste and odor control, bacteriological control, mineral control, design criteria, maintenance programs, and operational problems. New processes and recent development are studied. Criteria rules, regulations, forms and records associated with the field are considered.

EC 243 Water and Waste Water Chemistry

(3-3) Credit: 4

Theory and laboratory techniques for all control tests of water purification and analysis, including color, turbidity, pH, hardness, coagulation, chlorides, flourides, iron, manganese, bactericides, nitrates, and organic compounds which may be present in water. Qualitative and quantitative analysis are to be stressed in this area.

FIRE PROTECTION (FPRT)

FPRT 131 Fundamentals of Fire Protection

(3-0) Credit: 3

History and philosophy of fire protection: review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection; current legislative developments and career orientation; recruitment and training for fire departments; position classification and pay plans; employee organizations; a discussion of current related problems and review of expanding future fire protection problems.

FPRT 132 Fire Prevention

(3-0) Credit: 3

The objectives and views of inspection, fundamental principles, methods, techniques, and procedures of fire prevention administration. Fire Prevention organization; public cooperation and image; recognition of fire hazards; insurance problems and legal aspects; development and implementation of systematic and deliberate inspection program. Survey of local, state, and national codes pertaining to fire prevention and related technology; relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to fire hazards.

FPRT 133 Fire Protection Systems

(3-0) Credit: 3

Study of the required standard for water supply; special hazards protection systems; automatic sprinklers and special extinguishing systems; automatic signaling and detection systems; rating organizations and underwriting agencies.

FPRT 134 Fire Administration I

(3-0) Credit: 3

An in-depth study of the organization and management as related to a fire department including budgeting, maintenance of records and reports, and management of fire department officers. Personnel administration and distribution of equipment and personnel and other related topics, including relation of various government agencies to fire protection areas. Fire Service Leadership as viewed from the Company Officer's position.

FPRT 135 Fire Administration II

(3-0) Credit: 3

Study to include insurance rates and rating, preparation of budgets, administration and organization of training in the fire department; city water requirements, fire alarm and communications systems; importance of public relations, report writing and record keeping; measurements of results, use of records to improve procedures, and other related topics; legal aspects relating to fire prevention and fire protection with stress on municipal and state agencies; design and construction of fire department buildings.

FPRT 137 Fire Service Chemistry I

(3-0) Credit: 3

An introductory study to inorganic and organic chemistry, with emphasis on the metric systems, the periodic chart, water, oxygen, hydrogen, carbon, hydrocarbons, carbohydrates, and polymers.

FPRT 138 Fire Service Chemistry II

(3-0) Credit: 3

A continuation of FPRT 137. Prerequisite: FPRT 137.

FPRT 231 Industrial Fire Protection I

(3-0) Credit: 3

Specific concerns and safeguards related to business and industrial organization. A study of industrial fire brigade organization and development, plant lay-out, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organization. Study of elementary industrial fire hazards in manufacturing plants.

FPRT 232 Industrial Fire Protection II

(3-0) Credit: 3

Development of fire and safety organizations in industry; relation between private and public fire protection organizations; current trends, deficiencies and possible solutions for industrial fire problems; role of insurance and other special organizations, an in-depth study of specific industrial processes, equipment, facilities and work practices to understand the potential hazards and techniques to detect and control such hazards. Field trips to selected plants and demonstrations of new techniques equipment and innovations. Prerequisites: Industrial Fire Protection I.

FPRT 233 Hazardous Material I

(3-0) Credit: 3

Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, handling hazardous materials, i.e., flammable liquids, combustible solids, and gases. Emphasis on emergency situations and most favorable methods of handling fire fighting and control. Prerequisite: Fire Service Chemistry I, FPRT 137.

FPRT 235 Building Codes and Construction

(3-0) Credit: 3

Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies, exposures, and related data focused fire protection concerns; reviews of related statutory and suggested guidelines, both local and national in scope. Review of Model Building Codes and Life Safety Codes.

FPRT 236 Fire and Arson Investigation

(3-0) Credit: 3

A study of the detection of arson, investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussions of laws, decisions and opinions; kinds of arsonists, interrogation procedures, cooperation and coordination between fire fighters and arson investigators and other related topics.

FPRT 238 Hazardous Material II

(3-0) Credit: 3

Hazardous materials covering storage, handling, laws, standards, and fire fighting techniques associated with chemicals, gases, flammable liquids, corrosives, poisons, explosives, rocket propellants and exotic fuel, and radio-active materials. The formation of toxic fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids, and solids related to free-burning fire and explosion phenomena. Familiarization with radiological instruments, human exposure to radiation, decontamination procedures, common uses of radioactive materials and operational procedures. Prerequisite: FPRT 233.

FPRT 239 Fire Safety Education

(3-0) Credit: 3

A survey of physical, chemical, and electrical hazards and their relationship to loss of property and/or life. Study of codes, laws, problems, and cases. Detailed examination and study of the physical and psychological variables related to the occurrence of casualties. Safe storage, transportation and handling techniques are stressed to eliminate or control potential risks.

FPRT 244 Fire Fighting Tactics and Strategy

(3-0) Credit: 3

Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment and apparatus. Emphasis to be placed on pre-planning, study of conflagration problems, fire ground organization, problem solving related to fire ground decision making and attack tactics and strategy. Use of Mutual Aid and large scale command problems. Prerequisite: Completion of, or registration therein of all other required fire courses.

FOOD SERVICE MANAGEMENT (RMGT)

RMGT 131 Food Preparation and Serving (3-3) Credit: 3

An introduction to techniques of food preparation. Includes preparation of vegetables, pastries, oven dishes, soups, salads, meats, fish and poultry. Techniques include experimental cookery, food marketing and preservation, serving and table service.

RMGT 132 Nutrition (3-0) Credit: 3

A study of dietary needs; the role of proteins, fats, carbohydrates, minerals and vitamins; factors to be considered in proper selection and preparation of foods for maximum nutritional value.

RMGT 133 Sanitation and Safety (3-0) Credit: 3

Personal cleanliness; sanitary practices in food preparation; cause, investigation and control of illness caused by food contamination; food storage and refrigeration; sanitation of dishes, equipment, and kitchens; cleansing materials, garbage and refuse disposal; safety precautions, and accident prevention.

RMGT 135 Food Purchasing (3-0) Credit: 3

Applied theory of food and beverage purchasing; factors affecting selection, standards, quality and prices; techniques of receiving, storing and issuing supplies, foods, and materials; applied theory of cost control, pricing and portions.

RMGT 136 Menu Planning (3-0) Credit: 3

Basic factors of planning menus; variety and nutrition in menu planning; technique of preparing attractive menus and maintaining budgetary controls; types of menus for various public and private institutions.

RMGT 137 Meat Science (3-0) Credit: 3

An introductory course in raising, slaughtering, and packing meats, fish and poultry accompanied by an intensive study of wholesale and retail cuts of beef, veal, pork, and lamb. Emphasis is placed on the knowledge of grades, bone structure, muscle configuration and appropriate cooking methods of hotel and restaurant meat cuts.

RMGT 221 Food Service Terminology (2-0) Credit: 2

Food service terminology, being a compilation of various languages, will break down and define these terms with an emphasis on the French language.

RMGT 232 Restaurant Merchandising (2-3) Credit: 3

Sales promotion; interior decor; types and uniformity of service; food and beverage display; menu and room styling.

RMGT 233 Cafeteria Management (3-0) Credit: 3

This course points out the specific differences between an industrial cafeteria and a conventional restaurant and explains how to cope with the unusual problems of industrial and institutional feeding.

RMGT 234 Marketing and Sales Promotion (3-0) Credit: 3

A course designed to develop an understanding of what must be done in order to bring the wheels of production and consumption in the United States into mesh. The business activities that direct the flow of goods and services from the producer to the ultimate consumer are analyzed. Coordination of personal selling, advertising, product design, market research, and customer relations/services are the individual ingredients of sales promotion, and each is examined in detail. Advertising is studied as the force that creates prospects of countless products, converts these prospects into customers, and keeps customers returning and buying.

RMGT 235 Financial Management

(3-0) Credit: 3

Methods and application of financial management within the combined food service facility. Primary emphasis upon sales accountability and internal controls utilized within bar, food, dining room and hotel operational areas. Secondary emphasis on budgeting and forecasting with applications of effective labor/sales ratios.

RMGT 236 Layout and Design

(3-0) Credit: 3

Fundamentals of equipment layout for optimum production and operational efficiency. Course will include procedures to design and decorate remodeling projects.

RMGT 241 Classical Food Preparation

(3-3) Credit: 4

This course emphasizes the fine points of culinary skills and theory. Concentration on the preparation of menus. Responsibility of the Chef and the Sous-Chef.

RMGT 242 Exhibition Work

(3-3) Credit: 4

Taught in conjunction with Classical Food Preparation. This course is designed to assist the student in professional employment. The essence of exhibitions, buffets and center pieces - the role of the Executive Chef will be emphasized. This course will include an exhibition planned and prepared by the student.

GOVERNMENT (GOVT)

GOVT 231-232 State and Federal Government

(3-0) Credit: 3

Fulfills the legislative requirements for six hours of American Government. A functional study of the American constitutional and governmental system, federal, state and local. The origins and development of the American governmental system; federal, state and interstate relations; lesser units of government; the individual as a citizen, person, and voter; political parties. Legislative, executive, and judicial functions in federal and state governments; financing governmental activities; foreign relations and national defense; government services and functions.

GOVT 239 Introduction to Political Science

(3-0) Credit: 3

Emphasis on political fundamentals, public law, theory and organization of the modern state, political dynamics, public policy and international relations.

HISTORY (HIST)

HIST 131 History of the United States to 1877

(3-0) Credit: 3

English colonization; the Revolution; adoption of the Constitution; growth of nationalism; cotton and the slavery problems; war for southern independence. Reconstruction.

HIST 132 History of the United States from 1877

(3-0) Credit: 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; contemporary America.

HIST 231 International Relations and U.S. Foreign Policy

(3-0) Credit: 3

A study of international relationships and problems in world affairs; organization and processes used to arrive at foreign policy decisions of the United States; the elements of international communist ideologies; and the evolution of American Foreign Policy since 1945.

HOTEL/MOTEL MANAGEMENT (HM)

HM 130 Food and Beverage Management

(3-0) Credit: 3

This is an introductory course in food and beverage operations, with an introduction to purchasing, receiving, storage, preparation and service.

HM 132 Hotel/Motel Organization and Administration

(3-0) Credit: 3

This course includes management and organization of hotel industry, communications, accounting, personnel relations and administration, management of guests. Planning for today and tomorrow.

HM 133 Front Office Procedures

(3-0) Credit: 3

This course includes hotel organization and services, front office salesmanship, cashiering, front office posting, accounting for guest charges, procedures and form for accounting controls.

HM 144 Hotel/Motel Sales Promotion

(3-1) Credit: 4

This course includes sales planning, media advertising to include outdoor, radio and TV, mail advertising; personal sales; telephone selling; individual and group room business; food and beverage sales and sales incentive.

HM 231 Hotel/Motel Law

(3-0) Credit: 3

This course includes a study of the consequences resulting from a lack of foresight on the part of the management, understanding of the attitudes of courts toward innkeepers involved in litigations, and an awareness of the responsibilities law imposes upon the innkeeper.

HM 232 Supervisory Housekeeping

(3-0) Credit: 3

This course includes organization of a housekeeping department of a hotel, job schedules, job breakdown, floor care, stain removal, fire inspection, purchasing records, equipment records linen inventory care, carpeting and care, and basic interior design.

HM 235 Hotel/Motel Maintenance

(3-0) Credit: 3

This course includes a study of the organization, terms and concepts common to building maintenance. Maintenance functions to be studied include heating, plumbing, electrical, refrigeration and airconditioning, communications and signal systems, kitchen equipment, fire prevention and protection, and elevator systems.

JOURNALISM (JOUR)

JOUR 141 Communications Media

(3-3) Credit: 4

This course is designed to give the student an understanding and respect for the mass media of the modern world. It includes a survey of all the mass communicative media, their purposes, and methods of operation.

JOUR 142 News Writing

(3-3) Credit: 4

Designed to acquaint the student with fundamental news gathering and writing techniques for the print medium. It includes instruction and practice in interviewing, writing, and discussion of new sources and values.

LAW ENFORCEMENT (LE)

LE 131 Introduction to Law Enforcement

(3-0) Credit: 3

History, development, and philosophy of law enforcement in a democratic society; introduction to agencies involved in the administration of criminal justice; career orientation.

LE 132 Criminal Investigation

(3-0) Credit: 3

Introduction to the fundamentals of criminal investigation, including theory and history, conduct at crime scenes, collection and preservation of evidence.

- LE 133 Legal Aspects of Law Enforcement** (3-0) Credit: 3
History and philosophy of modern criminal law, including the structure, definition and application of statutes and leading case law; the elements of crimes and penalties; general provisions of the Penal Code.
- LE 134 Criminal Procedures and Evidence** (3-0) Credit: 3
Introduction to the rules governing the admissibility of evidence and types of evidence; criminal procedure in various courts, review of the model Code of Criminal Procedure including laws of arrest, search and seizure, and leading case law on each topic.
- LE 135 Traffic Law** (3-0) Credit: 3
This course is designed to cover all laws pertaining to the control and enforcement of traffic. The officer is taught the use of spot maps and charts, the techniques of enforcement, and the maintenance of good public relations. An analysis of the model Motor Vehicle Code is given.
- LE 136 Survey of Corrections** (3-0) Credit: 3
A general course describing the history and evolutions of the corrections process. Covers all aspects of institutional and community based corrections.
- LE 137 Police-Community Relations** (3-0) Credit: 3
The role of the individual officer in achieving and maintaining positive public response; inter-group relations and public information.
- LE 138 Police Role in Crime and Delinquency** (3-0) Credit: 3
Study of deviate behavior and current criminological theories, with emphasis on police applications; crime prevention and the phenomena of crime as it relates to juveniles.
- LE 139 Police Organization and Administration** (3-0) Credit: 3
Principles of organization and management as applied to law enforcement agencies; introduction to concepts of organizational behavior.
- LE 231 Probation and Parole** (3-0) Credit: 3
Course will provide the student with some understanding of the evolution of criminal corrections and explore with the student the many avenues which the corrections field branches into, to develop in each student a basic understanding of the various types and methods of correction so that they can function efficiently in the field.
- LE 233 Law Enforcement Seminar** (2-2) Credit: 3
A problems course. (With approval of the appropriate college official.)
- LE 234 Juvenile Procedures** (3-0) Credit: 3
The organization, functions and jurisdiction of juvenile agencies; the processing and detention of juveniles, case disposition; juvenile statutes and court procedures.
- LE 236 Traffic Planning and Administration** (3-0) Credit: 3
This course consists of the application of traffic problems from the administrative point of view, including engineering, education, enforcement at the supervisory level.
- LE 237 Penology (Jail Operation and Management)** (3-0) Credit: 3
A survey of the basic concepts of penal and correctional rationale as employed by criminal justice administrators. An overview of the operation and management principles of the institutional setting to be examined in depth.
- LE 238 Patrol Administration** (3-0) Credit: 3
Discussion of the administration of beat surveys, special problems arising while the officer is on patrol, improvement in patrol methods, observation of persons and things, preventive techniques, methods of handling complaints, and the development of contacts.

LE 239 Provost Marshal Operations**(3-0) Credit: 3**

The principles of organization and administration as applied to the operational system of a military Provost Marshal's Office as well as that of the Inspector General's. Practical training in conduct of briefings, management, and attendant qualities of leadership, and some phases of dissent conditions which might impair role and mission of the post command.

LE 239A Correctional Control and Administration**(3-0) Credit: 3**

The course prepares the student to perform supervisory functions related to control of prisoners and contraband; segregation and accountability of prisoners; procedures required at a correctional facility; emergency measures; prisoner privileges; and the records and reports of the detention center.

MACHINE TOOLS (MT)**MT 143 Machine Shop Practice****(2-4) Credit: 4**

Theory and practice in basic metal working, hand and machine tool operation and maintenance. Includes related instruction in blueprint reading and precision measurement.

MAINTENANCE TECHNOLOGY (MTNT)**MTNT 141 Carpentry I****(2-4) Credit: 4**

This course covers the theory and practical application of the use of basic hand and power tools, safety; an overview of residential and light commercial building construction, including foundations, exterior and interior walls and roof framing.

MTNT 142 Carpentry II**(2-4) Credit: 4**

This course is a continuation of MTNT 141, with additional emphasis placed on cabinetry, exterior and interior trim and finish work, including door and hardware installation. Prerequisite: MTNT 141 or consent of appropriate college official.

MTNT 143 Electricity I**(2-4) Credit: 4**

This course covers the theory and practical application of basic electricity, including Ohm's Law, AC/DC circuits, control devices, motor starters, transformers and rectifiers.

MTNT 144 Electricity II**(2-4) Credit: 4**

This course is a continuation of MTNT 143, with special emphasis on electrical maintenance, service and repair procedures for residential and light commercial buildings. Topics of study include wiring with romex cable, exterior and interior light systems and motor installation. Prerequisite: MTNT 143 or consent of appropriate college official.

MTNT 241 Masonry I**(2-4) Credit: 4**

This course covers the theory and practical applications of laying common brick, concrete tile, and instruction in applying ceramic tile.

MTNT 242 Masonry II**(2-4) Credit: 4**

This course is a continuation of MTNT 241, with additional emphasis placed on setting forms and the pouring and finishing of concrete slabs. Prerequisite: MTNT 241 or consent of appropriate college official.

MTNT 243 Plumbing I**(2-4) Credit: 4**

This course covers the theory and practical application of the use of basic hand and power tools used in plumbing; safety; the cutting, threading and joining of different types of pipe.

MTNT 244 Plumbing II

(2-4) Credit: 4

This course is a continuation of MTNT 243, with special emphasis on plumbing maintenance, service and repair procedures for residential and light commercial buildings. Prerequisite: MTNT 243 or consent of appropriate college official.

MTNT 245 Painting and Refinishing

(2-4) Credit: 4

This course covers the theory and practical application of painting and refinishing residential and light commercial buildings. Topics of study include various types of paint, the preparation of surfaces to be painted, use of hand and power tools, refinishing damaged furniture surfaces and the proper maintenance of finished surfaces.

MATHEMATICS (MATH)

MATH 130 Fundamentals of Mathematics

(3-0) Credit: 3

Designed for students desiring a review of fundamental algebraic operations. This course may not be used as a part of the requirements for a major in mathematics. Topics considered include operations with signed numbers, exponents, operations with polynomials, factoring, operations on rational expressions, solving linear equations.

MATH 131 Intermediate Algebra

Credit: 3

Includes a brief review of fundamental algebraic operations, linear equations, systems of linear equations, determinants, quadratic functions, inequalities, exponential functions, logarithmic functions.

MATH 132 College Algebra

Credit: 3

Includes consideration of quadratic functions, systems of quadratic equations, quadratic inequalities, matrices, binomial theorem, exponential functions, sequences, progressions, series, and applications. Prerequisite: Math 131 or equivalent.

MATH 133 Trigonometry

(3-0) Credit: 3

Wrapping function, circular functions, trigonometric functions, use of tables, identities, applications, to right triangles and oblique triangles, inverse functions, trigonometric equations, logarithms. Prerequisite: Math 131 or equivalent.

MATH 135 Finite Mathematics

Credit: 3

Symbolic logic, set theory, induction, permutations, combinations, counting methods, probability. Prerequisite: Math 131 or equivalent.

MATH 136 Finite Mathematics

(3-0) Credit: 3

A continuation of Math 135. Introduction to statistics, graphing, vectors, matrices, linear programming, and theory of games. Prerequisite: Math 135.

MATH 137 Business Mathematics

(3-0) Credit: 3

Introduction to the arithmetic processes in business, including interest, mortgage, taxes, insurance, payroll, inventory deductions, discounts, depreciation, annuities.

MATH 138 Elementary Statistics

(3-0) Credit: 3

Collection and tabulation of data, bar charts, graphs, sampling, averages, dispersion, correlation, index number, normal curve, probability, inferential statistics, applications.

TMTH 130 Technical Mathematics I

(3-0) Credit: 3

A course designed to fill the needs of students in industrial and technical programs. To perform calculations and measurements and to solve mathematical problems for the shop, construction site, design and drafting rooms. It covers arithmetic fundamentals development of "number sense", basic algebra, geometry, and the elements of the slide rule and calculating machines.

TMTH 131 Technical Mathematics II

(3-0) Credit: 3

This course is a continuation of Technical Mathematics I, and includes a study of algebra, trigonometric functions, graphs of trigonometric functions, solution of triangles, and plane and solid geometry. Prerequisite: Math 130, TMTH 130 or permission of appropriate college official.

MANAGEMENT (MGMT)**MGMT 130A Organization and Management**

(3-0) Credit: 3

Organizational structure can have considerable impact on the manner in which an organization functions. The student studies the complex variables over which managers can exercise control to determine proper structure. While surveying management topics such as planning, decision making, organizing, staffing and controlling, this course deals, in specific terms, with how the organization must be structured to fit its environment, and operation.

MGMT 134 Work Organization

(1-3) Credit: 3

Methods and techniques of planning and organizing work. Principles of time and motion as related to efficient use of worker and work place. Application of work simplification procedures for maximum efficiency of operation. Application of specific programs to current organizational principles.

MGMT 134A Fundamentals of Industrial Management

(3-0) Credit: 3

Application of the systems approach to the unification of all areas covered by the term industrial management. All phases of industrial management from human factors to environmental factors are covered along with the manner and methods through which work can be simplified yet made more meaningful and satisfying.

MGMT 135 Introduction to Management

(3-0) Credit: 3

This course is designed to give the student a knowledge and understanding of management theories and functions which are essential to the person planning a career in business or industry.

MGMT 136 Human Relations

(3-0) Credit: 3

A study of "Human Relations" as an emerging scientific discipline of study in which basic concepts and principles concerning man at work are emphasized. It is structured to explain the "whys" and "wherefores" of the behavior of industrial man.

MGMT 137 Insurance

(3-0) Credit: 3

Introduction to theory and practice of insurance, including life, fire, automobile, and personal and business risk.

MGMT 137A Safety (OSHA)

(3-0) Credit: 3

A study of safety as it is related to the military, industrial and business communities. Special emphasis will be given the requirements of the Occupational Safety and Health Act as it affects management and employees.

MGMT 138R Real Estate

(3-0) Credit: 3

Basic factors and agencies in modern real estate development; historic, economics, legal and social aspects of real estate; appraisal, financing and agency management.

MGMT 139 Income Tax

(3-0) Credit: 3

Income tax legislation; present income tax law and regulations; treasury decisions, court decisions, and departmental rulings; income tax problems and returns.

MGMT 139R Real Estate Fundamentals II

(3-0) Credit: 3

This course includes a study on sources of funds; influence of the Federal Reserve System; secondary mortgage market; agency operation and functions; title search, examination, registration and

closing procedures; residential and income property valuation; urban land development; and city, state and federal land planning regulations.

MGMT 230 Credit and Collections (3-0) Credit: 3
The elements of mercantile and consumer credit; organization of a credit department; sources of credit information; collection tolls and procedures.

MGMT 230R Real Estate Brokerage (3-0) Credit: 3
Techniques and skills required to effectively operate a broker's office in today's economy, including organization of brokerage operations; personnel selecting, training and retention; sales, marketing and advertising policy formulation and general functions of the modern brokerage office. Prerequisite: MGMT 138R or consent of appropriate college official.

MGMT 231 Marketing and Sales (3-0) Credit: 3
A study of those aspects of marketing which will achieve a conceptual understanding and serve the needs of business competence. Emphasis is placed on the economic aspect of marketing and the relationship to freedom and democracy.

MGMT 231R Real Estate Appraisal (3-0) Credit: 3
This course includes an analysis and valuation of real estate as needed by buyer, sellers, lenders and investors. Emphasis is placed on cost income and market data approaches to appraisal. Case methods are used to demonstrate appraisal principles and practices.

MGMT 232 Personnel Management (3-0) Credit: 3
The dynamic role of management as it relates to personnel, with emphasis on the management aspects important to the line executive or supervisor. Personnel functions and procedures are viewed in the light of management objectives, while personnel management is treated as an active and dynamic process which is motivated by basic human drives.

MGMT 232A Law and Legal Assistance (3-0) Credit: 3
Nature and scope of the law, court systems, law of contracts, principal and agent as relates to the military. Explanation of bailments, carriers, mortgages, securities, negotiable instruments, banks and banking, wills and estates. The procedures of obtaining and acquiring legal assistance for both military and civilian cases in or out of the continental limits of the United States of America are addressed. Emphasis is given on the knowledge required by the supervisor to counsel his subordinates in the areas of law and legal assistance.

MGMT 232B Fundamentals of Systems Management (3-0) Credit: 3
Introduction to the "systems" concept of management and integration of this concept with the more traditional "principles" approach. This course combines theory and application of systems management and focuses on systems as they exist in many fields such as education, law enforcement, military, industry, and a variety of nonprofit organizations.

MGMT 232R Real Property Management (3-0) Credit: 3
Introduction to the property management field, including professional organizations, management responsibilities, lease negotiations, insurance and tax aspects, advertising and public relations. Prerequisite: MGMT 138R or consent of appropriate college official.

MGMT 233R Real Estate Finance (3-0) Credit: 3
This course includes the study of federal and state practices in mortgages and real estate finance, also includes a survey of savings and loan associations, commercial banks, life insurance companies and mortgage bankers. Prerequisite: MGMT 138R or consent of appropriate college official.

MGMT 234 Labor-Management Relations (3-0) Credit: 3
Labor relations aspects of personnel management are emphasized; selection and placement, discipline and morale, promotions, lay-offs, job evaluation, incentive systems, profit sharing and

the influence of collective bargaining and legislation of personnel policies. Methods used by organized labor and employers in industrial conflicts.

MGMT 235 Business Law I (3-0) Credit: 3
Nature and scope of law; court system; law of contracts; principal and agent, business organizations, including partnerships and corporation; community property laws.

MGMT 236 Business Law II (3-0) Credit: 3
Additional studies in law of business, dealing with bailments, carriers, mortgages, suretyships, negotiable instruments, banks and banking, wills and estate, sales bankruptcy.

MGMT 237 Life Insurance (3-0) Credit: 3
Principles of life insurance; business and personal use in insurance; classification and analysis of policies; reserves and policy values; organization and administration of life insurance companies.

MGMT 238R Real Estate Law (3-0) Credit: 3
Contains a study of sources of real estate law, legal estates and ownership, deeds, contracts, law of agency and brokerage, escrow agreements, closing of sales, title assurance methods, mortgages, liens, leases, homesteads, wills, administration of estates, zoning and building ordinances, property taxation and other matters of law which pertain to real estate transactions.

MGMT 239 Supervision (3-0) Credit: 3
A course designed to provide an understanding of: planning work, leadership, decision making, work problem solving, human behavior and personnel relations.

MGMT 239A Personnel Counseling (3-0) Credit: 3
Systematic study of major theories of personnel counseling with supervised experience in role-playing utilizing these approaches.

MGMT 239B Military and Statistical Accounting (3-0) Credit: 3
To train the student to complete statistical surveys of the military community at the company and battalion level, and to place these studies in proper report format. The student will also learn the fundamental principles of military report systems to include morning reports.

OFFICE ADMINISTRATION (OA)

OA 131 Beginning Shorthand (3-3) Credit: 3
Introduction to Gregg Shorthand. Reading, writing, theory principles, brief forms.

OA 132 Intermediate Shorthand (3-3) Credit: 3
Continuation of OA 131.

OA 133 Beginning Typewriting (3-3) Credit: 3
A beginning course in touch typewriting for the mastery of machine parts and the keyboard. Special emphasis of speed development, including an introduction of letter writing, tabulating, and preparing manuscripts.

OA 134 Intermediate Typewriting (3-3) Credit: 3
A continuation of OA 133. Additional skill in terms of accuracy and speed will be evidenced by students. Composition and typing of business letters, tabulation, and manuscripts of more demanding content will be instructed.

OA 135 Clerical Practice (2-1) Credit: 3
Procedures of filing and finding operations employed in business offices, standard filing systems. Training in the operation of spirit duplicators, mimeograph, and dry copy machines. Training in proficiency in handling the mail, telephone techniques, and handling receptionist duties. Considerable emphasis and training in integrating these activities into an office environment will be instructed.

OA 136 Secretarial Practice

(3-1) Credit: 3

This course is designed for the student who wishes to prepare for a career as an executive secretary. More advanced mailable letters, typing from transcribing machines, organization of meetings and conferences, travel arrangements, information sources, and human relations skills are studied. Students are trained in word processing procedures. Students are introduced to various "needs" theories such as Abraham Maslow's hierarchy of needs. Students are guided into the solution of office problems due to personality problems. Group work, group dynamics and student evaluations are utilized extensively in this course.

OA 138 Business Correspondence

(3-0) Credit: 3

A course designed to teach effective business writing and to give practice in composing all types of business letters and reports.

OA 139 Business Machines and Calculations

(3-3) Credit: 3

Technique familiarization in the operation of the most commonly used office machines. Computation; calculations; speed drills; percentages, discounts and net values, chain discounts; business forms.

OA 231 Advanced Shorthand

(3-3) Credit: 3

Improvement of ability to take dictation and transcribe mailable copy. Theory principles; brief form derivatives; vocabulary development; speed building; mailable transcription; office style dictation.

OA 232 Advanced Typewriting

(3-3) Credit: 3

This course includes advanced work in such specialized production as tabulation, inter-office correspondence, manuscripts, telegrams, stencil cutting and mimeograph operation, legal forms, special inter-office forms, and additional work on the arrangement of business letters with special features.

OA 233 Advanced Transcription

(3-3) Credit: 3

A continuation of skill building in Gregg Shorthand with concentration on transcribing into mailable copy from office-style dictation. Special emphasis will be given to the inter-relatedness of specialized office activities and terminologies as they relate to an administrative secretarial position. Prerequisite: OA 231-Advanced Shorthand.

OA 234 Bookkeeping I

(3-3) Credit: 3

Elementary principles of bookkeeping, journalization; posting, statements, special journals; subsidiary ledgers.

OA 235 Bookkeeping II

(3-3) Credit: 3

Analysis and recording of business transactions; use of journal and ledger; trial balance and work sheets; adjusting and closing entries; accounting statements; payroll records and payroll taxes; introduction to partnership accounting; special journals and ledgers; business papers and business procedures relating to accounting; voucher system.

OA 237 Office Administration and Procedures

(3-0) Credit: 3

This course is a finishing course through which secretarial and/or clerical students may have an opportunity to relate all information, knowledge, and skills acquired in their academic preparation. Special emphasis will be given to the inter-relatedness of the office in various systems that affect office work.

OA 238 Office Occupations Internship

(1-5) Credit: 3

The student will be provided a combination of occupationally related classroom instruction and on-the-job training in cooperation with offices within the Office Administration Department, and other campus offices. Actual work training will be available in the following areas: Typewriting, filing, duplication, use of telephone, preparation of correspondence, voice transcription machines, record-keeping, proof-reading, etc.

OA 239 Office Administration Internship

(1-5) Credit: 3

Students will be provided a combination of occupational related classwork instruction and on-the-job training in cooperation with Office Administration offices and other campus offices. Students will be provided with work experiences in the following areas: Taking dictation, typewriting, letter composing, telephone procedures, filing, work scheduling, financial calculating, duplicating, transcribing from dictation, equipment, etc.

OFFSET PRINTING (OP)**OP 131 Introduction to Offset Printing**

(2-4) Credit: 3

This course offers the student an introduction to offset printing with a general survey of various printing processes and their uses in industry. The history of printing, the techniques involved in the production and distribution of printing materials, the kinds of printing industries and printing terminology are included. It provides an introduction to all equipment and how each piece of equipment relates to the total plant operation.

OP 132 Camera and Darkroom Procedures, Stripping and Platemaking I

(2-4) Credit: 3

Basic camera operations and darkroom procedures including percentage size calculations, simple line shots and film processing by the tray method. Basic techniques in the precise layout of simple line negatives, halftones, and combinations. Selection of proper plates for specific jobs and the exposing and developing of plates.

PETROLEUM TECHNOLOGY (PETT)**PETT 131 Introduction to Petroleum Technology**

(3-0) Credit: 3

General study of the industry, including history of the industry chemistry of petroleum, its occurrence in nature and its importance in the world economy, leasing and royalty exploration, drilling and production methods, conservation, transportation and refining, economics of the oil industry.

PETT 132 Petroleum Geology

(3-0) Credit: 3

A rapid survey course covering the principles of petroleum geology. Topics covered are geographic and stratigraphic distribution, types of structures, properties of petroleum, origin of petroleum, methods of migration, and petroleum discovery methods. Different fields are studied to determine the characteristics of fields as based on different types of traps.

PETT 133 Rotary Drilling Fluids

(3-0) Credit: 3

Testing methods, determining drilling fluid characteristics, drilling fluid problems, use of special drilling fluids, laboratory exercises consisting of practice in altering the properties of fresh water and special drilling fluids for drilling through troublesome zones with the rotary system.

PETT 134 Oil Field Records

(3-0) Credit: 3

A study of records kept by oil companies and reports made within companies and to the regulation agencies.

PETT 141 Rig and Drilling Equipment

(3-3) Credit: 4

Technical information covering the care and use of drilling equipment, hoists, power units, derricks, pumps, and derrick equipment. Trips to examine different types of drilling equipment in actual operation in the field. Also trips to service companies to study their drilling tools.

PETT 142 Petroleum Logging and Mapping

(3-3) Credit: 4

A study of theories of electrical, micro-electrical radiation, optical chemical, and mechanical well logging methods and application of these theories, field examples and problems.

PETT 231 Pumping Equipment

(3-0) Credit: 3

A theoretical study of the motors, engines, compressors, and pumps used in the movement of

petroleum products; including a survey of the different types of equipment available for specific conditions and loads.

PETT 232 Well Completion Methods

(3-0) Credit: 3

Included in this course are basic types of completion methods, such as open hole, liner and screen, perforated casing. Permanent type completions and multiple completions are studied. Remedial measures including recompletion, shutting off bottom hole water, reducing high gas oil ratios, sand control, fracturing, and re-drilling are studied.

PETT 233 Natural Gas Production

(3-0) Credit: 3

A survey course in the handling of natural gas, from discovery to use; with emphasis on efficient transportation and the use of proper equipment for distribution. Gas regulations, control and measuring devices will be studied.

PETT 234 Petroleum Transportation

(3-0) Credit: 3

A study of the methods and practices of transporting crude and refined petroleum products by pipeline, tanker and by land.

PETT 235 Petroleum Pollution Control

(3-0) Credit: 3

A study of the various contaminants of air, water, and soil and their effect on ecology. The types of contaminants released by the petroleum industry and petroleum products to the air and water, and methods used to minimize them will be studied. A survey of the various pollutants, their effects on materials, and their control.

PETT 236 Hydraulics

(3-0) Credit: 3

A study of hydraulics related to drilling, oil pipelines, and artificial lift.

PETT 237 Refinery Operations

(3-0) Credit: 3

A study of theoretical and practical approaches to the operation of refinery.

PETT 241 Petroleum Production Methods

(3-3) Credit: 4

Various elements of crude oil production are studied, including subsurface pumps, gaslifting, emulsion treating, separation of oil and water, separation of oil and gas. Instrumentation of leases is discussed, including flow-meters, automatic lease operation, and automatic custody transfer; also a study of oil field corrosion problems, and secondary recovery methods.

PETT 242 Petroleum Refining Methods and Operations

(3-3) Credit: 4

The chemical structure of the hydrocarbon is studied in this course. A survey of modern refining methods of gasoline, petrochemicals and other related chemicals is included.

PHOTOGRAPHY (PHOT)

PHOT 141 Introduction to Photography

(3-2) Credit: 4

This course emphasizes the handling of small cameras, film exposure, processing, contact printing and basic enlarging. Flash and existing light photography is studied with new features, action photography, and story-telling photographs. Printing and composing photographs for publications included.

PHOT 142 Portrait Photography

(3-2) Credit: 4

A study is made of fundamental lighting, camera techniques, posing, composition, processing, and printing as applied to portraiture. Experience in retouching negatives and prints, mounting and making story-telling pictures for fashion and advertising is provided. Prerequisite: PHOT 141 or consent of instructor.

PHOT 143 Advanced Photography

(3-2) Credit: 4

This course includes elements of composition and film exposure development for specific gamma, studied sensitometry, advanced photographic printing characteristics of printing papers, process-

ing for contrast, print balance, and toning are included. Principles of filters and lenses and advanced focusing techniques are studied. Prerequisite: PHOT 141 or consent of instructor.

PHOT 144 Commercial Photography (3-2) Credit: 4

A study is made of the fundamental differences between commercial and advertising photography. Although both are studied, emphasis will be on the commercial level such as products, houses, factories, weddings and party photography. Emphasis on what a commercial photographer does, how he sets up a business, what equipment he needs, how he finds clients, what prices to charge, and new trends in the field are revised. Prerequisite: PHOT 141 and PHOT 142, or consent of instructor.

PHOT 145 Advanced Printmaking (3-2) Credit: 4

This course includes special instruction and laboratory work in advanced printmaking, mounting, display, toning and tinting and special procedures in graphic techniques in printmaking with higher contrast materials. Preparation of a black and white portfolio is included. Prerequisite: PHOT 141, PHOT 142, PHOT 143, PHOT 144 or consent of instructor.

PHOT 146 Color Photography I (3-2) Credit: 4

This course of study of primary and secondary colors of light, color temperature, color compensations in film exposure, the making of color slides for visual education, theory of color negative systems and demonstrations of Type-C printing.

PHOT 147 Color Photography II (3-2) Credit: 4

Positive and negative color film processing, sensitometry, and color printing. Prerequisite: PHOT 146.

PHOT 231 Photography Internship I (1-5) Credit: 3

Supervised off-campus laboratory and work experience in photography or closely allied fields. Students usually work as laboratory technicians, cameramen, and salespersons. Prerequisite: PHOT 141, PHOT 142, PHOT 144 or consent of instructor.

PHOT 232 Photography Internship II (1-5) Credit: 3

Supervised off-campus laboratory and work experience in photography or closely allied fields. Students usually work as laboratory technicians, cameramen, and salespersons. Prerequisite: PHOT 231 or consent of instructor.

PHOT 243 Portrait Retouching (3-2) Credit: 4

Portrait negatives retouched by the use of leads, dye and etching with special attention to the study of facial structure and demonstrations in printing and retouching negatives. Some color techniques included. Prerequisite: PHOT 142.

PHOT 244 Photographic Production (3-2) Credit: 4

The student prepares a portfolio of photographs for the mass media, business, education, government, industry and science for presentation to staff members and to prospective employers. Individualized projects. Prerequisite: PHOT 141, PHOT 142, PHOT 144, PHOT 146, and PHOT 147.

PHYSICS (PHY)

PHY 140 Survey of Physics (3-3) Credit: 4

A survey of the fundamental principles of physics designed to acquaint students with the basic concepts of physics, contemporary physics and modern thinking.

PHYSICAL EDUCATION (PE)

PE 218 Physical Conditioning (1-1) Credit: 1

PE 218A	Health & First Aid	(1-1) Credit: 1
PE 218B	Defensive Tactics	(1-1) Credit: 1
PE 218C	Firearms	(1-1) Credit: 1
PE 235	Safety and First Aid	(3-0) Credit: 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.

PSYCHOLOGY (PSYC)

PSYC 111 Psychology of Personal and Social Development (1-0) Credit: 1
Designed to orient the student to college life, and to help him to understand his personal problems, such as separation from family, study habits, use of time, vocational choices.

PSYC 231 Introduction to Psychology (3-0) Credit: 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.

SMALL GAS ENGINE REPAIR (SGER)

SGER 141 Gas Engine Fundamentals (2-4) Credit: 4
This course covers the theory and repair practices on two cycle, four cycle and wankel engines, both air cooled and water cooled.

SGER 142 Ignition Systems (2-4) Credit: 4
This course covers the theory and repair practices on the various component parts of the ignition system. Proper testing and service procedures are performed on battery ignition systems, solid state ignitions, capacitor discharge systems and on magneto systems.

SGER 143 Shop Practices (2-4) Credit: 4
This course covers an introduction to shop safety, use of hand and power tools, use of precision measuring instruments and other special tools used in small engine repairs.

SGER 144 Carburetion, Fuel and Lubrication Systems (2-4) Credit: 4
This course is designed to provide the student with knowledge and skills to rebuild and service different types of carburetors, lubrication systems, exhaust systems, flame arrestors that are found on the various types of small gas engines.

SGER 145 Motorcycle Engine Service (2-4) Credit: 4
This course is designed to provide the student the necessary skills to disassemble and assemble motorcycle power plants, repair and replace drive train components, use special tools particular to motorcycle repair, and to use applicable parts and service manuals.

SGER 146 Lawn Care Equipment Service (2-4) Credit: 4
This course covers the theory and repair practices on all types of power lawn care units including lawn mowers, riding mowers, garden tractors, rotary tillers, and other similar items of equipment.

SGER 241 Advanced Motorcycle Repair (2-4) Credit: 4
This course is a continuation of SGER 145 with special emphasis placed on chassis and system repair including front and rear suspension systems, hub and wheel repair, transmissions and brakes. Prerequisite: SGER 145

SGER 242 Chain Saw Service**(2-4) Credit: 4**

This course covers the theory and repair practices on all types of modern chain saws and related equipment.

SGER 243 Marine Inboard/Outboard Service**(2-4) Credit: 4**

This course covers the theory and practical lab work including disassembly and assembly of the power head and lower drive unit, analysis of engine malfunctions, component inspection, use of special tools and the use of service and parts manuals that are applicable to marine inboard/outboard engines.

SGER 244 Stationary Power Plant Service**(2-4) Credit: 4**

This course covers the theory and repair practices necessary on stationary power plants, self-contained generating units and related units.

SGER 245 Recreational Vehicle Engine Service**(2-4) Credit: 4**

This course covers the theory and repair practices that are necessary to service snowmobiles, off-the-road vehicles and other related units.

SGER 246 Special Projects**(1-8) Credit: 4**

The purpose of this course is to allow the student to develop one or more special projects related to small gas engine repair under the supervision of the program instructor. Prerequisite: Sophomore standing and 24 semester hours of Small Gas Engine Repair courses.

SOCIOLOGY (SOC)

SOC 231 Introduction to Sociology**(3-0) Credit: 3**

The study of human society, human behavior and personality as a product of group life; community organizations, social change and current social problems.

SOC 232 Contemporary Social Problems**(3-0) Credit: 3**

Identification and analysis of contemporary social problems, development of criteria for evaluating problems for social betterment.

SOC 233 Criminology**(3-0) Credit: 3**

Causes and manifestations of delinquency; case studies of criminals and their social milieu; the offender and agencies of his adjustment; analysis and evaluation of penal methods.

SOC 239 Race or Minority Relations**(3-0) Credit: 3**

An in-depth multicultural approach to the study of racial and minority groups with group discussion on how to improve communication and understanding. The patterns of adjustment and interactions of ethnic and racial groups as revealed by sociological analysis.

SPEECH (SPCH)

SPCH 131 Fundamentals of Speech**(3-0) Credit: 3**

Instruction is given in speech preparation and delivery with emphasis on communication through audience analysis, gesturing, and vocal variety. Students will have opportunity for practice in the researching, outlining, and presentation of speeches.

SPCH 233 Business Speech**(3-0) Credit: 3**

Designed to aid the prospective business or professional person in preparing various types of speaking assignments such as he might encounter in his career. It is planned for agriculture, business, and home economics majors. Emphasis is on structure and techniques of presentation.

TELECOMMUNICATIONS (TELE)

TELE 131 Introduction to Broadcasting

(3-3) Credit: 3

This is a survey course tracing the history of broadcasting from 1884 to the present. Besides history, the course will present information on comparative systems of broadcasting and on the basic operational procedures of radio and television stations. Preparation for the FCC Radio-Telephone Operator's Third Class Permit is included in this course of study.

TELE 132 Beginning Radio Production

(3-3) Credit: 3

In this course the fundamental techniques and practices of production and programming are emphasized with a great deal of practical experience in an actual radio station. Production of various types of programs including interviews, documentaries, and basic news will be studied. Each student will be trained to competently operate a radio control board, turntables, and tape recorders.

TELE 133 Beginning Television Production

(3-3) Credit: 3

This course is designed to give the student the fundamental skills of camera operation, microphone techniques, basic set design, basic graphics, and lighting. In addition, each student will produce and direct his own commercials. A basic study of the operations of a television station will be covered.

TELE 134 Station Sales/Management

(3-0) Credit: 3

This course is designed to give the student a working knowledge of the broadcast industry; how individual radio and television stations program, sell spots and time, set up management responsibilities, negotiate scheduling with network, and advertising. It also covers the legal and ethical aspects of broadcasting through a use of the FCC Rules and Regulations. Audience measurement and what it means will also be studied.

TELE 135 Radio-Television Announcing

(3-3) Credit: 3

This course covers the duties and responsibilities of the announcer such as operation of the audio console, announcing commercial copy, announcing station breaks, newscasting, interviewing, etc. Special emphasis is given in the areas of voice and diction and pronunciation. Practical experience will be offered through the use of actual radio and television stations.

TELE 231 Television Film I

(3-3) Credit: 3

This course is designed to introduce the student to the fundamentals of cinematography and its application in the television industry. Basic filmic techniques will be covered, and each student will learn to shoot 16mm motion picture cameras, edit, story board, and process film. Laboratory exercises will provide for the shooting of at least 200 feet of film per student.

TELE 232 Advanced Television Production

(3-3) Credit: 3

This course offers advanced training in television production. Included will be experience as cameraman, floor director, talent, lighting director, technical director, producer, graphics, film director, video tape operator, and audio engineer. Practical experience in weekly television program production will be available through the use of an actual television station. In addition, a critical look will be given to television programming techniques, types of station structure, and innovative technological breakthroughs.

TELE 233 Advanced Radio Production

(3-3) Credit: 3

The major emphasis in this course is advanced training in the production of radio commercials, promotion announcements, documentaries, newscasting, and interviewing. An in-depth study of the programming formulas and different types of radio broadcasting is presented. Each student will be responsible for weekly programming to be aired over an actual radio station.

TELE 234 Broadcast Operations

(3-3) Credit: 3

This course is designed to provide the student of broadcasting with specific areas of study in promotion, graphics, traffic, continuity, and programming for both radio and television. The laboratory for this course will be the study of and implementation of an assessment of audience needs survey.

TELE 235 Broadcast Writing**(3-3) Credit: 3**

This course covers the stylistic writing techniques as needed for commercial copy, promotional copy, news editing, radio television show formats, and individualistic creative writing for drama or documentaries. Practical experience will be available through actual radio and television stations.

TELE 236 Communications Law**(3-0) Credit: 3**

This course is an in-depth study of the Federal Communications Commission Rules and Regulations, treaties, and laws pertaining to the overall operation of the broadcast stations; a survey of copyright laws, libel and slander laws, contracts and other legal responsibilities associated with broadcasting.

TELE 237 Television Film II/Electronic News Gathering**(3-3) Credit: 3**

Advanced film production, color processing and editing are covered during the first half of the semester. Electronic news gathering techniques with mini-cameras are covered the second half of the semester. Much emphasis is given to news photography and on-the-job training. Students are given weekly assignments for television newscasts.

TELE 238 Telecommunications Practicum**(1-6) Credit: 3**

The purpose of this course is to give each student an opportunity to receive practical experience in a specialized area of study. A student may choose his individual study practicum from any of the following broadcast-related areas: graphic arts, set design, photography, cinematography, broadcast journalism, radio production, television production, broadcast promotion, traffic and continuity.

TELE 239A Technical Aspects of Broadcasting**(3-0) Credit: 3**

This course will offer invaluable practical experience to the student because he will be usually working under the pressure of time. Each student will be participating in live newscasts over radio and television stations. In-depth news reporting, editing methodology, and news writing as well as technical production will be covered.

TELE 239B Telecommunications Field Projects**(1-5) Credit: 3**

The field projects will constitute an on-the-job training experience for all students. The laboratory portion will place the student in responsible production positions for on-air broadcast activities on radio and/or television. Each student will produce and direct at least three major TV or radio programs on a regularly scheduled basis. In conjunction with this practical training, the student will compile a daily log of his work experience for in-class discussion and criticism.

TELE 239C Telecommunication Seminar**(3-0) Credit: 3**

This seminar is designed to allow the student of broadcasting to take an in-depth look at the industry he will soon serve. Individual investigation will be conducted on the current trends in broadcasting, major issues facing the broadcaster, and the importance of broadcasting in today's society. Considerable discussion on such issues as freedom of the press and the future of broadcasting will take place. This course will give the student an up-to-date and realistic perspective of his chosen industry.

TELE 239D Telecommunication Field Projects**(1-5) Credit: 3**

A continuation of Telecommunication 239B, this course consists of on-the-job training as a production member of radio or television stations for on-air operations.

WELDING TECHNOLOGY (WELD)

WELD 141 Beginning Gas Welding**(2-4) Credit: 4**

Intensive classroom instruction will be conducted in oxy-acetylene welding. Fusion type welds will be made under a variety of positions, conditions, and materials. Instruction will include use and operation of oxy-acetylene cutting torch.

WELD 142 Beginning Arc Welding

(2-4) Credit: 4

Intensive classroom instruction will be conducted in electric arc welding. Welds will be made in all positions with various types of electrodes. A basic understanding of metal properties and characteristics will accompany all instructional materials.

WELD 146 Welding Fundamentals

(2-4) Credit: 4

Electric, oxy-acetylene welding and torch cutting. Making fusion welds in all positions with both the electric and oxy-acetylene welding. Using the hand cutting torch and cut-a-line cutting machine. (Special industrial application.)

WELD 151 Advanced Arc Welding

(2-6) Credit: 5

Theory and practice of shielded metal arc welding on tests required by industry. Emphasis will be placed on preparing the student for certification tests. Prerequisite: Weld 142.

WELD 152 Advanced Welding Processes (MIG & TIG)

(2-6) Credit: 5

Theory and practice of MIG & TIG welding. Course to include study of shielding gases used in these processes.

WELD 153 Weld Testing Methods

(2-6) Credit: 5

Theory and practice of making basic destructive and non-destructive weld test. This will include guided bend, nick break, liquid penetrant, and magnetic particle testing. Prerequisite: Weld 142.

WELD 154 Welding Fabrication and Lay-out

(2-6) Credit: 5

Practical application of steel fabrication and general lay-out work. Blueprint with welding symbols will be used on all projects. Prerequisite: Weld 142 & DD 130.

WELD 155 Advanced Fabrication Methods

(2-6) Credit: 5

The advanced welding student selects and develops comprehensive welding fabrication project under the direction of the supervising instructor. Special emphasis is placed on the utilization of special metals, including stainless steel, carbon steel, aluminum and the newer space-age exotic metals. Prerequisite: Weld 154.

WELD 156 Pipe Welding

(2-6) Credit: 5

This course covers the theory and practice of the arc welding of pipe in roll-out and in horizontal positions. Different sizes, schedules and materials of pipe are used in the course. Special emphasis is placed on preparing for pipe welding certification examinations. Prerequisite: Weld 151 and Weld 152.

WELD 157 Structural Welding

(2-6) Credit: 5

This covers the theory and practice of arc welding on the various structural steel shapes used in the construction and steel fabrication industry. Special emphasis is placed on preparing for the various welding certification examinations. Prerequisite: Weld 151.

CONTINUING EDUCATION PROGRAM

The purpose of non-credit programs is to meet the current and changing educational requirements of a specific community. To achieve this purpose, instruction is provided in response to expressed needs. Generally, classes provide training for the individual; however, special interest groups can also be accommodated within the scope and philosophy of the program. Classes are geared to the changing needs and requirements of the area being served. There are no limits to the number or variety of courses. Classes are offered in the vocational business fields as well as practical arts. Non-credit courses are offered in the following:

BUSINESS EDUCATION: Classes offered in business are the result of close and constant cooperation with, and are established on the basis of specific requests from, area agencies such as the board of realtors, and Civilian Personnel Offices. The business courses, including secretarial and clerical courses, are developed to provide adult students pre-employment and in-service training in knowledge and skills to meet occupational requirements of employers.

SELF DEVELOPMENT EDUCATION: Classes offered in this group are designed for persons who wish to learn a new language, hobby or skill and who derive self satisfaction from learning and performing in new subjects.

SUPPLEMENTAL TRAINING AND EDUCATION (STEP): This program was developed to meet military educational needs to provide adult, non-credit, technically specific course work related to military occupational skills. The purpose of this program is to improve skill performance, deepen technical expertise in subject areas identified by local commands, and provide professional development. Individual mission requirements and service member training needs are addressed through joint course development. Course content, location of class offerings and time schedules for instruction are provided to accommodate military requirements. Course development is provided in two categories: 1) military occupational skills, and 2) professional development.

BUSINESS

- Federal Service Entrance Exam
- Fundamentals of Tax Preparation
- How to Prepare for ACT, SAT & College Boards
- Interpersonal Communications
- Real Estate Appraisal
- Real Estate Brokers
- Real Estate Prep

EDUCATIONAL/SELF DEVELOPMENT

- Automotive Orientation
- Defensive Driving
- Dog Obedience Training
- Driver Education
- Gourmet Cooking
- Interior Decoration
- Intermediate Sewing
- Motorcycle Tune Up

Personal Cosmetology
Sewing I
Small Engine Repair
You, Your Child and Drugs

S.T.E.P. COURSES

Advanced Drafting
A.C. Circuits
Architectural Blueprint Reading
Assembly Methods
Automotive Electrical Systems
Automotive Engines
Ballistics Mathematics
Climate and Weather
D.C. Circuits
Engineering Graphics
Food Preparation & Serving
Geography, Map Reading and Directional Skills
Machine Drawing
Manual Transmission
Medical Technology
Menu Planning
Military Correspondence
Nutrition
Sanitation and Safety
Steering and Suspension
Technical Mathematics
Test Equipment

SPECIAL REQUESTS

Other non-credit courses may be arranged to meet specific requests from interested groups. Central Texas College and its affiliated organizations are able to provide assistance for virtually every educational requirement.

STUDENT CURRICULUM PLANNING SHEET

YOUR NAME _____

*15 Hour Certificate of Award
15 Sem Hrs. from _____
Program

	Required Credit	Transfer Credit	Examination Credit	Correspondence Credit	Military Credit	Credit	CTC		
							Grade	Remaining Requirements	

TOTAL: 15 Sem Hrs.

Total Remaining: _____

30 Hour Certificate of Award.

Must have satisfied 15 Hour Certificate plus 15 additional Sem. Hrs. applicable to the
_____ Program.

TOTAL: 30 Sem. Hrs.

Total Remaining: _____

**

Associate in _____ Remaining courses in _____

TOTAL: ____ Sem. Hrs.

Total Remaining: _____

OFFICIAL EVALUATIONS ARE AVAILABLE UPON APPLICATION AND AFTER THE STUDENT HAS COMPLETED 6 SEMESTER HOURS IN A SINGLE PROGRAM. SEE YOUR FIELD REGISTRAR FOR FORMS AND DETAILS.

NOTE:

- 1) *Indicates 9 SH of residence credit required at CTC for certificate award.
- 2) **Indicates 12 SH of residence credit required at CTC for degree award.

STUDENT CHECKLIST OF CREDIT SOURCES

When completing the Curriculum Planning Sheet, complete credits column in the following order:

1. CTC courses taken
2. Transfer credit from accredited institutions
3. Credit by examination
4. Military Service Schools
5. Military occupational skill training experience
6. Civilian occupational training experience

☐ 1. Transfer Credit from Accredited Colleges and Universities

	College/University	Location
a)	_____	_____
b)	_____	_____
c)	_____	_____
d)	_____	_____

☐ 2. Test Score Evaluation

- | | |
|--|---|
| <input type="checkbox"/> ACT Test | <input type="checkbox"/> College Level GED |
| <input type="checkbox"/> CEEB Scholastic Aptitude Test | <input type="checkbox"/> USAFI Courses |
| <input type="checkbox"/> CLEP General Examination | <input type="checkbox"/> DANTES Courses |
| <input type="checkbox"/> CLEP Subject Examination | <input type="checkbox"/> USAFI Subject Standardized Tests |
| <input type="checkbox"/> DANTES Subject Standardized Tests | |

☐ 3. Military Services Schools

- ☐ DD 295

☐ 4. MOS Training and Experience

- ☐ DA Form 2-1, Items 3 and 6
- ☐ DA Form 2-1, Items 3 and 6
- ☐ DA Form 20, Item 20

☐ 5. P.E. and PSYCH 111 Credit

- ☐ DD 214 or
- ☐ Letter from C.O.

☐ 6. Civilian Occupational Training Experience

- ☐ Transcripts or official documents
- ☐ Current License
- ☐ Current Certificate

NOTE: *Official transcripts or scores must be sent directly from the reporting institution to CTC.

**These documents must be certified as "true copies" and signed by an officer at the Personnel Records Center.

TUITION AND FEES

Tuition and fees listed below are those in effect at the date of printing this catalog and are subject to change.

Tuition and fees differ for the various geographical locations depending on educational service agreements in effect with the Command concerned.

ALASKA

TUITION

\$40 per semester hour for non-lab courses and \$64 per semester hour for lab courses. Definition of lab courses are those courses in which lab hours equal or exceed lecture hours. Food Service courses are treated as non-lab courses.

SEMESTER HOURS	NON-LAB COURSES	LAB COURSES
1	\$ 40.00	\$ 64.00
2	80.00	128.00
3	120.00	192.00
4	160.00	256.00
5	200.00	320.00
6	240.00	384.00
7	280.00	448.00
8	320.00	512.00
9	360.00	576.00
10	400.00	640.00
11	440.00	704.00
12	480.00	768.00
13	520.00	832.00
14	560.00	896.00
15	600.00	960.00

FEES - See Fee Schedule, Page 100

EUROPE

TUITION

ARMY: \$40 per semester hour, \$20 Lab Fee for all lab courses. Definition of lab courses are those courses in which lab hours equal or exceed lecture hours.

SEMESTER HOURS	NON-LAB COURSES	*LAB COURSE**
1	\$ 40.00	\$ 60.00
2	80.00	100.00
3	120.00	140.00
4	160.00	180.00
5	200.00	
6	240.00	**IMPORTANT: Table applies for re- gistration in <u>one</u> laboratory course only.
7	280.00	
8	320.00	
9	360.00	
10	400.00	EXAMPLE: If a student enrolls in 2 lab courses, one of 3 semester and one of 4 semester hours, the table should be used individually for each lab course. In this case the 3 semester hour course could be \$180.00. The total tuition due would be \$320.00
11	440.00	
12	480.00	
13	520.00	
14	560.00	
15	600.00	

AIR FORCE AND NAVY: \$40 per semester hour for non-lab courses and \$64 per semester hour for lab courses. Definition of lab courses are those courses in which lab hours equal or exceed lecture hours.

SEMESTER HOURS	NON-LAB COURSES	*LAB COURSE**
1	\$ 40.00	\$ 64.00
2	80.00	128.00
3	120.00	192.00
4	160.00	256.00
5	200.00	320.00
6	240.00	384.00
7	280.00	448.00
8	320.00	512.00
9	360.00	576.00
10	400.00	640.00
11	440.00	704.00
12	480.00	768.00
13	520.00	832.00
14	560.00	896.00
15	600.00	960.00

OTHER BRANCHES OF SERVICE: Tuition and fees for other services will be determined by the service which provides educational support (Air Force, Army or Navy).

VIDEO INSTRUCTION

TUITION: \$40.00 or \$55.00 per semester hour depending on location. Check with your CTC Registrar to determine your cost.

FEES

Matriculation Fee - \$15.00 - not refundable except when the course is cancelled by the College or the student withdraws prior to the first class meeting. Due from each student registering for the first time with CTC.

Other Fees - See Fee Schedule, Page 100

FAR EAST

TUITION

\$45 per semester hour. There is a \$40 Lab Fee for all Welding courses.

SEMESTER HOURS	NON-LAB COURSES	*LAB COURSE
1	\$ 45.00	\$ 40.00 per course applicable only to Welding Courses
2	90.00	
3	135.00	
4	180.00	
5	225.00	
6	270.00	
7	315.00	
8	360.00	
9	405.00	
10	450.00	
11	495.00	
12	540.00	
13	585.00	
14	630.00	
15	675.00	

FEES - See Fee Schedule, Page 100

FORT LEE

TUITION

\$40 per semester hour.

SEMESTER HOURS	NON-LAB COURSES	*LAB COURSES
1	\$ 40.00	*No lab fees
2	80.00	
3	120.00	
4	160.00	
5	200.00	
6	240.00	
7	280.00	
8	320.00	
9	360.00	
10	400.00	
11	440.00	
12	480.00	
13	520.00	
14	560.00	
15	600.00	

FEES - See Fee Schedule, Page 100

FORT LEONARD WOOD

TUITION

\$40 per semester hour. \$20 Lab Fee for Automotive and Welding courses and \$10 Lab Fee for Photography courses.

SEMESTER HOURS	NON-LAB COURSES	*LAB COURSES
1	\$ 40.00	*\$20 for each Automotive and Welding course and \$10 for Photography courses.
2	80.00	
3	120.00	
4	160.00	
5	200.00	
6	240.00	
7	280.00	
8	320.00	
9	360.00	
10	400.00	
11	440.00	
12	480.00	
13	520.00	
14	560.00	
15	600.00	

FEES - See Fee Schedule, Page 100

PACE

TUITION

Fully Navy funded per contractual agreements.

FEES - See Fee Schedule, Page 100

SCHEDULE OF FEES

ALL CONTINENTAL AND OVERSEAS CAMPUSES

Institutional Challenge Examination Fee - A fee of \$50.00 for each challenge examination should accompany the Application for Examination.

Certificate Fee - A fee of \$5.00 is payable at the time a student applies for each Certificate of Award. Two certificate are available, Level I and Level II.

Degree Fee - A fee of \$10.00 is payable at the time a student applies for a Degree.

Transcript Fee - A fee of \$2.00 is charged for each transcript issued.

Returned Check Charge - A charge of \$10.00 is made for checks which have been returned for insufficient funds.

TEXTBOOK COSTS

Costs are based on publisher prices plus transportation costs and may vary from term to term. Prices are available from the Field Registrar. Textbook costs are not refundable unless the class is cancelled by the College and the book is returned unused and unmarked to the Field Registrar.

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