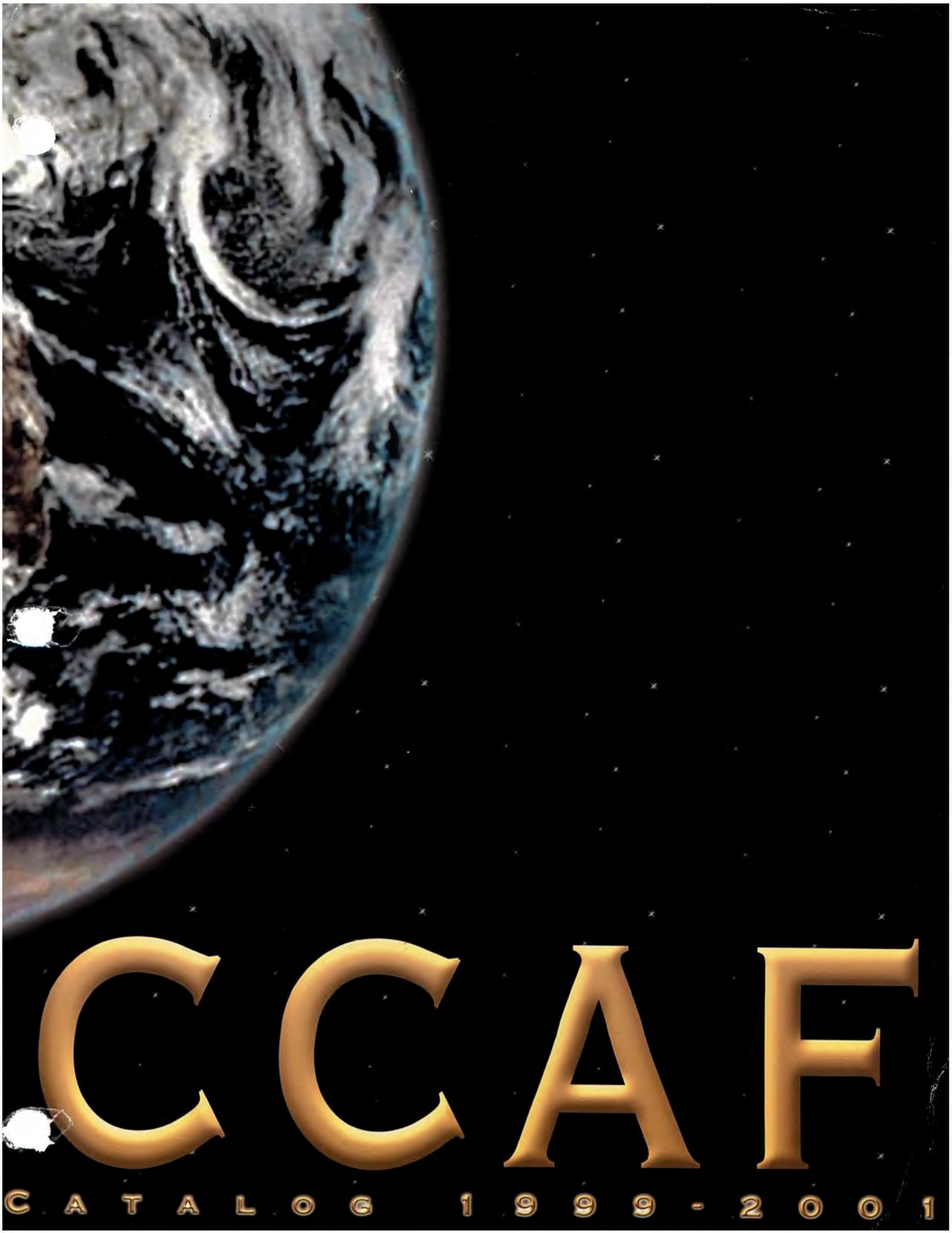
CCAF
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Community College of the Air Force

1999-2001 General Catalog
Number 15

The Community College of the Air Force, Maxwell AFB, Alabama, is an institution of higher learning dedicated to the enlisted members of the United States Air Force. The Community College of the Air Force is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award the associate in applied science degree.

Governing Board's Message

Gen Lloyd W. Newton

The Community College of the Air Force has a proud history of serving the educational needs of the enlisted Air Force. In the early 1970s Air Force leaders paved the way for the enlisted corps to advance both personally and professionally. This was accomplished through the Community College of the Air Force—a college that combines Air Force technical training, professional military education, and on-the-job training with a solid core of general education course work.

Since the college was founded in 1972, technological advances have multiplied, offering vast amounts of information at our fingertips. Rapid advances in technology require that airmen work even harder to ensure their job proficiency. This presents a new and exciting challenge for the next millennium as we transition to a space and air force.

Few collegiate institutions have the distinction of measuring the success of graduates by their ability to perform a complex mission such as ours. For our students, this means they can have the most current training and education in their Air Force career field, and for the nation, it ensures a more qualified enlisted force. I invite you to join the growing number of airmen who have advanced both personally and professionally by earning a CCAF degree.

Lloyd W Newton

LLOYD W. NEWTON
General, USAF
Commander of Air Education and Training Command

President's Message

As an institution of higher learning we, at the Community College of the Air Force, have a stake in the job knowledge and performance of every enlisted person in the Air Force. Our surveys have shown that new recruits are interested in the future of the Air Force and understand the importance of education in achieving their personal and professional goals. They also show that our students perform better in the workplace and have better developed leadership skills. The contributions you make to your nation, your family, and yourself are dependent on your intellectual growth. The Air Force needs your skills to be polished and ready for the future. I urge you to take a step forward and learn the true meaning of being a professional in the United States Air Force enlisted corps by completing your CCAF degree.

Col Tamzy J. House

TAMZY J. HOUSE, Colonel, USAF
Commander/President
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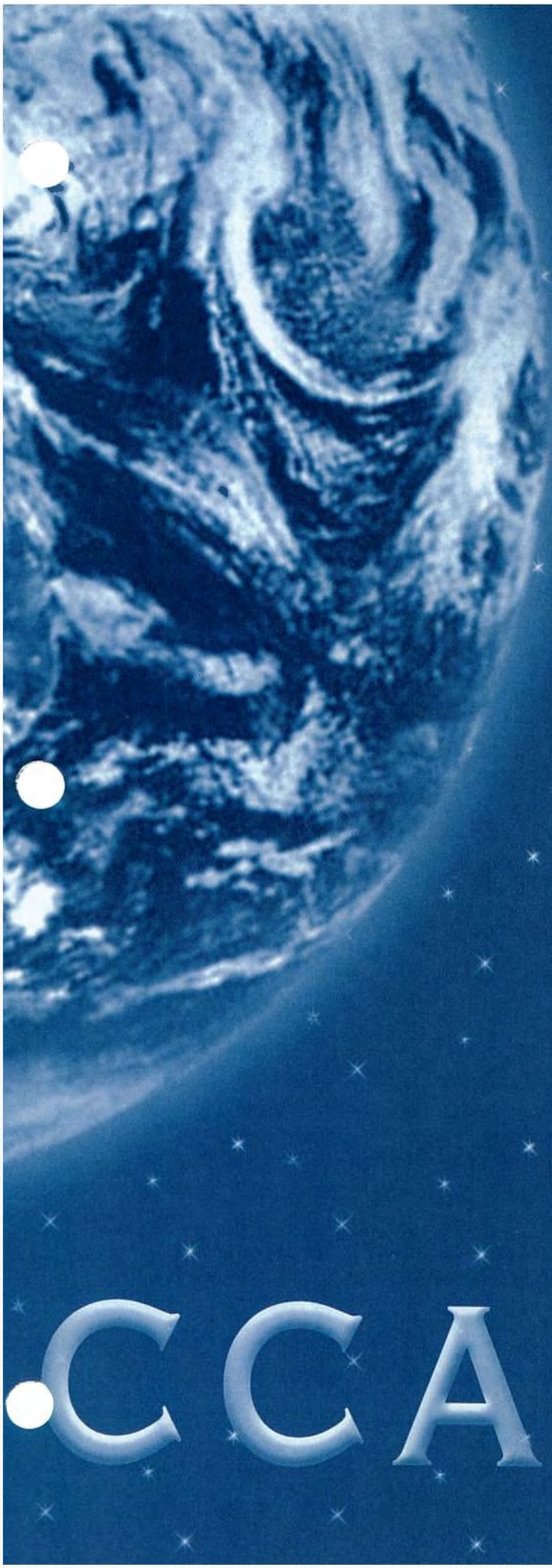


CCAF

GENERAL INFORMATION

Introduction

The United States Air Force (USAF) has always recognized the positive effects of education on Air Force personnel and continually established various programs to meet the needs of the Air Force, its personnel, and society as a whole. One of the most notable of these programs is the Community College of the Air Force (CCAF). The college is 1 of 14 federally chartered degree-granting institutions; however, it is the only 2-year institution and the only one serving enlisted personnel. The college awards the associate in applied science degree upon successful completion of a degree program designed for an Air Force specialty. The Community College of the Air Force is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award the associate in applied science degree.

History

The CCAF concept evolved in the early 1970s as a means of gaining accreditation and recognition for Air Force training. Led by Lt Gen George B. Simler, commander of Air Training Command (ATC), Air Force visionaries recognized the need to enhance the skills of noncommissioned officers (NCOs) as technicians, leaders, and citizens. Representatives of Air Training Command, Air University (AU), and the Air Force Academy held a series of conferences in 1971 to discuss the need for increased development of noncommissioned officers as managers of Air Force resources. The conferees recommended the founding of an Air Force community college, and on 9 November 1971, Gen John D. Ryan, Air Force Chief of Staff, approved the establishment of the Community College of the Air Force. The Secretary of the Air Force approved the activation plan 25 January 1972, and the college was established 1 April 1972 at Randolph AFB, Texas.

The seven major Air Force training schools—the five Air Force Schools of Applied Aerospace Sciences, the USAF School of Health Care Sciences, and the USAF Security Service School—provided the technical portion of CCAF's credential when the college was activated. The program model combined the technical education offered by Air Force schools, a core of general education from regionally accredited civilian institutions of higher education, and management education from Air Force or civilian sources.

The college mailed its first official transcript 9 November 1972 and issued its first credential, the Career Education Certificate, 23 August 1973. As the college gained prestige, increasing numbers of enlisted people registered, and more Air Force technical, special, and professional schools joined the CCAF system. As a result as many as 143 such schools have been affiliated with the college after meeting rigorous standards for participation. The SACS Commission on Occupational Education Institutions accredited the college on 12 December 1973.

By the mid-1970s many civilian consultants were reporting that CCAF standards exceeded the minimum requirements of associate degree programs in civilian community colleges, and in 1975 the Air Force sought degree-granting authority for the college from Congress. President Gerald R. Ford signed Public Law 94-361 on 14 July 1976 authorizing the ATC commander to confer the associate degree.

A site review committee, composed of nationally recognized educators appointed by the US Office of Education, evaluated the college in October 1976. After favorable recommendations by the committee and successful public hearings in Washington DC, the Commissioner of Education

certified degree-granting authority in January 1977. The college awarded its first associate in applied science degree in April 1977.

Since charter clarification in 1975 limited the Commission on Occupational Education Institutions to nondegree-granting institutions, the college immediately began the transition to the SACS Commission on Colleges. The Commission on Colleges accredited the college on 12 December 1980 and reaffirmed its accreditation in 1986 and again in 1997.

Over the years the college has grown both in numbers and recognition. With more than 388,000 registered students, the college is the largest multicampus community college in the world. Its affiliated schools are located in 35 states, the District of Columbia, 6 foreign locations, and 1 territory. Nearly 6,000 CCAF faculty members provide quality instruction for the personal and professional development of enlisted personnel. More than a million transcripts have been issued in the last 10 years, and in 1996-97 CCAF students earned 1.42 million hours of college credit.

Since issuing its first degree in 1977, the college has awarded more than 175,000 associate in applied science degrees.

Mission

Philosophy

The United States Air Force requires well-trained, educated, and professional noncommissioned officers prepared to meet current and future leadership, managerial, and technological challenges of an increasingly sophisticated and complex Air Force. We believe enlisted members of the Air Force are entitled to personal and professional growth through collegiate programs beneficial to the Air Force and the nation.

Mission Statement

Offer and award job-related associate in applied science degrees and other academic credentials that enhance mission readiness, contribute to recruiting, assist in retention, and support the career transitions of Air Force enlisted members.

Vision

CCAF: The foremost occupational education institution—preparing the world's best air and space enlisted leaders.

CCAF System

The Air Education and Training Command (AETC) commander has authority to confer the CCAF degree and with the advice of the CCAF Board of Visitors (BOV) serves as CCAF's governing board. Administrators, instructors, classrooms, laboratories, counselors, and students are located throughout the world. What is often perceived as nontraditional about the college is its form of organization and administration, which is designed to provide instruction at numerous locations because of the geographic dispersion of the students as they pursue their Air Force occupations. Civilian collegiate institutions on or near Air Force bases provide course work to satisfy the general education requirement (GER) of the degree programs and may also provide some course work required to satisfy technical education and leadership, management, and military studies (LMMS) requirements not completed at CCAF schools. Although this broad geographical separation may be unusual, the college is organized into a single, highly effective educational system.

Administrative Center

The administrative staff, located at Maxwell AFB, Alabama, brings together all elements of the system under the matrix authority of Air Force Instruction 36-2304, Community College of the Air Force.

The CCAF commander/president, the chief executive officer with command authority, is tasked with accomplishing CCAF's prescribed mission. The administrative staff translates system schools curricula into semester-hour credit, develops course descriptors, designs/manages degree programs, maintains records of student achievement and progress toward degree completion, ensures system schools maintain standards required for accreditation, disseminates official catalogs and other publications, and provides guidance to the worldwide network of counselors.

Affiliated Schools

Air Force schools that provide technical, leadership, and management education may voluntarily affiliate and become part of the CCAF system. Course work offered by these affiliated schools may satisfy part or all of the technical education; leadership, management, and military studies; and/or program elective requirements

Instructional programs are conducted in traditional learning environments. Even when advanced instruc tional technology and individualized instruction are used, students attend regularly scheduled classes and complete specified course work under assigned faculty in much the same manner as students in the classrooms of most traditional civilian colleges, except that students attend one course at a time, 6 to 8 hours per day, 5 days per week until satisfactorily completing the course. Accordingly, each affiliated school is a component of a worldwide educational system.

Education Services

The Air Force provides academic advice and offers financial assistance to airmen in planning and pursuing their educational goals. Operations are managed by education services offices whose staffs are composed of professional educational administrators, guidance counselors, education technicians, and test examiners.

Education services personnel supporting active Air Force installations, CCAF advisors working with the Air National Guard (ANG), and training technicians assigned to the Air Force Reserve Command (AFRC) counsel students and serve as the direct link between students and the administrative center. These counselors guide students toward degree completion and work with nearby civilian collegiate institutions to arrange for course offerings needed to satisfy the general education requirement.

Education services personnel also administer the College-Level Examination Program (CLEP), Defense Activity for Non-Traditional Education Support (DANTES) Subject Standardized Tests, and Regents College Examinations. Courses conducted by regionally accredited civilian institutions are scheduled on base by education services centers. Students may take these courses to satisfy requirements of CCAF degree programs.

CCAF advisors and training technicians coordinate education services for ANG and AFRC personnel. The point of contact for ANG/AFRC affairs is CCAF Student Relations, CCAF/SLS, 130 W Maxwell Blvd, Maxwell AFB AL 36112-6613.

Advisory Bodies

The college uses several advisory bodies composed of members from the CCAF system and those appointed from the civilian sector.

Board of Visitors

The Board of Visitors—consisting of civilian authorities appointed from education, industry, and the professions by the Secretary of Defense—represent the public interest and serve jointly with the AETC commander as the CCAF governing board. The AETC commander, an ex officio member of the board, represents the interests of the supporting governmental agency—the United States Air Force. Other ex officio members include the CCAF commander/president, who represents the interests of the institution, and the Chief Master Sergeant of the Air Force, who represents the student body. The senior enlisted advisor to the AETC commander and the chair of the AU Board of Visitors are also ex officio members. Collectively the board reviews policies and operations at least twice a year. BOV recommendations are forwarded to the Secretary of the Defense through the AETC commander and guide all CCAF actions.

Affiliated Schools Advisory Panel

The panel—representing the categories of technical and specialized training, enlisted professional military education, and command-sponsored schools affiliated with the college—provides the forum for reaffirming CCAF's commitment to providing job-relevant educational opportunities to all enlisted personnel.

Education Services Advisory Panel

The panel—which includes the CCAF dean of academic affairs and education services advisor, Headquarters USAF and major command personnel, base-level education services personnel, and ANG/AFRC counterparts—provides interface between the college and the education services system.

Policy Council

Academic policies are developed by the Policy Council and endorsed by the Board of Visitors. The Policy Council is composed of representatives from all elements of the CCAF system. Chaired by the dean of academic affairs, the Policy Council submits recommendations concerning academic policies, degree programs, award of credit, academic standards, affiliation of Air Force schools, and other policy matters to the commander/president and Board of Visitors for guidance and concurrence. Students, faculty members, counselors, administrators, and other interested personnel may submit suggestions to the Policy Council by writing to the dean of academic affairs (CCAF/DF, 130 W Maxwell Blvd, Maxwell AFB AL 36112-6613).

CCAF Policies

Entrance Requirements

Prior to enlistment in the Air Force, individuals must complete the Armed Services Vocational Aptitude Battery (ASVAB) meeting the standards specified in AETC Instruction 36-2002, Recruiting Procedures for the Air Force. Composite scores of the ASVAB indicate academic and career field aptitude. Scores are used to counsel individuals and place them in Air Force career areas that match their aptitudes and abilities. The college uses these scores as an indicator of the student's potential to make satisfactory progress in a career-related degree program.

Admission/Registration Procedures

Upon assignment to an Air Force career field, active duty, ANG, and AFRC enlisted members are admitted to the college and registered in the degree program for their Air Force specialty as nonparticipants. Their registration status does

not change until they receive formal academic advisement and provide official transcripts from a regionally accredited institution reflecting completion of civilian college course work or national tests applicable to their degree program. At the formal advisement session, the student must declare all institutions attended so course credit can be considered for acceptance in transfer if applicable to a degree program. Once a civilian college course or national test is posted to a record, the student is identified as a participant.

Individuals with a reporting identifier/special duty identifier not listed in Section II may register in programs related to their second or other AFSC reflected on their Report of Individual Personnel.

Time Limitation for Degree Completion

Students enrolled in the Instructor of Technology and Military Science program have 2 years from date of registration to complete their degree. Students enrolled in all other programs have 6 years from date of registration to complete their degree. Students who are pursuing their first CCAF degree and do not complete it in the allotted time will automatically be moved to the degree program for their primary occupational specialty in the most current catalog. They will be required to meet the requirements of the current catalog. Students who are pursuing a subsequent CCAF degree are disenrolled at the end of the allotted time. However, they may re-register in a subsequent degree program by submitting an Air Force Form 968 through their education services office or ANG/AFRC CCAF advisor/ training technician.

Subsequent Degree

Airmen may register in a subsequent degree program for which they have a primary Air Force specialty code (AFSC) or second, third, or fourth (not duty/control) Air Force specialty code provided they have not been awarded a degree in a program designed for that career field. CCAF degree holders who register in another program must earn and have applied a minimum of 24 semester hours of unique (different) technical credit, 12 semester hours of which must be CCAF credit.

Grading Policy

The academic performance of students is determined and reported using a pass/fail system. Students who successfully complete a course are reported to the registrar who records a grade of "S" (satisfactory) on the transcript. This equates to a grade of "C" or better.

All courses are taught at the collegiate level. Affiliated schools employ a variety of instructional methods and assessment techniques designed to ensure successful achievement and appropriate evaluation of desired learning outcomes. Course completion requirements, including grading standards, are provided to students at the beginning of each course.

Transfer Credit

The college will accept in transfer courses that meet the criteria outlined in Section II. Courses completed at foreign institutions must be submitted in English with an external course-by-course evaluation by a National Association of Credential Evaluation Services member.

DOD/Other Service Schools

Many Air Force enlisted members attend Army, Navy, and/or Department of Defense initial/ advanced technical training courses instead of Air Force technical training courses. Since these technical training schools are not part of the CCAF system, the college does not award resident credit for the courses. However, the college does award

proficiency credit to Air Force enlisted members who complete these courses and demonstrate apprentice level competency. Proficiency credit is applied to a student's program upon attainment of the journeyman, five skill-level. Proficiency credit does not apply to the residency requirement. The 16-semester-hour residency requirement can only be satisfied by credit earned in an affiliated school or through internship credit awarded for progression in an Air Force occupational specialty.

If the DOD/other service school is accredited and issues a transcript, the college will consider accepting the credit in transfer. Courses recommended for credit in the *Guide to the Evaluation of Educational Experiences in the Armed Services* (American Council on Education Guide) may be applied to a CCAF degree.

Credit by Examination

A maximum of 30 semester hours of degree-applicable examination credit may be applied to satisfy degree requirements. Credit may be applied for examinations offered by DANTES, CLEP, Regents College, and the Defense Language Proficiency Test.

Credit for Certification, Licensure, and/or Registry

Degree requirements may be satisfied upon verification of degree-relevant governmental and/or professional certification, licensure, and/or registry. Students who hold a degree-relevant certification, licensure, and/or registry must contact the sponsoring agency/association/society and request official written verification be sent to CCAF/RRR, 130 W Maxwell Blvd, Maxwell AFB AL 36112-6613.

Credit for Equivalency Examinations

Credit may be awarded to students who successfully complete a degree-applicable equivalency examination administered by an affiliated school. Only program-applicable equivalency examination credit will be transcribed.

Change of Degree Program or Catalog

Students are encouraged to complete their program of initial registration. However, they may request to change to another program for which they are eligible. The associate dean of academic programs must authorize degree program changes. Students may also elect to move from their catalog of registration to the current catalog. However, they must abide by all policies and program requirements of the catalog current on the date of the change.

Advanced Standing

Students attain advanced standing when they have completed 45 semester hours of degree-applicable course work and have civilian course or test credit applied (registration status code 2). At this point counselors should provide special guidance for completing degree requirements.

Waiver Process

Students desiring a waiver of academic policy and/or a degree program requirement must contact their education services office, CCAF ANG advisor, or AFRC training technician for guidance on how to proceed in submitting their waiver request to the dean of academic affairs. Waivers will only be considered if approval of the waiver will make the student a degree candidate.

Candidacy/Graduation

Candidacy status is recommended by the Academic Programs Division or student's counselor/advisor. Education services counselors, advisors, or training technicians notify students of candidacy status. After students are certified for graduation, the college will forward diplomas to the student's

current education services office or nominating training/education service office for presentation.

No Fault Exception

Ordinarily, in order to participate and graduate, a student must possess the required specialty code. An exception may be made if a specialty code is removed because of mandatory retraining, career field consolidations, or transition of a career field. To qualify for a no fault exception, a student must satisfy the following:

- The AFSC, reporting identifier (RI), or special duty identifier (SDI) must have been removed or deleted due to conditions or circumstances beyond the student's control.
- The request for a no fault exception must be received at the CCAF administrative center within 1 year of removal of the specialty code.
- The student must be able to complete the degree requirements within 1 year of approval of the exception.

Documentation must be submitted verifying the circumstances of the specialty code removal. As a minimum the following must be submitted:

- Proof that the specialty code was once held and subsequently removed (i.e., official Air Force Form 2095 or 2096). The document must show specialty code loss date.
- Medical documentation, which may include a physician's letter or diagnosis stating the exact medical reasons for disqualification, or a letter from the individual's commander explaining the reasons surrounding the disqualification or specialty code removal.
- A letter from the student explaining the situation and requesting no fault exception consideration.

The request and documentation should be mailed to CCAF/DFA, 130 West Maxwell Boulevard, Maxwell AFB AL 36112-6613.

Washback Policy

Every effort is made to ensure student success in CCAF courses. This is accomplished through carefully designed teaching/learning activities, appropriate assessment/evaluation processes, and individualized assistance. If all avenues have been exhausted and academic achievement continues to be below acceptable limits, the student may, under some circumstances, be allowed to repeat some or all of the course. This process is referred to as a washback. Students who are washed back are reported to the CCAF registrar as course graduates only when they successfully complete the entire course. Students are allowed to voluntarily withdraw from CCAF courses only with the permission of the affiliated school commander or designated representative.

Withdrawal from Degree Program

Since participation in a degree program is voluntary, students may formally request withdrawal from the degree program in which they are registered. Students requesting this action must complete and sign an Air Force Form 968, Community College of the Air Force Action Request, and forward it to the CCAF registrar (CCAF/RR, 130 W Maxwell Blvd, Maxwell AFB AL 36112-6613).

Educational Documentation

Students must submit an initial Air Force Form 968 through their education services office or ANG/AFRC CCAF advisor/training technician. The form should list all civilian postsecondary institutions attended. To progress in a degree program, students must have educational documentation of applicable degree program requirements. This documentation must be mailed by the issuing institution/agency to the appropriate education services center, CCAF advisor/training technician, or CCAF/RRR, 130 W Maxwell Blvd, Maxwell AFB AL 36112-6613. Depending on the manner in which students satisfy degree requirements, appropriate documentation may include the following:

- Official transcripts of applicable course work completed at regionally accredited postsecondary institutions.
- Official transcripts from the Educational Testing Service reflecting CLEP or DANTES tests taken at a certified DANTES testing site.
- Extension Course Institute official transcripts reflecting semester-hour credits.
- Certificate/diploma for a CCAF course.
- Request for Verification of Course Completion of an affiliated school course that was not added to the student's academic record.
- Official verification of professional certification, licensure, or registry.
- Official verification of successful completion of a course conducted by or for US Government agencies for which the American Council on Education recommends credit.

An Air Force Form 968 must accompany all documents and must indicate which civilian documents are being sent directly to the Admissions and Registrar Directorate. Educational documentation will not be accepted from a student.

Fraudulent Documentation

The Enrollment Management and Registrar Directorate and Academic Programs Division ensure documentation is authentic. Fraudulent documentation will be brought to the attention of the registrar for appropriate action, which can include disenrollment and/or legal action. Transcripts of students disenrolled for submitting fraudulent documentation will be annotated to reflect the reason for disenrollment.

Processing Student Records

When documentation arrives at the administrative center, program administrators assess progress toward degree requirements. After assessing the educational documentation, program administrators generate a progress report reflecting credits applied toward degree program completion. The progress report is a worksheet designed for advising students but is not an official educational record or transcript.

Updating Student Records

Student records are updated by submitting educational documentation. Students should update records no more than once a year except when applying for an Air Force commissioning program, prior to separation or retirement, or when an update may result in degree completion.

Release of Student Information

The primary purpose of maintaining unabridged records is to assist students with their education endeavors. The Federal Family Educational Rights and Privacy Act of 1974 and 5 USC:301, 10 USC:8013, and EO 9397 dictate the policy regarding the release of student data. These directives specify that an educational record may not be released without the student's written consent specifying records to be released and to whom. Students may have a transcript of their record released

to a third party by completing an Air Force Form 2099, Request for Community College of the Air Force Transcript, or by providing the registrar a written request with original signature. When requested for verification purposes, the college may release dates of attendance, degrees, certifications, or certificates awarded.

Transcript Requests

A transcript may be requested by completing an Air Force Form 2099, available from an education services office, CCAF advisor, or training technician or by writing the Enrollment Management and Registrar Directorate (CCAF/RRR, 130 W Maxwell Blvd, Maxwell AFB AL 36112-6613). Transcript requests must include the requester's full name or former name if appropriate, Social Security Account Number, current address including ZIP code, and address and ZIP code where transcript is to be sent. The requester's signature is the legal authorization for release of a transcript. Transcripts sent directly to educational institutions will be certified as official by the CCAF registrar. A student may request an official transcript be sent to a base or unit education services center. Transcripts sent directly to students are unofficial and stamped "Issued to Student." The college does not use the fax or e-mail to accept requests for transcripts or send transcripts. However, CCAF transcripts are provided free of charge.

Students

Role and Behavior

As military members, students must abide by the gnidelines published in the *Uniform Code of Military Justice*. Airmen are briefed on the code upon initial entrance into active duty and periodically thereafter. A copy of the code is also available in the legal office on each Air Force installation. Additionally, students must adhere to standards of behavior established by the affiliated schools.

Participation in Institutional Decision Making

Student participation is integral to the future development and continuous improvement of the college. In recognition of this fact, student input is incorporated into every phase of CCAF's strategic planning process and continually impacts policies and procedures, course and program reviews, affiliated school operations, and educational support services.

Students have the opportunity to participate in decision-making processes through numerous avenues. Some of these include classroom feedback mechanisms, followup surveys administered by affiliated schools and the CCAF institutional effectiveness office, student leaders at each affiliated school, and formal waiver review process. Student interests are also addressed by affiliated school representatives on the Policy Council, Affiliated Schools Advisory Panel, and Education Services Advisory Panel. In addition, the Chief Master Sergeant of the Air Force serves as the student advocate on the Board of Visitors.

Students who desire to provide feedback directly to the administrative center may do so by contacting the CCAF Student Relations Directorate at (334) 953-5800 or DSN 493-5800.

Student Services

The Air Force recognizes off-duty activities as an essential part of the everyday life of its enlisted force and provides a variety of recreational, social, and religious activities in which students may participate.

Arts and Crafts Hobby Shops. Facilities, equipment, and instructors are available to those

Arts and Crafts Hobby Shops. Facilities, equipment, and instructors are available to those who are interested in automobile repair/maintenance, woodwork, ceramics, leather work, engraving, painting, electrical repair, and photography.

Bowling Lanes. Schedules provide for open bowling, league bowling, and special tournaments.

Chapel. Protestant, Catholic, Jewish, and other religious activities are available, including special programs such as choir, study groups, social functions, and religious education.

Clubs. NCO and airman clubs serve food/beverages and provide entertainment, such as music, dances, floorshows, variety acts, and television viewing.

Family Support Center. Services include, but not are not limited to, transition assistance, job search, employment applications, interviewing, relocation assistance, resume writing, Air Force aid, personal financial management, and counseling for military personnel and their families.

Gymnasium. Facilities are available for such activities as weight lifting, racquetball, handball, jogging, weight control, basketball, tennis, volleyball, softball, and aerobics.

Library. Reference books/journals, newspapers, recordings, and tapes are available to support students.

Mental Health. Services include, but are not limited to, mental health and alcohol/drug abuse counseling on an inpatient, outpatient, and group basis.

Recreation Center. Activities include table games, music listening, dancing, television viewing, tours, concerts, discussion groups, and other special programs.

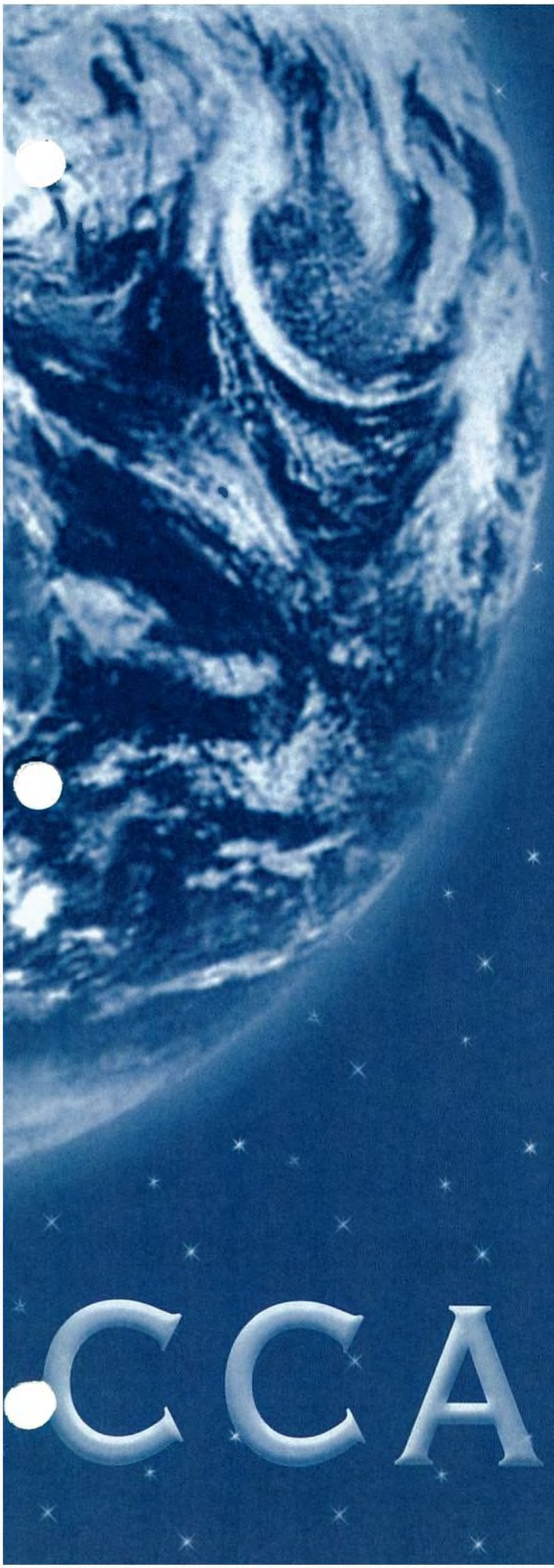
Swimming Pools. Swimming instruction is a routine part of scheduled activities.

Theater. Current films are normally shown daily.

Definition of Terms

- **Air Force specialty** is a group of related occupations that require common qualifications and are identified by title and code, the Air Force specialty code.
- **Air Force specialty codes** are alphanumeric identifiers of occupational specialties of airmen and their skill levels: unskilled (one level), apprentice (three level), journeyman (five level), craftsman (seven level), or superintendent (nine level).
- **Airman** refers to both male and female enlisted personnel.
- **Armed Services Vocational Aptitude Battery** consists of prerequisite tests for USAF enlistment and is a factor in occupational assignment.
- **Candidates for graduation** are students who—prior to commissioning, retiring, or separating—have completed all requirements for their degree program, submitted final documentation to the college, and been recommended for award of the associate in applied science degree.
- **Catalog of registration** is the edition of the catalog current at the time students register or to which they are subsequently moved when granted a program or catalog change or when they do not complete their degree within 6 years of date of registration.
- **CCAF certificate-applicable courses** may be applied toward certification but are not applicable to the degree program.
- **CCAF courses** are Air Force courses taught in affiliated schools, including both certificate and degree applicable.

- **CCAF degree-applicable courses** may be applied toward the technical core, technical elective, LMMS, or program elective portion of CCAF associate degree programs or toward certifications.
- **CCAF permanent record** is the official record of each student who completes an Air Force course for which the college awards credit and civilian transfer credits applied toward degree completion.
- **Degree award date** is the date degree completion documentation is received by the Enrollment Management and Registrar Directorate or the date a manual review by CCAF administrative staff reveals a student has completed all degree requirements.
- **Disenrollment** applies to a student who was withdrawn from a degree program for cause.
- **Internship** is a performance-based and documented system that may include a correspondence course; documented on-the-job training; and a closed-book, proctored examination, all based on an Air Force specialty.
- **Occupational specialty codes** are alphanumeric identifiers of Air Force enlisted occupational specialties. There are three types of occupational specialty codes—Air Force specialty code, special duty identifier, and reporting identifier.
- **Proficiency credit** is awarded to Air Force enlisted personnel who have completed tri-service or Department of Defense initial skills technical training and demonstrate apprentice level competency.
- **Program administrators** are occupational specialists who evaluate permanent student records and progress reports, review courses from affiliated schools, develop degree programs relevant to occupational specialties, and work with education services personnel in advising students.
- **Programmatic accreditation** is official recognition by national professional organizations in such fields as business, health, law, and engineering and provides quality assurance concerning educational preparation of members of a profession or occupation.
- **Progress report** is an internal worksheet reflecting a student's record, including credits applied toward degree completion, and cannot be used as an official education record.
- **Regional accreditation** is the official recognition by a nongovernmental regional association of peer institutions. Such recognition ensures an institution has met minimum requirements set forth by the appropriate regional accrediting association.
- **Registered student** is an individual currently registered in a CCAF degree program.
- **Reporting identifier** is a numeric occupational specialty code for an enlisted occupational specialty not included in the AFSC structure.
- **Separated student** is an individual who has been withdrawn from a degree program due to commissioning, retirement, or separation.
- **Special duty identifier** is an alphanumeric occupational specialty code assigned to airmen who, on a semipermanent or permanent duty basis, perform tasks that do not provide a normal career progression pattern and are unrelated to any Air Force specialty.
- **Subsequent degree** is a CCAF degree earned after award of the first CCAF degree.
- **Transcript** is the official educational record of a student.
- **Witbdrawn** applies to a student who has been removed from active student status because of administrative reasons or a personal request.



CCAF

DEGREE

REQUIREMENTS

Associate in Applied Science Degree

Degree programs are developed in conjunction with Air Force technical experts and civilian/military consultants and reviewed by the Policy Council, dean of academic affairs, commander/president, and Board of Visitors. The programs are designed to provide graduates with knowledge, skills, and theoretical background for enhanced performance as technicians and noncommissioned officers. The associate in applied science degree is offered in the following broad career areas:

- Aircraft and Missile Maintenance
- Allied Health
- Electronics and Telecommunications
- Logistics and Resources
- Public and Support Services

Degree Completion Requirements

Degree programs consist of a minimum of 64 semester hours with requirements typically as follows:

	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Oral Communication	3
Written Communication	3
Mathematics	3
Social Science	3
Humanities	3
Program Elective	15
Total	**64**

Leadership, management, and military studies; physical education; general education; and program elective requirements are identical for all programs.

Students must hold the journeyman (five) level in the appropriate AFSC at time of program completion. Attainment of the journeyman level is waived for students in selected occupational specialties that do not have a journeyman level.

Students must complete all degree requirements before separating, retiring, or becoming a commissioned officer.

Residency Requirement

Students must have a minimum of 16 semester hours of CCAF credit applied to their degree program in order to graduate.

General Education Requirement (15 Semester Hours)

The general education requirement is satisfied by application of courses accepted in transfer or by testing credit. The criteria for application of courses to the general education requirement are as follows:

- Must not be developmental, preparatory, remedial, refresher, or review.
- Must be from a regionally accredited institution or a recognized candidate for accreditation.
- Must be listed and identified in the offering institution's general catalog as satisfying the institution's freshman and sophomore general education graduation requirement designed for transfer.
- Must have been completed with the equivalent of a "C" grade or better.

- Must not duplicate or significantly overlap another course or test applied to the degree program.
- Must not be a special topic or problem, workshop, or similar course.
- Must not be narrowly focused on skills, techniques, and procedures peculiar to a particular occupation.

Courses required to satisfy the general education requirement are as follows:

Oral Communication 3
Speech. Courses that prepare students to organize oral presentations to persuade, debate, argue, or inform in a clear, concise, and logical manner. Emphasis must be on content and delivery. Group/interpersonal communication courses are not acceptable.

Written Communication 3
English composition. Applicable communication courses must satisfy the delivering institution's writing/composition requirement for graduation. Higher level writing/composition courses may be applied as a program elective.

Mathematics 3
Intermediate algebra or a college-level mathematics course that satisfies the delivering institution's mathematics requirement for graduation. Courses such as accounting, business mathematics, computer mathematics, statistics (taught outside the mathematics department), history of mathematics, and mathematics for elementary/secondary teachers are not applicable. Three semester hours of mathematics are required for graduation. However, if an acceptable mathematics course is applied as a technical or program elective, a natural science course may be substituted for mathematics.

Social Science 3
Courses from the following disciplines are acceptable: anthropology, archaeology, economics, geography, government, history, political science, psychology, and sociology designed to impart knowledge, develop skills, and identify goals concerning elements and institutions of human society.

Humanities 3
Courses in fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, and religion are acceptable. Applied courses that teach how to play a musical instrument, perform a dance routine, or sculpt/draw an art form are not acceptable.

Leadership, Management, and Military Studies Requirement (6 Semester Hours)

The LMMS requirement may be satisfied by application of professional military education, civilian courses accepted in transfer, and/or by testing credit. However, the preferred method of completing leadership, management, and military studies is through attendance at an airman leadership school, Air Force NCO academy, and/or the Air Force Senior NCO Academy.

The criteria for application of civilian courses to the LMMS requirement are as follows:

- Must be from an accredited institution or a recognized candidate for accreditation.
- Must be taught by faculty who meet the minimum faculty professional preparation requirements of the Commission on Colleges of the Southern Association of Colleges and Schools.
- Must be listed and identified in the offering institution's general catalog.
- Must not be developmental, preparatory, remedial, refresher, or review.
- Must emphasize the fundamentals of management and management of human resources. Examples of acceptable courses are Principles of Management, Personnel

Management, Human Resource Management, Principles of Supervision, and Organizational Behavior. Examples of unacceptable LMMS courses are Small Business Management, Managerial Accounting, Financial Management, Labor/Management Relations, and other specialized management and/or business courses.

- Must have been completed with the equivalent of a "C" grade or better.
- Must not duplicate or significantly overlap another course or test applied to the degree program.

Physical Education Requirement (4 Semester Hours)

PHE 1000. The 4-semester-hour physical education requirement is satisfied by completion of basic military training. No civilian courses may be applied to this requirement.

Program Elective Requirement (15 Semester Hours)

The program elective requirement is satisfied from the following:

- Courses applicable to the technical education, LMMS, or general education requirements.
- Natural science courses that meet the general education requirement application criteria. Courses in biological, physical, and earth space science are acceptable. Appropriate natural science courses are freshman/sophomore courses that satisfy the delivering institution's natural science requirement for graduation. Such courses as science for elementary/secondary teachers, health, nutrition, and hygiene are not acceptable.
- Foreign language credit earned at the Defense Language Institute or through the Defense Language Proficiency Test.
- A maximum of 6 semester hours of CCAF degree-applicable technical course credit otherwise not applicable to the program of enrollment.

Technical Education Requirement (24 Semester Hours)

Twenty-four semester hours are required to fulfill the technical education requirement. Twelve semester hours must be applied from technical core courses with the remaining 12 applied from either technical core or technical elective courses. Refer to individual academic programs in Section III for specific technical education requirements. Students should check with their CCAF counselors/advisors for advice regarding specific degree requirements and information regarding transfer credit. Requests to substitute comparable courses or to exceed specified semester-hour values in any subject/course must be approved by appropriate program administrator in the Academic Programs Division. Office symbols and DSN phone numbers are listed with the individual technical program requirements in Section III.

Technical education requirements are generally satisfied by entry-level and advanced degree-applicable courses at affiliated schools and through internship. However, additional technical education requirements may be satisfied by application of courses accepted in transfer, testing credit, independent study/correspondence, certification, licensure, or registry.

The criteria for application of courses accepted in transfer to the technical education requirement are as follows.

- Must be from an accredited institution or a recognized candidate for accreditation.
- Must be taught by faculty who meet the minimum faculty professional preparation

requirements of the Commission on Colleges of the Southern Association of Colleges and Schools.

- Must be listed and identified in the offering institution's general catalog.
- Must not be developmental, preparatory, remedial, refresher, or review.
- Must be collegiate course work relevant to the technical requirement.
- Must have been completed with the equivalent of a "C" grade or better.
- Must not duplicate or significantly overlap another course or test applied to the degree program.

Courses that are closely aligned by definition to the subject areas listed below may be applied toward fulfilling specific technical elective requirements.

- **Algebra-Based Pbysics**. Generally a sequence of courses for engineering students not pursuing a major or minor in physics or a technical program. Topics generally include mechanics, fluids, thermodynamics, wave motion, sound, light, electricity, magnetism, relativity, and atomic/nuclear structure. Prerequisites generally are high school algebra and trigonometry.
- **Calculus.** Normally includes study of limits, continuity, derivatives, techniques of differentiation, curve sketching, integrals, fundamental theorem of calculus, exponential and logarithmic functions, basic techniques of integration, and applications of the integral.
- **Calculus-Based Physics.** Generally a sequence of courses for engineering, physics, and technical majors or minors. Topics usually include mechanics, fluids, thermodynamics, wave motion, sound, light, electricity, magnetism, relativity, and atomic/nuclear structure. Operational and mathematical analyses, including differential and integral calculus, are stressed. Corequisite or prerequisite is calculus.
- **College Algebra.** Normally includes, but is not limited to, the real number system, functions and relations, binomial theorem, matrices and determinants, logarithms, equations, sequences and series, and mathematical induction. Prerequisite is generally 2 years of high school algebra or its equivalent.
- **Computer Science.** Hands-on use of computers in today's work environment. Use of desktop computers; concepts of mainframe computers; techniques of word processing, databases, and spread sheets; development of programming skills in Ada, Basic, FORTRAN, etc; concerns of virus prevention/detection; and data security. Computer history, hardware design, computer maintenance, and management of computer systems are not acceptable.
- **General Biology.** Normally includes study of fundamental principles of living organisms, including cell or subcellular structure, reproduction, heredity, and development.
- **General Chemistry.** Normally includes study of composition, structure, properties of and changes in matter, and accompanying energy phenomena as well as fundamental laws and theories including atomic/molecular structure.
- **General Psychology.** Introduction to the major areas of psychology. Normally includes history of psychology, factors in development of the individual, human capacities/abilities, emotions and their control, and the learning process.
- **General Sociology.** Introduction to the major areas of sociology. Normally includes nature and meaning of culture, social control/deviance, groups/associations, social institutions, social processes, ethnic relations, and social change. Emphasis is on man as a participant in society.

- **Human Anatomy and Physiology.** Normally includes study of digestive, metabolic, nervous, muscular, endocrine, respiratory, circulatory, and reproductive systems and their application to health and hygiene.
- **Statistics.** Basic statistical theory and application. Topics normally include descriptive statistics, probability, binomial and normal distributions, hypothesis testing. confidence intervals, correlation and simple regression, and nonparametric methods.
- **Trigonometry.** Normally includes study of analytical trigonometry and applications to include trigonometric functions, solution of triangles, and trigonometric form of complex numbers.

Occupational Specialties/ Degree Programs/Program Codes

The Academic Programs Division has final determination on degree program eligibility.

Occupational Specialty	Degree Programs	Program Codes	Branch	DSN Ext	Page
1A0XX	Aviation Operations	4VCB	DFAOT	5937	III-6
1A1XX	Aviation Operations	4VCB	DFAOT	5937	III-6
1A2XX	Aviation Operations	4VCB	DFAOT	5937	III-6
1A3XX	Avionic Systems Technology	4VHS	DFAOT	5938	III-7
1A4XX	Air & Space Operations Technology	4VAS	DFAOT	2043	III-2
1A5XX	Avionic Systems Technology	4VHS	DFAOT	5938	III-7
1C0X1	Airport Resource Management	1ATA	DFAOS	6448	III-4
1C0X2	Airport Resource Management	1ATA	DFAOS	6448	III-4
1C1XX	Airway Science	4VEN	DFAOS	6448	III-4
1C2XX	Airway Science	4VEN	DFAOS	6448	III-4
1C3XX	Information Systems Technology	0IYY	DFAOT	2043	III-19
1C4XX	Information Systems Technology	0IYY	DFAOT	2043	III-19
1C5XX	Airway Science	4VEN	DFAOS	6448	III-4
1C6XX	Air & Space Operations Technology	4VAS	DFAOT	2043	III-2
1NXXX	Communications Applications Technology	2IAL	DFAOS	6449	III-9
1SXXX	Safety	9IIY	DFAOS	6449	III-30
1T0X1	Survival Instructor	2IBS	DFAOS	7739	III-32
1T1X1	Aircrew Life Support	4VAT	DFAOS	7739	III-3
1T2X1	Pararescue	7GDP	DFAOS	7739	III-26
1WXXX	Weather Technology	8FYY	DFAOS	6448	III-33
2A0XX	Avionic Systems Technology	4VHS	DFAOT	5938	III-7
2A1XX	Avionic Systems Technology	4VHS	DFAOT	5938	III-7
2A3X1	Avionic Systems Technology	4VHS	DFAOT	5938	III-7
2A3X2	Avionic Systems Technology	4VHS	DFAOT	5938	III-7
2A3X3	Aviation Maintenance Technology	4VAD	DFAOT	5937	III-6
2A4XX	Avionic Systems Technology	4VHS	DFAOT	5938	III-7
2A5X1	Aviation Maintenance Technology	4VAD	DFAOT	5937	III-6
2A5X2	Aviation Maintenance Technology	4VAD	DFAOT	5937	III-6
2A5X3	Avionic Systems Technology	4VHS	DFAOT	5938	III-7
2A6X1	Aviation Maintenance Technology	4VAD	DFAOT	5937	III-6
2A6X2	Aerospace Ground Equipment Technology	4VAB	DFAOT	5937	III-1
2A6X3	Aviation Maintenance Technology	4VAD	DFAOT	5937	III-6
2A6X4	Aviation Maintenance Technology	4VAD	DFAOT	5937	III-6
2A6X5	Aviation Maintenance Technology	4VAD	DFAOT	5937	III-6
2A6X6	Aviation Maintenance Technology	4VAD	DFAOT	5937	III-6
2A7X1	Metals Technology	4VLB	DFAOT	5993	III-22
2A7X2	Nondestructive Testing Technology	4VXR	DFAOT	5937	III-24

Occupational Specialty	Degree Programs	Program Codes	Branch	DSN Ext	Page
2A7X3	Aviation Maintenance Technology	4VAD	DFAOT	5937	III-6
2A7X4	Fabrication & Parachute Technology	4VPF	DFAOT	5937	III-15
2EXXX	Electronic Systems Technology	4VHP	DFAOT	2043	III-14
2F0X1	Logistics	1AMY	DFAOS	6449	III-20
2G0X1	Logistics	1AMY	DFAOS	6449	III-20
2M0X1	Electronic Systems Technology	4VHP	DFAOT	2043	III-14
2M0X2	Missile & Space Systems Maintenance	4VAK	DFAOT	2043	III-23
2M0X3	Mechanical & Electrical Technology	4VGA	DFAOS	7739	II-21
2PXXX	Electronic Systems Technology	4VHP	DFAOT	2043	III-14
2RXXX	Maintenance Production Management	4VJG	DFAOS	7739	III-20
2S0X1	Logistics	1AMY	DFAOS	6449	III-20
2S0X2	Information Systems Technology	0IYY	DFAOT	2043	III-19
2T0X1	Transportation	1ATY	DFAOS	7739	III-32
2T1X1	Transportation	1ATY	DFAOS	7739	III-32
2T2X1	Transportation	1ATY	DFAOS	7739	III-32
2T3XX	Vehicle Maintenance	4VKC	DFAOS	7739	III-33
2W0X1	Munitions Systems Technology	4VRA	DFAOS	6448	III-23
2W1X1	Aircraft Armament Systems Technology	4VRY	DFAOS	6448	III-3
2W2X1	Munitions Systems Technology	4VRA	DFAOS	6448	III-23
3A0XX	Information Management	1AUY	DFAOS	6448	III-18
3C0X1	Information Systems Technology	0IYY	DFAOT	2043	III-19
3C0X2	Computer Science Technology	0CYY	DFAOT	2043	III-9
3C1XX	Information Systems Technology	0IYY	DFAOT	2043	III-19
3C2X1	Electronic Systems Technology	4VHP	DFAOT	2043	III-14
3C3X1	Information Systems Technology	0IYY	DFAOT	2043	III-19
3E0X1	Mechanical & Electrical Technology	4VGA	DFAOS	7739	III-21
3E0X2	Mechanical & Electrical Technology	4VGA	DFAOS	7739	III-21
3E1X1	Mechanical & Electrical Technology	4VGA	DFAOS	7739	III-21
3E2X1	Construction Technology	4VEB	DFAOS	7739	III-10
3E3X1	Construction Technology	4VEB	DFAOS	7739	III-10
3E4X1	Ecological Controls	3AKY	DFAOS	7739	III-13
3E4X2	Ecological Controls	3AKY	DFAOS	7739	III-13
3E4X3	Ecological Controls	3AKY	DFAOS	7739	III-13
3E5X1	Construction Technology	4VEB	DFAOS	7739	III-10
3E6XX	Maintenance Production Management	4VJG	DFAOS	7739	III-20
3E7XX	Fire Science	9IFY	DFAOS	7739	III-16
3E8XX	Explosive Ordnance Disposal	4VRC	DFAOS	7739	III-14
3E9XX	Disaster Preparedness	9IMY	DFAOS	7739	III-12
3HXXX	Aerospace Historian	9DHK	DFAOS	6449	III-1
3M0X1	Fitness, Recreation & Services Management	1FRS	DFAOS	6449	III-16
3N0XX	Public Affairs	2FDE	DFAOS	6449	III-28
3N1X1	Music	2CHB	DFAOS	6449	III-24
3N2X1	Music	2CHB	DFAOS	6449	III-24
3P0X1	Criminal Justice	9IJY	DFAOS	2737	III-11
3S0X1	Personnel Administration	1AOY	DFAOT	5936	III-27
3S0X2	Information Systems Technology	0IYY	DFAOT	2043	III-19
3S1XX	Social Services	9IKY	DFAOS	6449	III-31
3S2XX	Education & Training Management	2BAC	DFAOS	6448	III-13
3UXXX	Personnel Administration	1AOY	DFAOT	5936	III-27
3VXXX	Audiovisual Production Services	2IAJ	DFAOS	6449	III-5

Occupational Specialty	Degree Programs	Program Codes	Branch	DSN Ext	Page
4A0X1	Health Care Management	7GCY	DFAOS	2737	III-17
4A1X1	Logistics	1AMY	DFAOS	6449	III-20
4A2XX	Biomedical Equipment Technology	7GAA	DFAOS	2737	III-8
4BXXX	Bioenvironmental Engineering Technology	7GAM	DFAOS	2737	III-7
4CXXX	Mental Health Services	7GAP	DFAOS	2737	III-22
4DXXX	Food & Nutritional Science	7GAD	DFAOS	2737	III-17
4EXXX	Public Health Technology	7ECY	DFAOS	2737	III-29
4FXXX	Allied Health Sciences	7GAL	DFAOS	2737	III-5
4HXXX	Cardiopulmonary Laboratory Technology	7GDA	DFAOS	2737	III-8
4J0X1	Allied Health Sciences	7GAL	DFAOS	2737	III-5
4J0X2	Physical Therapist Assistant	7GAI	DFAOS	2737	III-28
4MXXX	Aerospace Physiology Technology	7GAN	DFAOS	2737	III-2
4N0XX	Allied Health Sciences	7GAL	DFAOS	2737	III-5
4N1X1	Surgical Services Technology	7GEA	DFAOS	2737	III-31
4PXXX	Pharmacy Technology	7GAH	DFAOS	2737	III-27
4R0X1	Radiologic Technology	7GDH	DFAOS	2737	III-29
4R0X1A	Nuclear Medicine Technology	7ABJ	DFAOS	2737	III-25
4R0X1B	Radiologic Technology	7GDH	DFAOS	2737	III-29
4R0X1C	Radiologic Technology	7GDH	DFAOS	2737	III-29
4T0X1	Medical Laboratory Technology	7GAF	DFAOS	2737	III-21
4T0X2	Histologic Technology	7GAE	DFAOS	2737	III-18
4T0X3	Medical Laboratory Technology	7GAF	DFAOS	2737	III-21
4UXXX	Allied Health Sciences	7GAL	DFAOS	2737	III-5
4VXXX	Optometric Technician	7GAG	DFAOS	2737	III-25
4Y0X1	Dental Assisting	7GBC	DFAOS	2737	III-11
4Y0X2	Dental Laboratory Technology	7GBB	DFAOS	2737	III-12
5JXXX	Paralegal	1CAM	DFAOS	6448	III-26
5RXXX	Information Management	1AUY	DFAOS	6448	III-18
6CXXX	Contracts Management	1CAO	DFAOT	7738	III-10
6FXXX	Financial Management	9GEC	DFAOT	7738	III-15
7SXXX	Criminal Justice	9IJY	DFAOT	6448	III-11
8A000	Transportation	1ATY	DFAOS	7739	III-32
8C000	Social Services	9IKY	DFAOS	6449	III-31
8D000	Communications Applications Technology	2IAL	DFAOS	6449	III-9
8F000	Personnel Administration	1AOY	DFAOT	5936	III-27
8M000	Information Management	1AUY	DFAOS	6448	III-18
8R000	Personnel Administration	1AOY	DFAOT	5936	III-27
8S000	Personnel Administration	1AOY	DFAOT	5936	III-27
9G000	Fitness, Recreation & Services Management	1FRS	DFAOS	6449	III-16
9L000	Communications Applications Technology	2IAL	DFAOS	6449	III-9
9S100	Scientific Analysis Technology	4VES	DFAOT	2043	III-30
9S200	Scientific Analysis Technology	4VES	DFAOT	2043	III-30
*	Instructor of Technology & Military Science	2IBB	DFAOS	6448	III-19

*Air Force and other service enlisted personnel who are performing duty as full-time CCAF instructors may register in this program. Airmen must hold their career-field-related degree prior to registration; however, individuals holding the 1T0X1 AFSC are not eligible.

CCAF

TECHNICAL EDUCATION REQUIREMENTS

Aerospace Ground Equipment Technology (4VAB)

DFAOT DSN 493-5937

Occupational Specialty: 2A6X2

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Aerospace Ground Equipment Maintenance	24
CCAF Internship	16

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Aerospace Ground Equipment Maintenance	12
Air-Conditioning and Refrigeration	3
Computer Science	6
Corrosion Control	3
Diesel Engine Maintenance	6
Electricity/Electronics	6
Engineering Graphics	3
Enlisted Professional Military Education	12
Fluid Power	3
General Chemistry/Algebra-Based Physics	4
Hazardous Materials	3
Industrial Safety	3
Maintenance Management	3

Aerospace Historian (9DHK)

DFAOS DSN 493-6449

Occupational Specialty: 3HXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Writing	9
Aerospace Science	9
Archival Management	3
CCAF Internship	16
Interviewing Techniques	3
Unit Historian Development	9

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Copyreading and Editing	3
Enlisted Professional Military Education	12
Human Communications	6
Logic	3
Military Science	3
Philosophy	3
Political Science	6
United States History	9

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Aerospace Physiology Technology (7GAN)

DFAOS DSN 493-2737

Occupational Specialty: 4MXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Clinical Research	3
High-Pressure Chamber Operations	6
Hyperbaric Chamber Operations and Maintenance	3
Hyperbaric Physiology and Therapy	3
Instructional Methodology	3
Introduction to Aerospace Physiology	3
Life-Support Equipment Systems	3
Physiological Training Management	3
Respiratory and Circulatory Physiology	3
Survival Training	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Academic Counseling	3
Algebra-Based Physics	4
Computer Science	6
Emergency Medicine	3
Enlisted Professional Military Education	12
General Biology	4
General Chemistry	8
Human Anatomy and Physiology	4
Medical Readiness	3
Practice Teaching	3

For hyperbaric technology certification, graduates of the Hyperbaric Chamber Team Training course should contact the National Board of Diving and Hyperbaric Medical Technology, 3052 General Collins Ave, New Orleans LA 70114-6850; (504) 366-8871.

Air and Space Operations Technology (4VAS)

DFAOT DSN 493-2043

Occupational Specialty: 1A4XX, 1C6XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Aerospace Control and Warning Systems	20
CCAF Internship	16
Space Systems Operations	20

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Astronautics	3
Astronomy	3
Aviation/Flight Safety	3
Basic Electronics Theory/Application	6
Computer Science	6
Enlisted Professional Military Education	12
Management Information Systems	3
Programming Languages	6
Solid-State Theory/Application	3
Space Propulsion	3
Survival Training	3
Technical Writing	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Aircraft Armament Systems Technology (4VRY)

DFAOS DSN 493-6448

Occupational Specialty: 2W1X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Aircraft Armament Systems	24
CCAF Internship	16

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Aircraft Armament Systems	12
Aircraft Systems Maintenance	3
Computer Science	6
Corrosion Control	3
Electricity/Electronics	6
Engineering Graphics	3
Enlisted Professional Military Education	12
Fluid Power	3
General Chemistry/Algebra-Based Physics	4
Heavy Equipment Operation/Maintenance	3
Industrial Safety	3
Maintenance Management	3
Materials and Processes	3
Weapons Safety	3

Aircrew Life Support (4VAT)

DFAOS DSN 493-7739

Occupational Specialty: 1T1X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Life Support	6
Aircrew Life-Support Instructor	3
Basic Life Support	6
Basic Life-Support Equipment	6
CCAF Internship	16
Evasion and Recovery	3
General Principles of Survival	6
Inspection/Use of Life-Support Equipment	9
Psychology of Environmental Stress	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Chemical Defense/Decontamination	3
Computer Science	6
Emergency Equipment	3
Enlisted Professional Military Education	12
Parachuting	3
Quality Assurance	3
Technical Writing	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Airport Resource Management (1ATA)

DFAOS DSN 493-6448

Occupational Specialty: 1C0X1, 1C0X2

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Aeronautical Laws and Regulations/Legislation	6
Air Navigation Aids	3
Airport Management	6
CCAF Internship	16
Climatology/Meteorology	3
Data Information Systems	6
Data Information Systems Management	3
Resource Management	6
Statistics	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Flight Operations or Commercial Pilot's License	9
Air Traffic Control Principles	6
Air Transportation	3
Aviation/Flight Safety	3
Basic Accounting	6
Basic Flight Operations or Private Pilot's License	3
Computer Science	6
Enlisted Professional Military Education	12
Federal Communications Commission (FCC) General Radiotelephone Operator's License	9
Technical Writing	3
Typing/Keyboarding	3

Airway Science (4VEN)

DFAOS DSN 493-6448

Occupational Specialty: 1C1XX, 1C2XX, 1C5XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Aeronautical Laws and Regulations/Legislation	6
Air Navigation Aids	3
Air Traffic Control Principles	9
Air Transportation	3
Airport Management	3
CCAF Internship	16
Hostile Environment Techniques	3
Radar Approach Control	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Flight Operations or Commercial Pilot's License	9
Aviation/Flight Safety	3
Basic Electronics Theory/Application	3
Basic Flight Operations or Private Pilot's License	3
Climatology/Meteorology	3
Computer Science	6
Enlisted Professional Military Education	12
FCC General Radiotelephone Operator's License	9
Technical Writing	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Allied Health Sciences (7GAL)

DFAOS DSN 493-2737

Occupational Specialty: 4FXXX, 4J0X1, 4N0XX, 4UXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Emergency Medicine/Emergency Medical Technician National Registry	6
Human Anatomy and Physiology	8
Hyperbaric Medicine	12
Kinesiology	3
Medical Assisting	24
Nursing	24
Occupational Therapy	24
Orthotics	24

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Algebra-Based Physics	4
Computer Science	6
Enlisted Professional Military Education	12
General Biology	8
General Chemistry	8
General Psychology	6
Medical Readiness	3
Survival Training	3

For professional nursing credentialing, students must complete courses in college algebra, introductory psychology, and sociology and lab courses in human anatomy and physiology, general chemistry, and microbiology. These courses are generally required in nursing programs and are applicable to this program. Students holding the journeyman five level can apply for certification as registered medical assistants upon completion of medical service apprentice or journeyman course. Contact American Medical Technologists, 710 Higgins Rd, Park Ridge IL 60068; (708) 823-5169.

Audiovisual Production Services (2IAJ)

DFAOS DSN 493-6449

Occupational Specialty: 3VXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Electronic Imaging	6
Graphic Art	12
Imagery Production Processes	15
Library Administration/Science	15
Photography	15
Television Production	12
Visual Information Production/Documentation	21

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advertising Art/Design	6
Audio/Visual Communications	6
Color Science/Theory	6
Commercial Art	6
Computer-Aided Imagery	6
Computer Science	6
Drawing	9
Enlisted Professional Military Education	12
Illustration	6
Layout/Design	6
Photographic Lighting Techniques	6
Projection Equipment Repair	6
Two/Three Dimensional Design	6

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Aviation Maintenance Technology (4VAD)

DFAOT DSN 493-5937

Occupational Specialty: 2A3X3, 2A5X1, 2A5X2, 2A6X1, 2A6X3, 2A6X4, 2A6X5, 2A6X6, 2A7X3

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Aircraft Electrical/Environmental Systems	24
Aircraft Fuel Systems	10
Aircraft Maintenance	24
Aircraft Pneudraulic Systems	16
Aircraft Propulsion Systems	15
Aircraft Structural Maintenance	24
Aircrew Egress Systems	13
CCAF Internship	16
FAA Airframe/Powerplant Certificate	24
Helicopter Maintenance	24

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Accessory Systems Maintenance	12
Advanced Aircraft Maintenance	12
Advanced Aircraft Propulsion Maintenance	12
Advanced Airframe Repair	12
Aerodynamics	3
Algebra-Based Physics/General Chemistry	4
Composite Bonded Structures	6
Computer Science	6
Corrosion Control	6
Electricity/Electronics	6
Engineering Graphics	3
Enlisted Professional Military Education	12
Hazardous Materials/Industrial Safety	3
Materials and Processes	6
Nondestructive Inspection	3
Private/Commercial Pilot's License	3
Technical Math	3

For Federal Aviation Administration (FAA) certification, students are encouraged to maintain a file of all education/training, documentation of maintenance experience, and letters/recommendations of commanders/supervisors. Upon application with FAA, this file will be reviewed by the local General Aviation Office to determine if requirements for testing have been satisfied.

Aviation Operations (4VCB)

DFAOT DSN 493-5937

Occupational Specialty: 1A0XX, 1A1XX, 1A2XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Air Refueling Operations	18
Air Transportation Principles	6
Aircraft Flight Engineer	10
Aviation/Flight Safety	6
CCAF Internship	16
FAA Flight Engineer Certificate	8
Flight Rules and Regulations	3
Helicopter Flight Engineer	10
Introduction to Aeronautics	3
Loadmaster Procedures	6
Survival Training	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Flight Engineering	12
Aerodynamics	3
Aircraft Systems	6
Aircraft Weight and Balance	3
Aviation Law	6
Climatology/Meteorology	6
Private/Commercial Pilot's License	3
Computer Science	6
Electricity/Electronics	6
Enlisted Professional Military Education	12
FAA Airframe/Powerplant Certificate	6
Flight Physiology	3
General Chemistry/Algebra-Based Physics	4
Human Relations	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Avionic Systems Technology (4VHS)

DFAOT DSN 493-5938

Occupational Specialty: 1A3XX, 1A5XX, 2A0XX, 2A1XX, 2A3X1, 2A3X2, 2A4XX, 2A5X3

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Avionic Systems Theory/Maintenance	24
CCAF Internship	16

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Electronics	12
Algebra-Based Physics	4
Basic Electronics Theory/Application	12
Computer-Aided Design or Technical Drawing/Drafting	3
Communications Systems Theory/Maintenance	12
Computer Science	6
Digital Techniques	6
Electronic Systems Theory/Maintenance	12
Enlisted Professional Military Education	12
FCC General Radiotelephone Operator's License	9
Industrial Safety	3
Microprocessor Theory	6
Quality Assurance	3
Radar Systems Theory/Maintenance	3
Soldering Techniques	3
Solid-State Theory/Application	6
Technical Writing	3
Trigonometry	3

Bioenvironmental Engineering Technology (7GAM)

DFAOS DSN 493-2737

Occupational Specialty 4BXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Bioenvironmental Protection	6
CCAF Internship	16
Disaster Medicine	6
Introduction to Bioenvironmental Sciences	9
Occupational Environment	3
Radiation Health Physics	3
Waste Management	3
Water Systems Management	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Algebra-Based Physics	4
Business Statistics	3
Computer Science	6
Ecology	3
Emergency Medicine	3
Enlisted Professional Military Education	12
General Biology	8
General Chemistry	8
Hearing Conservation	3
Industrial Hygiene Measurements	6
Microbiology	4
Radiological Hazards	4
Survey of Nuclear Medicine Safety and Procedures	3

For certification as occupational health and safety technologists, graduates should contact the American Board of Industrial Hygiene/Board of Certified Safety Professionals Joint Committee for Certification of Occupational Health and Safety Technologists, 208 Burwash Ave, Savoy IL 61874-9510; (217) 359-2686.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Biomedical Equipment Technology (7GAA)

DFAOS DSN 493-2737

Occupational Specialty: 4A2XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Biomedical Equipment Maintenance Management	12
CCAF Internship	16
Diagnostic Support Equipment Systems	12
Diagnostic Support Radiographic Systems	12
Physiological Monitoring Systems	9
Therapeutic Support Equipment Systems	12

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Acceptance/Certification Procedures for Medical X-Ray Systems	3
Advanced X-Ray Principles	3
Basic Electronics Theory/Application	6
Computer Science	6
Digital Techniques	6
Electronic Circuit Design/Analysis	6
Human Anatomy and Physiology	4
Enlisted Professional Military Education	12
Installation and Maintenance of X-Ray Systems	9
Management of Biomedical Equipment Programs	3
Medical Facilities Management	6
Medical Readiness	3
Microprocessor Technology	6
X-Ray Systems Technology	3

To become a Certified Biomedical Equipment Technician (CBET), upon completion of the Biomedical Equipment Apprentice course and 2 years' experience, contact the International Certification Commission (ICC) for Clinical Engineering and Biomedical Equipment Technology, 3330 Washington Blvd, Suite 400, Arlington, VA 22201-4598; (703) 525-4890, ext 207. ICC also offers a candidacy program that permits course graduates to proceed with the written examination while in the process of obtaining the required work experience for full standing as a CBET.

Cardiopulmonary Laboratory Technology (7GDA)

DFAOS DSN 493-2737

Occupational Specialty: 4HXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Cardiopulmonary Procedures	9
Cardiopulmonary Anatomy and Physiology	6
Cardiopulmonary and Pulmonary Diagnostic Principles	8
Cardiopulmonary Instrumentation	3
Cardiopulmonary Invasive/Noninvasive Diagnostic Procedures	12
CCAF Internship	16
Clinical Respiratory Therapy	8
Pulmonary Diagnostic Procedures	8
Respiratory Therapy	4

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Emergency Medicine	3
Enlisted Professional Military Education	12
Medical Readiness	3

Cardiopulmonary Laboratory course graduates who desire cardiovascular credentialing should contact Cardiovascular Credentialing International/National Board of Cardiovascular Technology, PO Box 611, Wright Brothers Station, Dayton OH 45419-0611; (513) 293-0315. For Pulmonary Function Technology credentialing, contact the National Board of Respiratory Care, 8310 Nieman Road, Lenexa KS 66214-1812; (913) 599-4200.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Communications Application Technology (2IAL)

DFAOS DSN 493-6449

Occupational Specialty: 1NXXX, 8D000, 9L000

Technical Core (12-24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Airborne Communications Systems	9
Broadcast Communications	6
CCAF Internship	16
Communications Analysis and Reporting	9
Cryptanalysis	6
Foreign Technical Language/Area Studies	18
Imagery Analysis	6
Introduction to Cartography	9
Photogrammetry	9

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Aerial Photography	6
Aeronautics	3
College Algebra	3
Communications System Operations	6
Computer Science	6
Enlisted Professional Military Education	12
Intelligence Collection Management	6
International Studies	9
Interviewing Techniques	3
Principles of Communications	9
Principles of Electronics	6
Principles of Radar	6
Survival Training	4

Computer Science Technology (0CYY)

DFAOT DSN 493-2043

Occupational Specialty: 3C0X2

Technical Core (12-24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Calculus	6
CCAF Internship	16
Computer Systems Analysis and Design	3
Computer Systems Management	3
Programming Languages	16

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Basic Accounting	3
College Algebra	3
Computer Science	6
Database Design	3
Database Management	3
Data Communications	3
Data Structures	3
Discrete Mathematics/Functions	3
Enlisted Professional Military Education	12
Statistics	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Construction Technology (4VEB)

DFAOS DSN 493-7739

Occupational Specialty: 3E2X1, 3E3X1, 3E5X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Blueprint Reading	6
Building Construction	3
Carpentry	12
CCAF Internship	16
College Algebra/Trigonometry	3
Computer–Aided Drafting	6
Construction Inspection	9
Drafting/Engineering Drawing	3
Heavy Equipment Operations	24
Masonry	9
Metals Characteristics	3
Metals Fabrication	14
Rigid and Flexible Pavements	12
Surveying	9
Welding	9

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Construction Building Codes	6
Construction Material Estimating	3
Enlisted Professional Military Education	12
Hazardous Materials	3
Industrial Safety	3
Properties of Materials	6
Quality Assurance	3
Soil Mechanics	3
Strength of Materials	6
Technical Writing	3

Contracts Management (1CAO)

DFAOT DSN 493-7738

Occupational Specialty: 6CXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
*Business Law	3
CCAF Internship	16
*Contract Administration/Management	12
*Contract Law	6
*Government Contracting Principles	6
*Pricing and Negotiation	6
*Purchasing	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
*Accounting	3
Computer Science	6
*Economic Principles (Macro/Micro)	6
*Enlisted Professional Military Education	12
Human Relations	3
*Introduction to Business	3
Labor Relations	3
Materiel Management	3
*Principles of Marketing	3
*Statistics	3

*Courses applicable to the Acquisition Professional Development (APD) program to meet the 24-hour business requirement. In addition, 4 semester hours may be applied to the APD program for completion of the five-level Career Development Course, and 2 semester hours may be applied to the APD program for completion of the resident Airman Leadership School, NCO Academy, or the USAF Senior NCO Academy.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Criminal Justice (9IJY)

DFAOS DSN 493-2737

Occupational Specialty: 3P0X1, 7SXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Criminal Law	6
Fundamentals of Ground Combat Skills	12
Fundamentals of Law Enforcement	3
Introduction to Criminal Justice	3
Introduction to Security	3
Physical Security Concepts	6
Police Administration and Supervision	6
Principles of Investigation	3
Principles of Marksmanship	6
Special Weapons and Tactics	6
Technical/Report Writing	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Antiterrorism	3
Behavioral Science for Police Officers	3
Computer Science	6
Constitutional Law	3
Criminalistics/Forensic Science	3
Criminology	3
Emergency Medicine	4
Enlisted Professional Military Education	12
General Psychology	3
General Sociology	3
Guidance and Counseling	3
Patrol Dog Operations	12
Police-Community Relations	3
Probation and Parole	3
Traffic Management/Investigation	3

Dental Assisting (7GBC)

DFAOS DSN 493-2737

Occupational Specialty: 4Y0X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Dental Clinical Phase and Procedures	9
Dental Sciences	6
Oral Radiology	3
Preventive Dentistry Sciences	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Dental Hygiene	9
American Dental Association Certified Dental Assistant	14
Computer Science	6
Dental Administrative Procedures	6
Emergency Medicine	3
Enlisted Professional Military Education	12
General Biology	4
General Chemistry	4
General Psychology	3
Human Anatomy and Physiology	4
Medical Readiness	3

The Dental Assistant Apprentice course is accredited by the Commission on Dental Accreditation of the American Dental Association. For certification, course graduates should contact the Dental Assisting National Board, Inc, 216E Ontario Street, Chicago IL 60611; (312) 642-3368.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Dental Laboratory Technology (7GBB)

DFAOS DSN 493-2737

Occupational Specialty: 4Y0X2

Technical Core (12-24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Complete Dentures	12
Construction of Removable Partial Dentures	6
Dental Ceramics	3
Dental Laboratory Fundamentals	4
Inlays, Crowns, and Fixed Partial Dentures	8

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Removable Prosthodontics	6
Computer Science	6
Enlisted Professional Military Education	12
Functional and Aesthetic Fixed Prosthodontics	8
Medical Readiness	3
Porcelain and Metal Ceramic Restoration	6

Upon completion of the Dental Laboratory Apprentice course and 5 years' experience, students who desire to be certified dental technicians should contact the National Board for Certification, 3801 Mt Vernon Ave, Alexandria VA 22305; (703) 683-5310.

Disaster Preparedness (9IMY)

DFAOS DSN 493-7739

Occupational Specialty: 3E9XX

Technical Core (12-24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Disaster Preparedness	6
Emergency Operations	6
Emergency Planning	6
Federal Emergency Management Agency Independent Study Program	12
Hazardous Materials	6
Instructor Fundamentals	6
Radiological Fundamentals	3
Risk Assessment	3
Warfare Defense	10

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Civil Defense	3
Climatology/Meteorology	3
Computer Science	6
Emergency Information Systems	3
Enlisted Professional Military Education	12
Exercise Design	3
General Chemistry	4
Introduction to Public Administration	3
Inventory Management	3
Safety Management	3
Technical Writing	3
Tests and Measurements	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Ecological Controls (3AKY)

DFAOS DSN 493-7739

Occupational Specialty: 3E4X1, 3E4X2, 3E4X3

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Environmental Support	20
Liquid Fuel Systems	20
Utilities Systems	20

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Algebra-Based Physics	8
Biology	3
Blueprint Reading/Schematic Diagrams	6
Botany	4
Chemistry	3
Computer Science	6
Ecology	6
Electronics	3
Enlisted Professional Military Education	12
Environmental Awareness	3
Environmental Compliance	3
Fire-Suppression Systems	6
Hazardous Materials	6
Industrial Management	3
Industrial Safety	6
Microbiology	4
Natural Gas Distribution	6
Plant Disease and Pest Control	6
Pollution Prevention	3
Quality Assurance	3
Technical Math (College Algebra or Higher)	3
Technical Writing	3
Welding and Pipefitting	6

Education and Training Management (2BAC)

DFAOS DSN 493-6448

Occupational Specialty: 3S2XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Guidance and Counseling	3
Business Communications	3
CCAF Internship	16
Computer-Based Instruction	9
Educational Technology	3
Human Relations	3
Instructional Methodology and Materials	6
Instructional Systems Development	9
Introduction to Education	3
Microcomputer Software Application	3
Office/Classroom Management	3
Oral Communication	3
Principles of Instruction	3
Records Management	3
Report/Technical Writing	3
Statistics	3
Tests and Measurements	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Curriculum Development	3
Developmental/Educational Psychology	3
Enlisted Professional Military Education	12
General Psychology/Sociology	6
Public Relations	3
Resource Management	3
Supervision of Instruction	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Electronic Systems Technology (4VHP)

DFAOT DSN 493-2043

Occupational Specialty: 2EXXX, 2M0X1, 2PXXX, 3C2X1

Technical Core (12–2 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Communications Systems Theory/Maintenance	24
Electronic Communications-Computer Systems Theory/Maintenance	24
Electronic Systems Theory/Maintenance	24
Ground Radar Systems Theory/Maintenance	24
Metrology	24
Missile and Space Systems Electronics Theory/ Maintenance	24

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Electronics	12
Algebra-Based Physics	4
Basic Electronics Theory/Application	12
College Algebra (or Higher Level Mathematics)	3
Computer Science	6
Computer Systems Maintenance and Operations Principles	6
Digital Techniques	6
Enlisted Professional Military Education	12
FCC General Radiotelephone Operator's License	9
High-Reliability Soldering	3
Industrial Safety	3
Microprocessor Electronic Theory	6
Quality Assurance	3
Solid-State Theory/Application	6
Technical Writing	3

Explosive Ordnance Disposal (4VRC)

DFAOS DSN 493-7739

Occupational Specialty: 3E8XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Algebra-Based Physics	8
CCAF Internship	16
Electricity/Electronics	9
Explosive Ordnance Disposal	24
General Chemistry	4
Hazardous Materials	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Accident Prevention	3
Basic Photography (Camera/Video Operations)	3
Blueprint Reading/Schematic Diagrams	3
Computer Science	6
Emergency Medicine	3
Enlisted Professional Military Education	12
Heavy Equipment Operation	3
Industrial Safety	3
Industrial X-Ray/Nondestructive Inspection	3
Inventory Management	3
Investigative Techniques	3
Map and Compass Reading	3
Marksmanship	3
Nuclear Science	4
Statistics	3
Technical Math (College Algebra or Higher)	3
Technical Writing	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Fabrication and Parachute Technology (4VPF)

DFAOT DSN 493-5937

Occupational Specialty: 2A7X4

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Fabrication and Parachute Maintenance	24
Parachute Rigging	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Applied Aerodynamics	3
Clothing and Textiles	6
Computer Science	6
Engineering Graphics	3
Enlisted Professional Military Education	12
General Chemistry	4
Hazardous Materials	3
Industrial Safety	6
Maintenance Management	3
Production Planning and Control	3
Tailoring	3
Technical Writing	3
Upholstery	6

Financial Management (9GEC)

DFAOS DSN 493-6448

Occupational Specialty: 6FXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Accounting	12
Business Law	3
Business Mathematics	3
CCAF Internship	16
Financial Analysis	6
Financial Principles	6
Microcomputer Software Applications	6
Statistics	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Business Finance	3
Computer Science	6
Economic Principles (Macro/Micro)	6
Enlisted Professional Military Education	12
International Finance	3
Money and Banking	6
Principles of Marketing	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Fire Science (9IFY)

DFAOS DSN 493-7739

Occupational Specialty: 3E7XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Aerospace Vehicle Firefighting	6
CCAF Internship	16
Fire Apparatus Operation	6
Fire Department Administration	3
Fire Service Rescue	9
Hazardous Materials	6
Introduction to Fire Science	3
Structural Firefighting	12

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Building Construction for Fire Protection	3
Computer Science	6
Emergency Medicine	6
Enlisted Professional Military Education	12
Fire Codes and Related Ordinances	3
Fire Command	3
Fire Hydraulics	3
Fire Instructor	3
Fire Prevention	6
Fire Protection Systems	3
Fire/Arson Investigation	3
Firefighting Occupational Safety	3
General Chemistry	3
Technical Writing	3

Fitness, Recreation, and Services Management (1FRS)

DFAOS DSN 493-6449

Occupational Specialty: 3M0X1, 9G000

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Accounting	6
Baking	3
CCAF Internship	16
Financial Management	3
Fitness and Health	3
Food and Beverage Preparation	6
Food Equipment Selection and Layout	3
Hospitality Administration	3
Hotel/Motel Front Office Management	3
Housekeeping	3
Indoor/Outdoor Recreation	6
Institutional Food Services	9
Introduction to Recreation	3
Mortuary Services	3
Physiology	3
Recreation Leadership/Management	6
Recreation Programming	6
Sanitation and Safety	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Budgeting	3
Business Communications	3
Business Law	3
Catering	3
Computer Science	6
Enlisted Professional Military Education	12
Food Facilities Management	6
Human Relations	3
Introduction to Business	3
Nutrition	3
Personnel Management	3
Principles of Marketing	3
Purchasing	3
Recreational Safety and First Aid	3
Sports Instruction	6

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Food and Nutritional Science (7GAD)

DFAOS DSN 493-2737

Occupational Specialty: 4DXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Diet Therapy	12
Dietetics	3
Dining Operations	3
Fitness and Health	3
Introduction to Food Preparation	6
Nutrition	3
Nutritional Medicine Administration	3
Subsistence Management	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Emergency Medicine	3
Enlisted Professional Military Education	12
Food Services	3
General Accounting	3
General Biology	4
General Chemistry	4
Human Anatomy and Physiology	4
Medical Readiness	3

For Dietary Manager Certification, graduates should contact the Dietary Managers Association, 1 Pierce Place, Suite 1220 W; Itasca IL 60143-1277; 1-800-373-1908. Students who desire Lifestyle and Weight Management Consultant Certification should contact the American Council on Exercise, 5820 Oberlin Drive, Suite 102, San Diego CA 92121-3787; 1-800-825-3636. Note: Current CPR certification required.

Health Care Management (7GCY)

DFAOS DSN 493-2737

Occupational Specialty: 4A0X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
American Health Information Management Association Medical Records Technician Certification	24
CCAF Internship	16
Health Care Management	12
Medical Care Evaluation	3
Medical Expense and Performance Reporting	3
Medical Records Management	6
Medical Resource Management	3
Patient Administration	9

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Accounting	6
Business Law	3
Business Statistics	3
Computer Science	6
Emergency Medicine	3
Enlisted Professional Military Education	12
Human Anatomy and Physiology	8
Human Resource Management	3
Introduction to Business	3
Marketing	6
Medical Ethics	3
Medical Readiness	3
Medical Terminology	3
Principles of Management/Supervision	6

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Histologic Technology (7GAE)

DFAOS DSN 493-2737

Occupational Specialty: 4T0X2

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Bacteriology	3
CCAF Internship	16
Clinical Chemistry	9
Clinical Microbiology	9
Hematology, Serology, and Blood Banking	6
Histologic Practicum	24
Histologic Specimen/Slide Processing	3
Histologic Technician—American Society of Clinical Pathologists Certification	30
Histopathology Procedures	24

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Enlisted Professional Military Education	12
General Biology	6
General Chemistry	6
Human Anatomy and Physiology	4
Medical Readiness	3

Graduates with 1 year of acceptable laboratory experience and a combination of 12 semester hours of biology and chemistry courses satisfy the prerequisites to sit for the Clinical Pathologists Certification Examination. Contact the American Society of Clinical Pathologists, Board of Registry, PO Box 12270, Chicago IL 60612-0270.

Information Management (1AUY)

DFAOS DSN 493-6448

Occupational Specialty: 3A0XX, 5RXXX, 8M000

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Chapel Management	15
Information Systems Administration	9
Information Systems Management	6
Microcomputer Software Applications	9
Office Equipment	3
Postal Operations/Management	15
Records/Publications Management	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Business Communications	3
Computer Science	6
Desktop Publishing	3
Enlisted Professional Military Education	12
Personnel Management	3
Principles of Accounting	6
Principles of Management	3
Report/Technical Writing	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Information Systems Technology (0IYY)

DFAOT DSN 493-2043

Occupational Specialty: 1C3XX, 1C4XX, 2S0X2, 3C0X1, 3C1XX, 3C3X1, 3S0X2

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Airborne Information Systems	12
Broadcast Information Systems/Management	15
CCAF Internship	16
Command and Control Information Systems	9
Communications Networking	6
Communications-Electronics Program Management	12
Computer Security	6
Data Information Systems/Management	15
Personnel Data Systems	12
Telecommunications Administration/Industry Regulation	6
Telecommunications Technology	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Basic Accounting	3
Business Mathematics/Statistics	3
College Algebra	6
Computer Science	12
Data Communieations	3
Enlisted Professional Military Education	12
FCC General Radiotelephone Operators License	9
Radio Communications	6
Typing/Keyboarding	3

TE-3

Instructor of Technology and Military Science (2IBB)

DFAOS DSN 493-6448

Occupational Specialty: Air Force and other service enlisted personnel who are performing duty as full-time CCAF instructors may register in this program. Airmen must hold their career-field-related degree prior to registration; however, individuals holding the 1T0X1 AFSC are not eligible.

Degree Requirements: The journeyman (five) level (or fully qualified equivalent) must be held at time of program completion. Registrants must complete the program within 2 years of initial date of registration.

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Adult/Vocational Education	3
Basic Counseling	3
CCAF Special Duty Internship	8
Curriculum Development	3
Educational Technology	3
Educational/Developmental Psychology	3
Foundations of Education	3
*Instructional Methodology	9
Instructional Systems Development	6
Learning Theories	3
*Practice Teaching	12
Supervision of Instruction	3
Tests and Measurements	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Enlisted Professional Military Education	12
CCAF Internship	12
Computer Science	6
Computer-Based Instruction	9
**Related Specialty Training	6
Statistics	3
Technical Writing	3

*A methods conrse of at least 3 semester hours and a teaching practicum are required to complete the core reqnirement.

**A maximum of 6 semester hours of specialty training may be applied if related to the subject matter being taught.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Logistics (1AMY)

DFAOS DSN 493-6449

Occupational Specialty: 2F0X1, 2G0X1, 2S0X1, 4A1X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Contract Management	3
Cryogenic Operations	10
Distribution Management	12
Fuels Distribution	12
Inventory Management	12
Logistics Automated Systems	6
Logistics Management	12
Materiel Handling/Plant Layout	3
Materiel Management	12
Principles of Accounting	6
Production/Operations Management	3
Purchasing Principles	3
Warehouse Storage and Operations	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Business Law	3
Business Mathematics/Statistics	3
Computer Science	6
Enlisted Professional Military Education	12
Environmental Protection Procedures	3
General Chemistry	3
Hazardous Materials	3
Industrial Safety	3
Introduction to Business	3
Introduction to the Petroleum Industry	3
Introduction to Transportation	3
Marketing/Merchandising	6
Quality Assurance	3

Maintenance Production Management (4VJG)

DFAOS DSN 493-7739

Occupational Specialty: 2RXXX, 3E6XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Human and Resource Management	3
Management Information Systems	10
Production Management	6
Scheduling and Production Control	6
Statistics	3
Systems Management	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Basic Accounting	3
Computer Science	6
Enlisted Professional Military Education	12
Environmental Compliance	3
Industrial Quality Assurance	3
Technical Writing	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Mechanical and Electrical Technology (4VGA)

DFAOS DSN 493-7739

Occupational Specialty: 2M0X3, 3E0X1, 3E0X2, 3E1X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Electrical Power Production	20
Electrical Systems	20
Heating Systems	20
Refrigeration and Air-Conditioning Systems	20

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Air Distribution and Filtering Systems	3
Alternate Heating and Cooling	3
Blueprint Reading/Schematic Diagrams	6
Building Codes and Ordinances	3
Computer Science	6
Control Systems/Maintenance	6
Electronics	6
Engine Principles	3
Enlisted Professional Military Education	12
Environmental Awareness	3
Environmental Compliance	3
Industrial Management	3
Industrial Safety	3
Motor, Starter, and Control Devices	6
Quality Assurance	3
Technical Math (College Algebra or Higher)	3
Technical Physics	4
Technical Writing	3
Welding/Pipefitting	3

Medical Laboratory Technology (7GAF)

DFAOS DSN 493-2737

Occupational Specialty: 4T0X1, 4T0X3

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
American Society of Clinical Pathologists Certification (Cytology)	24
ASCP Certification (Medical Laboratory Technology)	24
Bacteriology	4
CCAF Internship	16
Clinical Chemistry	9
Clinical Microbiology	12
Clinical Practicum	24
Cytology	24
Hematology, Serology, and Blood Banking	12
Department of Health and Human Services Certification (Medical Laboratory Technology)	30
Immunology	8

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Enlisted Professional Military Education	12
General Biology	8
General Chemistry	8
Inorganic Chemistry	8
Medical Readiness	3
Microbiology	4
Organic Chemistry	8

For certification, Phase I and II Medical Laboratory course graduates with 1 year of experience should contact the National Certification Agency for Medical Laboratory Personnel, 8310 Nieman Rd, Lenexa KS 66214-1598, (913) 438-5110 or the American Society of Clinical Pathologists (ASCP), Board of Registry, PO Box 12277, Chicago, IL 60612-0277, (312) 738-1336. This degree, including 6 semester hours of general biology and 6 semester hours of general chemistry as technical electives (0–12 semester hours), meets requirements for the ASCP medical laboratory technician examination. Degree graduates meet the requirement established by the Clinical Laboratory Improvement Amendment Act—1988.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Mental Health Services (7GAP)

DFAOS DSN 493-2737

Occupational Specialty: 4CXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Abnormal Psychology	3
CCAF Internship	16
Drug and Alcohol Abuse	3
Guidance and Counseling	6
Human Biology	3
Human Growth/Lifespan Development	6
Human Relations	3
International Certification Reciprocity Consortium/Alcohol and Other Drug Abuse Certification	6
Interpersonal Communication	3
Mental Health Care	24
Psychology of Adjustment	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Emergency Medicine	3
Enlisted Professional Military Education	12
General Biology	3
General Chemistry	3
General Psychology	3
Human Anatomy and Physiology	3
Medical Readiness	3
Nursing (Mental Health Related)	6

For certification as a substance abuse counselor, contact HQ AETC/SGPCM, 63 Main Circle, Suite 3, Randolph AFB TX 78150-4549, (210) 652-5748, ext 7. For certification as a psychiatric technician, contact the American Association of Psychiatric Technicians, Certification Processing Center, 336 Johnson Road, Michigan City IN 46360-6430, 1-800-391-7589.

Metals Technology (4VLB)

DFAOT DSN 493-5937

Occupational Specialty: 2A7X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Aircraft Metals Technology	24
CCAF Internship	16

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Machining/Welding Techniques	12
Brazing	3
Computer Numerical Control	6
Computer Science	6
Corrosion Control	3
Engineering Graphics	6
Enlisted Professional Military Education	12
General Chemistry/Algebra-Based Physics	4
Hazardous Materials	3
Industrial Safety	3
Maintenance Management	3
Materials and Processes	3
Physical Testing of Materials	3
Technical Math (College Algebra or Higher)	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Missile and Space Systems Maintenance (4VAK)

DFAOT DSN 493-2043

Occupational Specialty: 2M0X2

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Missile Maintenance	24

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Corrosion Control	3
Electricity/Electronics	6
Engineering Graphics	3
Engineering Mechanics	3
Enlisted Professional Military Education	12
Fluid Power	3
General Chemistry/Algebra-Based Physics	4
Hazardous Materials	3
Heavy Equipment Operation/Maintenance	3
Industrial Safety	3
Maintenance Management	3
Materiel and Processes	3
Nondestructive Inspection	3
Nuclear Weapons Systems Maintenance	3
Quality Assurance	3

Munitions Systems Technology (4VRA)

DFAOS DSN 493-6448

Occupational Specialty: 2W0X1, 2W2X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Munitions Operations/Inventory Management	12
Munitions Systems	12
Nuclear Weapons Systems	12

Technical Electives (0-12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Munitions Systems	12
Advanced Nuclear Weapons Systems	12
Basic Accounting	6
Computer Science	6
Corrosion Control	3
Electricity/Electronics	6
Engineering Graphics	3
Enlisted Professional Military Education	12
Fluid Power	3
General Chemistry/Algebra-Based Physics	8
Hazardous Materials/Environmental Management	3
Heavy Equipment Operation/Maintenance	3
Industrial Safety	3
Maintenance Management	3
Reactor Technology	3
Statistics	3
Weapons Safety	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Music (2CHB)

DFAOS DSN 493-6449

Occupational Specialty: 3N1X1, 3N2X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Arranging and Instrumentation	6
Band	6
CCAF Internship	16
Chorus	6
Ensemble	6
Music History	6
Music Theory	6
Production and Stage Craft Arts	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Applied Music	6
Aural Perception	6
Computer Science	6
Dance	3
Electricity/Electronics	3
Electronic Music (Synthesizers)	3
Enlisted Professional Military Education	12
Fundamentals of Conducting	3
Public Relations	3
Voice	6

Nondestructive Testing Technology (4VXR)

DFAOT DSN 493-5937

Occupational Specialty: 2A7X2

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Nondestructive Inspection	24

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Nondestructive Inspection Techniques	3
Computer Science	6
Corrosion Control	3
Engineering Graphics	3
Enlisted Professional Military Education	12
General Chemistry/Algebra-Based Physics	8
Hazardous Materials	3
Industrial Safety	3
Maintenance Management	3
Materials and Processes	6
Technical Math (College Algebra or Higher)	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Nuclear Medicine Technology (7ABJ)

DFAOS DSN 493-2737

Occupational Specialty: 4R0X1A

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Applied Nuclear Medicine Physics and Chemistry	9
American Registry of Radiologic Technicians Nuclear Medicine Registry	24
CCAF Internship	16
Diagnostic Imaging, Clinical and Nonclinical	24
Nuclear Medicine Instrumentation	14
Radiation Safety and Procedures	14
Radioimmunoassay	4
Radiopharmaceuticals	8

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Enlisted Professional Military Education	12

Clinical Nuclear Medicine Technician Phase I and II course graduates who desire certification should contact the American Registry of Radiologic Technologists, 1255 Northland Dr, Mendota Heights MN 55120; (612) 687-0048.

Optometric Technician (7GAG)

DFAOS DSN 493-2737

Occupational Specialty: 4VXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Assisting the Optometrist	6
General Psychology	3
*Human Anatomy and Physiology	3
Introduction and Basic Optics	6
Introduction to Operating Room Technology	3
Operating Room Practicum	6
Operating Room Technology	3
Vision Classification	6
Visual Acuity and Its Correction	6

*Must be completed as part of degree program.

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Algebra-Based Physics	4
Analytic Geometry	3
CCAF Internship	16
Computer Science	6
Enlisted Professional Military Education	12
General Biology	4
General Chemistry	4
Medical Readiness	3
Office Management	3

This degree program is accredited by the Council on Optometric Education of the American Optometric Association. For registration contact the American Optometric Association, National Paraoptometric Registry, 243 N Lindbergh Blvd, St Louis MO 63141, (314) 991-4100.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Paralegal (1CAM)

DFAOS DSN 493-6448

Occupational Specialty: 5JXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Business Law	6
CCAF Internship	16
Civil Law	3
Claims Investigation	6
Introduction to Law for Paralegals	6
Law Office Management	6
Legal Administration	6
Legal Claims and Tort Litigation	6
Legal Ethics	3
Legal Research/Writing	6
Military Justice	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Business Organizations/Entities	3
Civil Litigation Procedures	3
Computer Science	6
Contract Law	3
Criminal Law	3
Enlisted Professional Military Education	12
Environmental Law	3
Estate Planning and Probate	3
Legal Investigation and Interviewing	3
Real Estate Law	3

Pararescue (7GDP)

DFAOS DSN 493-7739

Occupational Specialty: 1T2X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Air Operations	9
CCAF Internship	16
Emergency Medicine	12
Evasion and Recovery	3
General Principles of Survival	12
Ground Operations	12
Mountain Travel/Rescue Techniques	3
Pararescue Indoctrination	3
Psychology of Environmental Stress	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Enlisted Professional Military Education	12
Human Anatomy and Physiology	3
Parachuting/Scuba Diving	6
Physical Geography	3
Weapons Familiarization	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Personnel Administration (1AOY)

DFAOT DSN 493-5936

Occupational Specialty: 3S0X1, 3UXXX, 8F000, 8R000, 8S000

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Manpower/Quality Management	20
Personnel Management/Administration	15
Personnel Recruiting	12

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Business Communications	3
Computer Science	6
Enlisted Professional Military Education	12
Fundamentals of Counseling	3
General Psychology	6
Human Relations/Interpersonal Communication	3
Industrial Process Design	3
Microcomputer Software Applications	6
Principles of Accounting	6
Quantitative Methods	3
Report/Technical Writing	3
Salesmanship	3
Statistics	3

Pharmacy Technology (7GAH)

DFAOS DSN 493-2737

Occupational Specialty: 4PXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Fundamentals of Pharmacy	8
Introductory Pharmacology	8
Pharmaceutical Preparation and Manufacture	6
Pharmacy Technician Certification	17

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Emergency Medicine	3
Enlisted Professional Military Education	12
General Biology	4
General Chemistry	8
Intravenous Admixtures and Pharmacy Concepts	6
Medical Readiness	3
Organic Chemistry	8

For certification as a pharmacy technician, contact the Pharmacy Technician Certification Board, 2215 Constitution Ave NW, Washington DC 20037-2985, (202) 429-7576 or Fax (202) 429-7596.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Physical Therapist Assistant (7GAI)

DFAOS DSN 493-2737

Occupational Specialty: 4J0X2

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Functional Anatomy, Pathophysiology, and Therapeutic Procedures	6
Introduction to Physical Therapy	3
Introductory Anatomy and Physiology	6
Physical Therapy Clinical Arts	6
Physical Therapy Procedures and Modalities	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Physiology	3
Algebra-Based Physics	3
CCAF Internship	16
Computer Science	6
Emergency Medicine	3
Enlisted Professional Military Education	12
General Biology	4
General Chemistry	4
Human Anatomy and Physiology	8
Kinesiology	4
Medical Readiness	3

This degree program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association. Graduates may sit for the state Physical Therapy Assistant License examination. Contact the Board for Physical Therapy of the state in which licensure is desired.

Public Affairs (2FDE)

DFAOS DSN 493-6449

Occupational Specialty: 3N0XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Copyreading and Editing	3
Journalism	3
Mass Communications	12
Media Production	10
Photojournalism	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advertising	3
Computer Science	6
Desktop Publishing	6
Enlisted Professional Military Education	12
General Psychology	3
Graphic Art	3
Interviewing	3
Mass Communications Law	3
Public Relations	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Public Health Technology (7ECY)

DFAOS DSN 493-2737

Occupational Specialty: 4EXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Environmental Medicine Office Procedures	3
Epidemiology	3
Hearing Conservation	3
Management of Disaster Medicine Programs	3
Management of Occupational Health Programs	6
Public Health/Sanitation	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Epidemiology	3
Communicable Diseases	4
Computer Science	6
Disaster Medicine	3
Emergency Medicine	3
Enlisted Professional Military Education	12
Entomology	3
Food Safety	4
General Biology	8
General Chemistry	8
General Physical Science	4
General Psychology	3
Microbiology	4
Statistics	3
Zoonotic Diseases	3

For certification in the Food Protection Certification Program, graduates should contact the Education Testing Service FPCP, PO Box 6515, Princeton NJ 08541-6515, 1-800-251-3663.

Radiologic Technology (7GDH)

DFAOS DSN 493-2737

Occupational Specialty: 4R0X1, 4R0X1B, 4R0X1C

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
American Registry of Radiologic Technicians	24
CCAF Internship	16
Introduction to Radiologic Technology	3
Radiographic Anatomy and Physiology	3
Radiographic Physics	3
Radiographic Positioning	3
Radiographic Techniques and Darkroom Procedures	3
Radiography Clinical Practicum	6
Special Radiographic Procedures	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Special Radiographic Procedures	3
Computer Science	6
Enlisted Professional Military Education	12
Medical Readiness	3
Radiographic Clinical Education	12
Radiographic Internship	16

Radiology Phase I, II, and III course graduates seeking certification should contact the American Registry of Radiologic Technologists, 1266 Northland Drive, Mendota Heights MN 55120, (612) 687-0048.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Safety (9IIY)

DFAOS DSN 493-6449

Occupational Specialty: 1SXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Accident Investigation	3
Accident Prevention Management	9
CCAF Internship	16
Hazardous Materials	6
Hazardous Waste Management	6
Industrial Safety	6
Instructional Methodology	6
Safety Engineering	6
Weapons Safety Program Management	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Blueprint Reading/Schematic Diagrams	3
Computer Science	6
Electricity/Electronics	3
Enlisted Professional Military Education	12
Environmental Science	3
Fire Investigation	3
General Chemistry	8
Industrial Hygiene	3
Introduction to Public Administration	3
Oral Communication	3
Report Writing	3
Safety and Risk Analysis	3
Statistics	3
Technical Writing	3

Scientific Analysis Technology (4VES)

DFAOT DSN 493-2043

Occupational Specialty: 9S100, 9S200

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Special Duty Internship	16
Geophysical Analysis	12
Satellite Analysis Systems	6
Scientific Lab Technology	12
Scientific Measurements	12

Technical Electives (0-12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Basic Electronics Theory/Applications	6
Computer Science	6
Computer Systems Maintenance and Operations Principles	3
Enlisted Professional Military Education	12
Meteorology	6
Physical Science	3
Statistics	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Social Services (9IKY)

DFAOS DSN 493-6449

Occupational Specialty: 3S1XX, 8C000

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Cultural Diversity	9
Family Services Administration	3
Group Dynamics	6
Interviewing	3
Introduction to Equal Opportunity	6
Social Psychology	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Enlisted Professional Military Education	12
Human Development and Learning	3
Instructional Methodology	3
Introduction to Sociology	3
Marketing	3
Statistics	3
Technical Writing	3

Surgical Services Technology (7GEA)

DFAOS DSN 493-2737

Occupational Specialty: 4N1X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Fundamentals of Central Sterile Supply	3
Operating Room Practicum	16
Operating Room Technology	12
Surgical Nursing	6

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Computer Science	6
Emergency Medicine	6
Enlisted Professional Military Education	12
General Biology	4
General Chemistry	4
General Psychology	3
Human Anatomy and Physiology	8
Medical Readiness	3
Nursing	6

For certification Surgical Service Specialist course graduates should contact the Liaison Council on Certification, Association of Surgical Technologists Inc, 8307 Shaffer Parkway, Littleton CO 80120, (303) 978-9010. For certification in Sterile Processing and Distribution, degree graduates with 6 months' experience in sterile processing and distribution should contact the National Institute for Certification of Healthcare Sterile Processing and Distribution Personnel, PO Box 558, Annandale NJ 08801, 1-800-322-0637.

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Survival Instructor (2IBS)

DFAOS DSN 493-7739

Occupational Specialty: 1T0X1

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Advanced Survival Techniques	9
CCAF Internship	16
Evasion and Recovery	9
General Principles of Survival	16
Instructional Methodology	6
Instructional Systems Development	3
Instructor Fundamentals	9
Practice Teaching	6
Psychology of Environmental Stress	3
Resistance Training	3
Special Survival Techniques	14

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Audio-Visual Media	3
Basic Counseling	3
Computer Science	6
Curriculum Development	3
Educational/Developmental Psychology	3
Emergency Medicine	6
Enlisted Professional Military Education	12
International Terrorism	3
Land Navigation	3
Mountain Travel	3
Parachuting	3
Technical Writing	3

Transportation (1ATY)

DFAOS DSN 493-7739

Occupational Specialty: 2T0X1, 2T1X1, 2T2X1, 8A000

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Air Cargo Procedures	3
Air Transportation Principles	3
Business/Transportation Law	6
CCAF Internship	16
Freight Transportation	6
Hazardous Materials	4
Household Goods Movement	9
Introduction to Transportation	3
Motor Fleet Management and Safety	9
Passenger Routing/Movement	9
Traffic Management	9
Transportation Automated Systems	6
Vehicle Operations	9

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Accounting	3
Business Mathematics/Statistics	3
Computer Science	6
Contract Management	3
Enlisted Professional Military Education	12
Food and Beverage Preparation	3
Human Relations	3
Industrial Safety	3
Introduction to Aviation/Aeronautics	6
Introduction to Business	3
Introduction to Logistics	3
Physical Distribution	6
Quality Assurance	3
Warehouse Storage and Operations	3

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

Vehicle Maintenance (4VKC)

DFAOS DSN 493-7739

Occupational Specialty: 2T3XX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Automotive Engine Computer Control Systems	3
Automotive Service Excellence Examination	16
CCAF Internship	16
Gas/Diesel Engine Principles	4
Maintenance Scheduling	3
Power Train Fundamentals	3
Radiator/Fuel Tank Repair	3
Specialized Support Vehicles	15
Suspension/Brake Systems	3
Vehicle Air-Conditioning	3
Vehicle Body Repair/Painting	6
Vehicle Electrical/Starting/Charging Systems	3
Vehicle Fuel/Emission Systems	3
Vehicle Glass, Upholstery/Trim, and Hardware	6
Vehicle Integrated Management System	7
Welding	8

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Alternative Fuel/Electric Powered Vehicle Systems	3
Computer Science	6
Engine Lubrication/Cooling Systems	3
Engine Overhaul	3
Enlisted Professional Military Education	12
Environmental Compliance	3
Industrial Management	3
Industrial Safety	3
Quality Assurance	3
Technical Writing	3

Weather Technology (8FYY)

DFAOT DSN 493-6448

Occupational Specialty: 1WXXX

Technical Core (12–24 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
CCAF Internship	16
Climatology	6
Dynamic Meteorology	6
Operational Weather Forecasting	6
Physical Meteorology	6
Plotting Weather Maps and Charts	6
Satellite Meteorology	6
Synoptic Meteorology	6
Thermodynamics	6
Weather Instruments and Observations	6
Weather Prognosis Techniques	6
Weather Radar Interpretation	3
Weather Station Operation	3

Technical Electives (0–12 Semester Hours)

Subjects/Courses	*Maximum Semester Hours*
Algebra-Based Physics	4
Astronomy (Containing Earth-Sun Relationships)	3
Briefing Techniques	3
College Algebra (or Higher Mathematics)	6
Computer Science	6
Enlisted Professional Military Education	12
Physical Geography	3
Tropical Meteorology	3
Upper Air Measurement	6

SEE SECTION II FOR COMPLETE DEGREE REQUIREMENTS.

CCAF

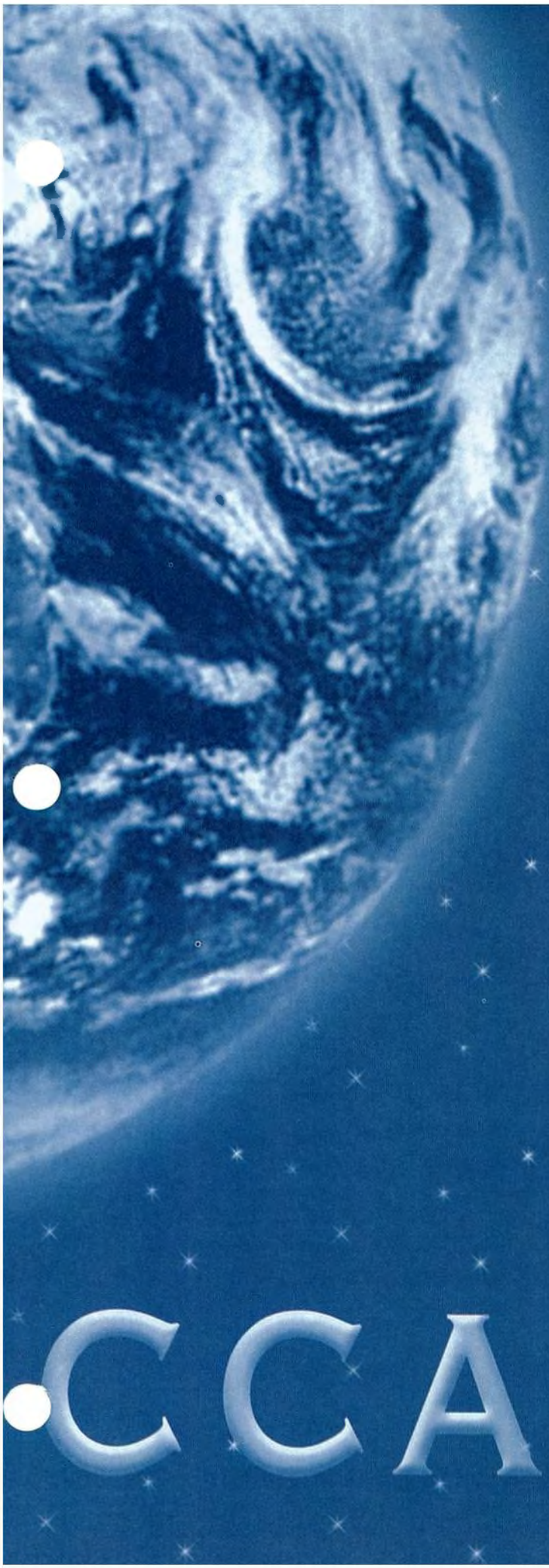
OCCUPATIONAL INSTRUCTOR CERTIFICATION

OIC Requirements

Upon completion of instructor qualification training, consisting of an instructor methods course and supervised practice teaching, CCAF instructors (enlisted, officer, and civilian) may be nominated by their school commander/commandant for certification as an occupational instructor. CCAF transcripts reflect occupational instructor certification.

To qualify for certification, a nominee must:

- Be a full-time CCAF instructor, teaching a CCAF course at the time of nomination.
- Have at least 2 year's teaching experience as a CCAF instructor.
- Have completed an instructor course of at least 3-semester hours.
- Have completed a teaching practicum course of at least 5 semester hours.
- Hold the journeyman (five) level (or fully qualified equivalent).
- Hold an associate or higher degree.
- Be recommended for certification by the affiliated school commander/commandant or equivalent designated representative.



CCAF

COURSE DESCRIPTIONS

Course Descriptions

This section contains the codes and descriptions of the CCAF courses that are segments of Air Force-conducted courses. Courses are identified by seven character codes, such as AAS 1300. The three letters identify a course area (in the example, AAS represents Aircraft Armament Systems) while the four digits identify the specific course within that area. The course descriptions listed on the following pages are arranged alphabetically and then numerically within the alphabetic code.

CCAF courses are subject to increases/decreases of credit-hour value because they are continually evaluated and revised as necessary to meet the immediate needs of the Air Force. The credit hours entered on the CCAF transcript reflect the value of the courses when they were completed. The transcript is the only official and reliable indicator of an airman's accomplishments in terms of courses completed and semester hours earned. Questions regarding courses not listed in the catalog should be directed to CCAF/DFAX, 130 W Maxwell Ave, Ste 130, Maxwell AFB AL 36112-6613; (334) 953-2875; DSN 493-2875; Fax (334) 953-2980/5231 or DSN 493-2980/5231.

Code Index

AAS Aircraft Armament Systems
ACL Aircrew Life Support
ACT Aircrew Technology
ADM Administration
AFM Airfield Management
AMT Aircraft Maintenance Technology
AST Astronautics
ATC Air Traffic Control
AVA Audiovisual Arts
AVI Avionics
BEE Bioenvironmental Engineering
BET Biomedical Equipment Technology
CAR Carpentry
CDC Chemical Decontamination and Control
CHE Applied Chemistry
CIV Civil Engineering
CLT Cardiopulmonary Laboratory Technology
CMR Computer Maintenance and Repair
COM Communications
CON Contracts
COR Corrosion Control
CYT Cytology
DAS Dental Specialist
DLT Dental Laboratory Technology
DPO Disaster Preparedness
EDP Data Systems
EDT Education and Training
EEO Electronic Equipment Operation
ELT Electronics
EMT Emergency Medical Technology
ENM Environmental Medicine
ENV Environmental Science
EPP Electric Power Production
EXP Explosives Handling and Disposal
FDS Food Service
FIN Finance
FIP Fire Protection
FLR Fabric, Leather, and Rubber Products
FNS Food and Nutritional Science
FSC Family Support Center
FTL Foreign Technical Language
FUS Fuel Service
GEO Applied Geography
GOV Applied Government
GPS Geophysical Sciences
GRA Graphics
HAR Heating, Air-Conditioning, and Refrigeration
HBM Hyperbaric Medicine
HEO Heavy Equipment Operation
HIS Applied History
HIT Histologic Technology
HSA Health Services Administration
HTM Hotel Management
INT Internship
ITL Intelligence
LAW Law Enforcement
LEG Legal Service

LMM Leadership, Management, and Military Studies
LOG Logistics
MAC Machinist
MAP Mapping
MAS Masonry
MAT Mathematics
MEA Measurements
MEC Mechanical Maintenance
MED Medical Assistant
MEL Metalworking
MET Meteorology
MGT Management and Supervision
MIL Military Science
MKS Marksmanship
MLT Medical Laboratory Technology
MRD Medical Readiness
MSL Missile Maintenance Technology
MUN Munitions
NMT Nuclear Medicine Technology
NUR Nursing
OCC Occupational Therapy
OPD Orthotic Prosthesis Devices
OPT Optometric Technology
PAV Pavements
PER Personnel
PHA Pharmacology
PHE Physical Education
PHO Photography
PHY Applied Physics
PLB Plumbing
PTH Physical Therapy
PTR Physiological Training
QCI Nondestructive Inspection and Quality Control
RAD Radiologic Technology
REC Recreation
RTB Radio and Television Broadcasting
SAF Safety
SAN Sanitation
SDI Special Duty/Reporting Identifier Internship
SEC Security
SOC Social Actions
SOO Solar Observation
SUR Surveying
SVR Survival and Rescue
TRN Transportation
TVS Television Systems
VEM Vehicle Maintenance
WEL Welding

Aircraft Armament Systems

AAS 1201 Aircraft Armament Systems Maintenance

Aircraft armament systems; includes component functions of nuclear weapons, missiles, rockets, bombs, and ammunition with emphasis on explosives safety.

AAS 1202 Aircraft Air Munitions Loading/ Unloading Laboratory

Positioning, loading, safing, and downloading nuclear and nonnuclear air munitions from internal and/or external suspension components; includes operation and maintenance of internal and external suspension components stressing explosive and ground safety, care and use of handtools, and use of applicable handling equipment.

AAS 1203 Aerospace Ground Equipment (AGE) Handling Support/Maintenance

Maintenance and use of powered/nonpowered AGE equipment and armament support equipment; includes theory of operation, component location, removal, adjustment, repair, inspection, installation, and trouble-isolation procedures.

AAS 1204 Aircraft Armament Launch Ejection Systems

Direct application of maintenance practices to electrical, pneumatic, and mechanical subsystems. Includes theory of operation; malfunction analysis; trouble-isolation procedures; system operation; and repair, adjustment, removal, and installation of components.

AAS 2200 Advanced Aircraft Automatic Weapons Laboratory

Theory of operation and maintenance of specified automatic gun systems; includes support and handling equipment, testers, and care and use of handtools. (May be repeated for credit on various aircraft.)

AAS 2201 Advanced Aircraft Armament Systems Maintenance Laboratory

Maintenance procedures and systems theory as applied to specific aircraft. Includes system operation analysis using wiring diagrams, engineering drawings, and manufacturer's maintenance manuals; theory of operation; location of components; and removal, adjustment, repair, inspection, installation, and trouble-isolation procedures.

AAS 2202 Helicopter Aerial Gunner

Operation of helicopter weapon systems and performance of related aircrew duties. Includes analysis and repair of in-flight malfunctions; weapon loading, inspection, and servicing; hoist operation; cargo and passenger loading; medical evacuation; and navigation waypoint identification.

Aircrew Life Support

ACL 1101 Basic Life Support

Aircrew life-support programs and systems. Includes Quality Air Force awareness, career progression and duties, safety, security, supply, automated data and oxygen, and technical orders.

ACL 1102 Basic Life-Support Equipment

Life-support test equipment for anti-G garments, aircraft oxygen system, and protective helmets; safety procedures; and physiological effects of flight.

ACL 1103 Inspection and Use of Life-Support Equipment

Inspection and use of life-support equipment including personnel parachutes, harnesses, and liferafts and maintenance and use of survival kits, anti-G garments, protective helmets, oxygen survival system, life preservers, night vision devices, and anti-exposure suits. Includes aircrew instruction in emergency egress, chemical defense, and flash protection.

ACL 1104 Maintenance of Aircrew Night Vision Devices

Maintenance and operation of night vision devices. Includes operational checks, physiological limitations, testing, purging, and device adjustment procedures.

ACL 2101 Advanced Life Support

Life-support operations. Includes Air Force occupational safety and health, technical orders, automated data systems, supply, aircrew instruction, night vision, and advanced technologies.

ACL 2102 Aircrew Life-Support Instructor

Knowledge and techniques needed to conduct aircrew life-support continuation training. Includes navigation with global positioning system equipment, survival, evasion, resistance, and escape training.

Aircrew Technology

ACT 1201 Aircraft Systems Familiarization

Knowledge of aircraft systems applicable to duties of flight engineers; emphasis on theory of operation and normal and emergency operating procedures. Includes familiarization with aircraft electrical, engine, hydraulic, environmental control, fuel, and flight control systems.

ACT 1202 Aircraft Flight Performance

Principles and techniques for predicting takeoff power and performance factors. Includes weight variables at takeoff; time, distance, fuel, and power requirements for ascent, maximum range, constant speed, cruise climb, and maximum endurance cruise performance; and descent and landing data.

ACT 1203 Air Refueling

Analysis of in-flight refueling equipment and airborne operating procedures. Includes operation and components of refueling boom, nozzle, probe, and drogue; mission planning and accomplishment; crew duties; identification of applicable publications; use of emergency equipment and egress routes; weather; bailout, ditching, and crash-landing procedures; in-flight emergency procedures; and emergency warfare procedures.

ACT 1205 Introduction to Aircraft

Function and use of aircraft systems for aircrew members; includes fuel, flight control, communications, pneudraulic, engine, electrical, air-conditioning/pressurization, and oxygen systems as well as aircraft ground-handling and servicing procedures.

ACT 1206 Air-Refueling Flying Training

Supervised practical application of air-refueling operator duties; includes use of life-sustaining equipment, operation of refueling boom and related equipment, application of navigation principles, and handling in-flight emergencies under actual flying conditions.

ACT 1207 Aircrew Qualification

Concepts, principles, and procedures required for performance of aircrew duties; includes security, aircrew member discipline, personal affairs, oral communication skills, safety, flying orientation, publications, aircrew coordination, life-support equipment, basic aerodynamics, aircrew training, and customs and border clearances.

ACT 2201 Helicopter Ground Training

Advanced helicopter flight performance, system familiarization, and emergency procedures necessary for performance of powerplant and flight control limitations and operational checks, system trouble analysis, loading and refueling parameters, and rescue and recovery procedures.

ACT 2202 Helicopter Simulator and Flying Training

Comprehensive helicopter operational procedures in both a flight simulator and aircraft; includes flight maneuvers, emergency procedures, instrument flying, navigation and voice procedures, weight and balance, fuel management, hoist and sling operation, and care of equipment and forms.

ACT 2204 HC-130 Flight Engineer Ground Training

Evaluation of HC-130 aircraft systems operation in both normal and emergency circumstances; includes trouble-isolation techniques, operational checks, operating limitations, weight and balance computations, prediction of takeoff and landing performance requirements, theory of flight, aerodynamics, airspeed measurement, pre-takeoff checklists, and preflight inspections.

ACT 2205 HC-130 Flight Engineer Flying Training

Advanced normal and emergency airborne procedures; includes navigation, aerial cargo delivery, air refueling, search, intercept, and night flying. Emphasis on weight and balance adjustment, fuel management, monitoring of aircraft instruments, and in-flight procedures.

ACT 2206 Transition Aircraft Flight Performance

Transition training for skilled flight engineers and crew members converting from one type of aircraft to

another; includes normal operation, emergency procedures, aircraft performance data, adverse weather operations, fuel calculations, forms management, crew responsibility, and safety precautions.

ACT 2207 Flight Engineer Aircraft Systems Familiarization

Location, description, normal/emergency operation, and inspection of fuel, oxygen, pneumatic, hydraulic, lighting, warning, electrical, environmental control, egress, engine, fire-extinguishing, flight control, automatic flight control, and instrument systems and use of emergency equipment, signals, and evacuation routes.

ACT 2208 Advanced Flight Performance Planning

Calculation of aircraft ground run, takeoff, climb, cruise, and emergency performance data using current environmental conditions, gross weight, and load factors.

ACT 2209 Trainer, Simulator, and Flying Training

Ground and airborne operational procedures in cockpit procedural trainer, flight simulator, and aircraft; includes inspections, flight performance, aircraft systems, crew communication, and emergency procedures.

ACT 2213 Intelligence Trainer, Simulator, and Flight Training

Ground and airborne operational procedures in task trainer, flight simulator, and aircraft; includes inspections, console operation, mission procedures, data reporting, crew communication, and emergency procedures.

Administration

ADM 1101 Typing I

Touch typing to include thorough knowledge of keyboard and operation of machine parts. Emphasis on centering, simple tables, business letters, envelopes, rough drafts, and manuscripts.

ADM 1102 Chapel Management

Organization and management of chapel activities; includes standard office practices, written communication, public relations, application of principles of funds accounting, preparation of budgets and publicity materials, and management of property and equipment.

ADM 1103 Document and Publications Management

Management of publications and documents; includes publications and forms systems, requisition procedures, inventory controls, and customer issues.

ADM 1104 Administrative Communications

Management of written communication; includes preparation of official letters, messages, and administrative orders as well as suspense control of written communication.

ADM 1106 Information Management

General administrative support and office management. Includes typing/keyboarding, microcomputer, word processing, computer security, career progression, plans and programs, administrative communications, publications, records and forms management, official correspondence, suspense files, document security, mail handling, electronic messages, Air Force orders, awards and decorations, performance reports, telephone procedures, and quality assurance.

ADM 1107 Postal Operations

Principles, policies, procedures, and administration of military postal operations. Includes postal service center operations, preparation of transportation documents, domestic and international mail, registered mail, claims/inquiries, directory functions, administration of postage accounts, money order services, and postal supplies and equipment.

ADM 2101 Typing II

Development of accuracy and speed with emphasis on letter production, business forms, advanced tables, and statistical reports.

ADM 2102 Advanced Chapel Management

Organization and management of chapel activities; includes techniques for chapel supply management, use of applicable mechanized output products, budget management, control of chapel equipment, supply management, performance ratings, decorations, on-the-job training, and funds accounting. Also includes preparation of budgets, publicity materials, professional communications, and other supervisory duties.

ADM 2103 Advanced Typing

Development of accuracy and speed with emphasis on letter production, business forms, advanced tables, and statistical reports.

ADM 2106 Advanced Information Management

Integrated definition language modeling to analyze processes and improve efficiency, information warfare doctrine and philosophy, contingency operations, resource management, total quality improvement, computer network operating and distribution systems, and network operation management. Format encourages student interaction, team learning, and exchange of viewpoints and experience.

ADM 2107 Postal Supervisor

Technical skills and management techniques required for supervision of military postal center operations. Includes administration of postal information system, postage meter monitoring, money order business, integrated retail terminals, mail security, search and seizure, and postal incident reporting.

Airfield Management

AFM 1101 Airfield Management

Introduction to flight planning and management of airfield functions. Includes reviewing flight plans for accuracy and completion; weather checks; airfield and runway condition assessments; maintenance and distribution of flight publications, diagrams, and aeronautical charts; and notification of aircrew and airfield personnel.

AFM 2101 Advanced Airfield Management

Advanced techniques and procedures of airfield management. Includes flight rules, use of military airfields by civilian aircraft, emergency action procedures, coordination of airfield construction and repair, and airfield inspections and safety.

Aircraft Maintenance Technology

AMT 1101 Aircraft Technical Manuals

Use of specific technical manuals relating to aircraft systems and components; includes servicing, inspection, removal, repair, replacement, and overhaul and use and interpretation of schematics and wiring diagrams. (May be repeated for credit on different aircraft.)

AMT 1102 Introduction to Aircraft Engines

Theory of operation, system integration, basic construction, and aircraft and engine specific features. May include removal and replacement of components and servicing.

AMT 1103 Introduction to Aircraft and Systems

Overview of aircraft specifications, functions, and system and component locations. Does not include hands-on training.

AMT 1201 Egress Systems Fundamentals

Aircraft major assemblies, structural members, and aircraft markings. Includes ground safety procedures; use of ground support equipment, handtools, special tools, aircraft hardware, and safety devices; aircraft electrical and pneudraulic systems; supply procedures and materiel deficiency reporting; principles and operation of aircraft escape system components (ballistic and nonballistic); and handling, storage, and care of explosive components.

AMT 1202 Egress Systems Laboratory

Basic, intermediate, and advanced aircraft escape systems. Includes application of theory in removal, replacement, adjustment, and rigging of aircraft canopy and seat components (ballistic and nonballistic) in basic, dual, and multicrew module escape systems and inspection, repair, corrosion control, operational checks, and trouble-isolation procedures.

AMT 1203 Jet Engine Principles

Use of tools and maintenance materials including common handtools, torque wrenches, and micrometers; identification of aircraft hardware; lock-wiring techniques and safety devices; principles of jet engine operation and construction features; identification and purpose of main bearings, seals, and major engine components; and use of manufacturer's technical manuals.

AMT 1204 Jet Engine Inspection and Repair

Construction, inspection, trouble isolation, and repair of ignition; lubrication, fuel, starter, compressor bleed, pneumatic, and water injection systems; removal and installation; operating, conditioning, and servicing of installed engines; spectrometric oil sampling; disassembly inspection, repair, and reassembly of powerplant and accessories; and preservation for storage.

AMT 1206 Aircraft Propeller Inspection and Repair

Practical experience in removal, disassembly, inspection, repair, reassembly, installation, and adjustment of propellers and propeller subsystems; includes balancing of blades and hubs and testing and operational checks of hydraulic and electrical standard propellers and turbopropellers.

AMT 1208 Manufacturer's Technical Manuals

Selection and use of manufacturer's maintenance manuals and other publications relating to aircraft systems and components; includes servicing, inspection, removal, replacement, repair, and overhaul instructions.

AMT 1209 Aircraft Pneudraulic Systems

Pneudraulic principles; hardware, tools, and typical aircraft components; and principles of operation of power, landing gear, brake, steering, flight control, and other pneudraulic systems. Includes normal/emergency operations, inspection, and servicing procedures; repair, removal, and installation of

components; and adjustment, operational checkout procedures, and use of schematic diagrams.

AMT 1213 Control and Warning Systems Maintenance

Principles of operation of common aircraft and engine control and warning systems. Includes inspection procedures; preventive maintenance; and repair of antiskid, interior/exterior lighting, starting, ignition, landing gear warning, takeoff warning, fire-detection, and other control and warning systems.

AMT 1214 Aircraft Pressurization and Air-Conditioning Systems

Inspection and maintenance procedures for cabin pressure regulators, heat exchangers, flow control valves, and temperature regulators. Includes theory of operation, repair of system components, operational checks, servicing procedures, analysis and isolation of malfunctions, cabin leakage checks, bench testing, and calibration of components.

AMT 1215 Aircraft Pneudraulic Repair Laboratory

Construction features and purpose; theory of operation; and disassembly, inspection, repair, and reassembly of hydraulic pumps, pressure regulators, valves, reservoirs, accumulators, actuators, brake assemblies, shock struts, steering control units, and other aircraft pneudraulic system components. Includes ultrasonic cleaning of system filters, use of bench test stands, and hose fabrication.

AMT 1217 Aircraft Reciprocating Engine Familiarization

Removing, installing, adjusting, servicing, and inspecting reciprocating aircraft engines; includes operating principles, construction features, maintenance of engine subsystems, and removal and installation of power packages and associated equipment.

AMT 1218 Airframe Systems and Components

Operational theory, inspection, and maintenance of landing gear, brake, flight control, pneumatic, hydraulic, oxygen, air-conditioning, pressurization, instrument, and fuel systems.

AMT 1219 Aircraft Maintenance Fundamentals

Identification, selection, use, and care of common handtools and torque wrenches; safety wiring procedures; selection and use of appropriate aircraft hardware; operation and care of ground support equipment; maintenance documentation; aircraft familiarization; maintenance safety precautions; and introduction to use of technical manuals.

AMT 1222 Helicopter Engine and Transmission Maintenance

Theory of operation and purpose; maintenance of turbine engines, semirigid helicopter rotors, and fully articulated rotor transmission and drive systems and components; removal and replacement of engines, rotor heads, main gearboxes, and selected components; servicing procedures; rigging of engine components; final adjustments; performance checks; and trouble analysis.

AMT 1225 Aircraft Fuel Systems

Operational theory and function and maintenance techniques as applied to engine feed and crossfeed, airframe fuel transfer, air-refueling, quantity indicator, and vent pressurization systems. Encompasses aircraft defueling and scavenging procedures with emphasis on precautions.

AMT 1226 Integral Fuel Tank Maintenance

Tank entrance procedures, leak detection, corrosion control, selection/application of sealants, and repair procedures.

AMT 1227 Fuel Cell Maintenance

Use of handtools and special equipment; selection and use of aircraft hardware; use of manufacturer's technical manuals; leak detection procedures; and fuel cell testing, removal, repair, and installation.

AMT 1229 Introduction to Aircraft Maintenance

Knowledge of basic systems theory and mechanical skills required for entry-level training on specific aircraft; includes selection and use of handtools, aircraft hardware, manufacturer's technical publications, ground handling, operational theory of aircraft systems, care and use of ground support equipment scheduled inspections, corrosion identification, and control and safety.

AMT 1230 Helicopter Fully Articulated Flight Controls

Practice in identification, purpose, and theory of operation of helicopter flight controls, fully articulated rotor system, and system components; includes practical experience in rigging, adjusting, removing, repairing, replacing, servicing, and balancing flight control system components.

AMT 1231 Helicopter Semirigid Flight Controls

Identification, purpose, and theory of operation of helicopter flight controls, semirigid rotor system, and system components; includes practical experience in rigging, adjusting, removing, repairing, replacing, servicing, and balancing flight control system compooents.

AMT 1233 Helicopter Maintenance Fundamentals and Practices

Introduction to UH-60 helicopter airframe, systems, engines, and flight-line practices. Includes basic practices, tools, ground handling and equipment, inspections, troubleshooting, and removal and replacement of components. Aircraft systems include landing gear, electrical, fuels, utility, hydraulics, and flight controls. Engine and related systems to include transmission and main and tail rotor.

AMT 2101 Auxiliary Power Unit Systems

Theory of operation of aircraft auxiliary power units for specific aircraft. Includes normal and emergency operation of systems and subsystems and removal, repair, and replacement of components.

AMT 2102 Aircraft Engine Removal and Replacement

Advanced aircraft engine removal and replacement. Includes use and operation of specific tools and equipment (i.e., engine stands and lift trailers, dollies, hoists, etc.) and specific procedures for removal/ replacement of engine with emphasis on technical data and safety.

AMT 2103 Transport Aircraft Cargo Configuration

Methods and principles of configuring aircraft for transportation of specific equipment and/or personnel loads.

AMT 2104 Aircraft Landing Gear and Door Rigging

Troubleshooting, adjusting, and operational checkout of aircraft landing gear and door systems. Includes special tools and equipment to perform various tasks with special emphasis on adherence to technical instructions provided in maintenance manuals.

AMT 2105 Advanced Aircraft Maintenance

Troubleshooting procedures and techniques for aircraft malfunctions. Includes research of aircraft technical data, use of trouble isolation charts, and reading and interpretation of aircraft wiring diagrams and system schematics.

AMT 2106 Air Force Technical Order System

Outline of equipment and responsibilities associated with managing Air Force Technical Order System accounts. Includes automated systems and documentation required for performing account custodial duties.

AMT 2204 Organizational Maintenance Procedures, F/TF-15

Flight-line maintenance procedures pertaining to F/TF-15 aircraft. Includes application of ground safety devices and procedures; servicing aircraft systems; towing and jacking procedures; aircraft launch and recovery; scheduled inspections; and removal and installation of tires, brakes, external fuel tanks, and access covers.

AMT 2205 Turbofan Engine Maintenance

Advanced flight-line and shop procedures for maintenance of specific engines. Includes engine disassembly, assembly, inspection, repair, removal, and installation; test cell operation; trim; component operation and replacement; preservation and depreservation; safety; corrosion identification and control; and manufacturer's technical data. (May be repeated for credit on different engines.)

AMT 2206 Organizational Maintenance Procedures, A-10A

Detailed flight-line maintenance procedures pertaining to A-10A aircraft; includes ground safety devices and procedures, servicing aircraft systems, towing and jacking procedures, inspection and use of ground-support equipment, engine oil samples, aircraft launch and recovery, and performance of scheduled inspections.

AMT 2208 Organizational Maintenance Inspection, C-130

Application of airframe conformity and airworthiness inspection as applied to C-130 aircraft. Includes knowledge of aircraft systems theory, operational inspections, scheduled major inspections to airframe, ground handling, documentation of forms, use of manufacturer's technical data, lubrication, safety, and corrosion identification control.

AMT 2209 Aircraft Weight and Balance

Theory and methods used to control aircraft loading and center of gravity location. Includes weight-and-balance terminology; principles of force and movement acting on a free body; and methods, procedures, equipment, and safety precautions required for weighing aircraft to determine center of gravity location. Practical experience in performing loading calculations using manufacturer's loading charts and load adjuster slide rules.

AMT 2210 Advanced Pneudraulic Repair Workshop

Application of design theory in specific aircraft pneudraulic systems. Includes application of detailed principles to determine functions and interrelationships of components using electrical/hydraulic schematics; trouble isolation; and practice in removing, installing, repairing, servicing, adjusting, inspecting, and modifying aircraft pneudraulic systems. (May be repeated for credit on various aircraft.)

AMT 2214 Gas Turbine Engine Laboratory

Advanced shop maintenance procedures and application of jet engine theory on specific engines; removal from shipping containers; depreservation; installation on maintenance stands; removal of accessories, lines, and other hardware; engine disassembly, cleaning, inspection, and replacement of parts; and assembly, inspection, and preservation. (May be repeated for credit on various engines.)

AMT 2215 Engine Test Facility Laboratory

Advanced operator maintenance and preparation of engines for testing; performance of prestart checks; engine operation; and trouble analysis using vibration, temperature, and pressure data to determine serviceability or to isolate engine problems. Includes service adjustments and use of portable and semiportable engine test facilities. (May be repeated for credit on various pieces of equipment.)

AMT 2216 Jet Engine Maintenance

Flight-line maintenance procedures and jet engine theory as applied to specific engines; includes preservation/depreservation procedures, engine and related aircraft systems operation, trouble analysis, testing and adjustment, repair of installed engines,

removal/installation, use of test equipment, and scheduled inspections. (May be repeated for credit on various engines.)

AMT 2217 Engine Systems and Operation

Principles of fuel, ignition, and other integrated engine systems; includes engine operation, trouble analysis, and evaluation. (May be repeated for credit on various engines.)

AMT 2222 Engine Blade Blending

Blade blending procedures and fiber-optic borescope inspection using a flexible borescope.

AMT 2223 Helicopter Gas Turbine Engines

Operational theory and limitations of gas turbine engines; identification, removal, inspection, and replacement of engine components; removal, buildup, inspection, and reinstallation of engines; removal, installation, and rigging of engine controls; and trouble isolation and analysis of engine operating problems. (May he repeated for credit on various engines.)

AMT 2224 Helicopter Airframe and Systems Maintenance

Advanced theory of operation, identification of components, and trouble-isolation procedures. Includes practical experience in removal and replacement of electrical, instrument, fuel, and hydraulic system components; operation, inspection, and maintenance of utility systems; removal, disassembly, reassembly, and adjustment of rotors and hubs; removal and replacement of transmission and drive systems; operation, trouble isolation, replacement, and rigging of flight controls; repair of landing gear systems; aod periodic inspections. (May be repeated for credit on various aircraft.)

AMT 2231 Jet Engine Accident Analysis

Construction and design differences of jet engines as required for accident investigations and engine accessory failures; includes analyses of fuel and oil system contamination, combustion and turbine overtemperature damage, material failures, and jet engine accident cause factors; identification and analyses of compressor, turbine, and bearing failures; and identification of in-flight and post-impact fires; and estimation of engine power at impact.

AMT 2233 Advanced Egress Systems Maintenance Laboratory

Maintenance procedures and ejection systems theory as applied to specific aircraft systems; includes operation, location of components, rigging, adjustment, repair, inspection, and trouble-isolation procedures. (May be repeated for credit on various aircraft.)

AMT 2234 Advanced Aircraft Environmental Systems Laboratory

Maintenance procedures and environmental systems theory as applied to specific aircraft and associated equipment. Practice in locating components; troubleshooting procedures; and servicing, repairing, testing, and inspecting aircraft pressurization, air-conditioning, oxygen, and fire-extinguishing systems. (May be repeated for credit on various aircraft.)

AMT 2235 Advanced Aircraft Electrical Systems Maintenance Laboratory

Direct application of maintenance procedures and electrical theory to specific aircraft electrical systems and associated test equipment; includes operation, circuit analysis, trouble-isolation procedures, system operation, repair, adjustment, removal, installation of components, functional checkout, bench checking and testing, and inspection procedures. (May be repeated for credit on various aircraft.)

AMT 2236 Advanced Aircraft Maintenance Laboratory

Maintenance procedures and systems theory as applied to specific aircraft. Includes system operation analysis using wiring diagrams, engineering drawings, and manufacturer's maintenance manuals; operation of flight controls, engines, and utility systems; and use of emergency procedures. Experience in ground handling; servicing; functional systems checkout; locating, removing, and replacing components; and inspection of aircraft to ensure systems are operational and airworthy. (May be repeated for credit on various aircraft.)

AMT 2237 Aircraft Fuel Systems Maintenance Laboratory

Advanced fuel systems theory and maintenance procedures for specific aircraft fuel systems; includes function/operation of fuel system components,

servicing, refueling/defueling, inspection procedures, trouble isolation, fuel tank construction, safety, selection and use of sealants, and maintenance procedures. (May be repeated for credit on various aircraft.)

AMT 2238 Maintenance Organization and Functions

Maintenance concepts, organization, and procedures for master crew chief. Includes identifying management functions and responsibilities; proper use of maintenance forms, technical manuals, and supply systems; maintenance standardization and evaluation; on-the-job training techniques; and safety precautions.

AMT 2240 Advanced Maintenance Management

Organizational maintenance structures, responsibilities, functions, and control. Includes workload, material, quality control, man-hour and deficiency reporting, training, records, reports, administration, maintenance data collection, and documentation of maintenance actions and scheduling.

AMT 2241 Aircraft Flight Control Systems Maintenance

Indepth operational checks, rigging, and adjusting of aileron, rudder, and elevator systems; hydraulic power system; and secondary flight control system. (May be repeated for credit on various aircraft.)

AMT 2244 Fuel System Inerting and Fire Suppression

Advanced theory of nitrogen fuel inerting and firefighting systems; includes operational checkout of fuel tank pressurization, fuel scrubbing, and firefighting systems. (May be repeated for credit on various aircraft.)

AMT 2246 Diagnostics and Analysis Laboratory

Analysis of F-100/PW-100 engines. Includes fuel system operation; component location and operation; engine trimming and trending. Use of varied test equipment including engine trim box; electronic control system test set; vibration, pressure, temperature, and position test set; mach number simulator test set; events history recorder reset box; and remote trimmer.

AMT 2249 Aircraft Field/Intermediate Maintenance

Application of major maintenance procedures and systems theory as applied to specific aircraft. Includes removal, repair, and replacement of parts and components; use of special tools and test equipment; rigging and operational checkout of primary and secondary flight controls, landing gear, throttle, canopy, and other systems; and systematic use of maintenance manuals, drawings, and wiring schematics during trouble analysis, inspection, and aircraft modification. (May be repeated for credit on various aircraft.)

AMT 2255 Aircraft Transition, Jet

Transition training for skilled aircraft maintenance technicians converting from one jet aircraft to another; includes familiarization with general aircraft and ejection, electrical, environmental control, fuel, pneudraulic, engine, and other related systems. (May be repeated for credit on various aircraft.)

AMT 2259 Organizational Maintenance Procedures, F/RF4

Advanced flight-line maintenance procedures pertaining to F/RF-4 aircraft. Includes application of ground safety devices and procedures; inspection and use of ground-support equipment; aircraft servicing, defueling, towing, jacking; removal and installation of wheels, drag chutes, external fuel tanks, batteries, launching and recovery; and performance of scheduled aircraft inspections.

AMT 2262 Advanced Jet Engine Laboratory

Indepth powerplant trouble analysis and correction; includes knowledge of general operating procedures; disassembly, reassembly, engine test requirements and procedures, and operation/maintenance of engine test facilities. (May be repeated for credit on various engines.)

AMT 2263 TF-34 General Maintenance

Removal and installation of engine system components and mounting hardware, borescope inspections, identification of special inspection requirements, and corrosion identification/control pertaining to TF-34 turbofan engine. Designed for technicians who have completed an introductory course in jet engine maintenance.

AMT 2264 Aircraft Entry-Level Maintenance

Aircraft systems servicing and inspection concepts and flight-line ground-handling procedures; includes safety, forms documentation, servicing, ground handling, inspection, use of technical publications, and corrosion identification.

AMT 2265 Advanced Fuel Tank Analysis and Repair

Indepth analysis of integral tanks and conventional fuel cells; includes leak source and path analysis, corrosion prevention, sealant preparation/application, repair/maintenance procedures, testing, inspection, and storage. (May be repeated for credit on various aircraft.)

AMT 2266 Advanced Fuel Systems Theory and Analysis

Fuel system operation, trouble analysis, and repair in single or multiengine aircraft. Includes inspection/maintenance of fuel system components; system configuration; engine feed; fuselage fuel transfer scavenge system; refuel, fuel indication, and air-refuel systems; and defueling. (May be repeated for credit on various aircraft.)

AMT 2267 Organizational Maintenance Flight-Line Supervisor

Advanced maintenance procedures pertaining to flight-line supervisor. Includes servicing; engine run; operational checks; ground handling; scheduled inspections; general operating principles of aircraft; supervision of jacking, towing, recovery, and inspection; and safety and corrosion control. (May be repeated for credit on various aircraft.)

AMT 2268 Organizational Maintenance Level Repair and Reclamation

Advanced major maintenance procedures and systems theory. Includes removal, repair, and replacement of parts/components, use of special tools and test equipment; torque and tolerance; rigging techniques and operational checkout of primary and secondary controls, landing gear components, throttles, canopies, and other rigged systems; and systematic use of manuals, drawings, and wiring circuits. (May be repeated for credit on various aircraft.)

AMT 2269 Aircraft Electrical Laboratory

Application of electrical systems pertaining to specific aircraft; includes familiarization, inspection, and operational checks on power, lighting, fire-detection system, and aircraft subsystem electrical components. (May be repeated for credit on various aircraft.)

AMT 2271 Canopy Rigging

Removal, installation, and adjustment of jettisonable aircraft canopies; includes egress system safety precautions, use of safety devices, and system operational checks. (May be repeated for credit on different aircraft.)

AMT 2272 Aircraft Engine Operation

Normal/emergency operating procedures and safety precautions used in operational checkout of installed aircraft engines; includes prerun checks, postrun inspections, and engine limitations. (May be repeated for credit on different aircraft.)

AMT 2275 In-Flight Refueling System Laboratory

Advanced course in removal, installation, rigging, and adjustment of in-flight refueling boom/receptacles and associated equipment; includes system operational checks and trouble-isolation procedures. (May be repeated for credit on different equipment.)

AMT 2276 Preflight and Postflight Inspections

Aircraft preflight, postflight, and between flight inspections; includes use of inspection work cards and safety, corrosion control, and technical publications and documentation of maintenance and inspection on aircraft forms. (May be repeated for credit on different aircraft.)

AMT 2277 Aircraft Phase Inspections

Application of scheduled dock inspection and maintenance procedures to specific aircraft. Includes use of inspection work cards, special test equipment, and lubrication equipment; practice of safety precautions; and maintenance documentation procedures. (May be repeated for credit on different aircraft.)

AMT 2278 Turbofan Engine Performance Testing

Advanced test cell performance testing of turbofan engines; includes installation of test cell adapter and adapter/engine in test cell, stray voltage checks, engine operation, performance testing, inspection, and removal of engine and adapter.

AMT 2280 Jet Engine Diagnostic Analysis

Advanced engine subsystems theory, operational characteristics, engine operation, adjustments, and trouble isolation. Practical experience in use of special test equipment. (May be repeated for credit on various engines.)

AMT 2281 F-15 Secondary Power Subsystem

Advanced subsystem testing and maintenance. Includes analysis of central gearbox, airframe mounted accessory drive, jet fuel starter lubrication system, starter and accessory drive electrical systems, starter fuel system; servicing of components; and use of test equipment to isolate and correct system malfunctions.

AMT 2285 Aircraft Battle Damage Repair (ABDR)

ABDR concepts, identification/classification of damages; repair of systems/structures; use of technical publications, tools, and materials; proper wear and care of chemical warfare suits; safety; and prevention of damage to foreign objects. (May be repeated for credit on various aircraft.)

AMT 2286 Throttle Rigging

Throttle cable installation, maintenance, and alignment; includes corrosion control, evaluation of engine system components, operational checks, isolation of malfunctions, appraisal of associated support equipment, application of safety, and use of manufacturer's technical manuals.

AMT 2287 Aircraft Materiel System Support Management

Unit aircraft maintenance required to fulfill support section requirements. Includes management of supplies, equipment, and records and support of maintenance activities.

AMT 2288 Aircraft Tow Target System Set

Maintenance procedures and theory of operation. Includes knowledge of system, preparation and use of tow target equipment, shop setup, use of safety devices, operation and checkout of target sets, inspection and mission support, tow reel upload, flight preparation and damage assessment.

AMT 2289 Aircraft Crash Recovery

Response procedures for flight and ground emergencies; includes tire failure, barrier extraction, emergency towing, powered/nonpowered aerospace ground equipment, and handling of crashed aircraft.

AMT 2290 Auxiliary Power Unit Maintenance

Theory of operation, troubleshooting, repair, adjustment, removal, and replacement of engines, systems, and subsystems.

AMT 2291 Helicopter Organizational Maintenance

Flight-line maintenance procedures. Includes ground safety devices, servicing of aircraft systems, aircraft launch and recovery, towing and jacking, performance of scheduled inspections, and system operational checks.

Astronautics

AST 2402 Introduction to Space Systems

Space systems and mechanics and defense and satellite systems; includes identifying orbital parameters and understanding applicable technical language and space-tracking detection systems.

AST 2406 Satellite Systems Operations

Techniques and procedures for satellite control and operation. Includes satellite type and mission, components and subsystems, tracking, command and control operations, duty positions, and crew procedures.

Air Traffic Control

ATC 1401 Principles of Aviation Weather

Weather principles, interpretation of reports, and forecast as applied to flight; includes analysis and use of weather data to write weather reports using format and symbols prescribed by *Federal Meteorological Handbook Number 1*, understanding how weather affects flight safety, and control of air traffic in terminal area.

ATC 1402 Air Navigational Aids

Theory and use of radio navigational facilities, techniques, terminology, and publications including Federal Aviation Administration publications and regulations; emphasis on basic air traffic control navigational aids and procedures in order to direct flow of en route, arriving, and departing aircraft.

ATC 1403 Visual Flight Control

Aircraft characteristics and methods of identification. Includes proficiency in control procedures for heavy jets; control tower operations, equipment, and operating positions; knowledge of aviation regulations pertaining to visual flight rules (VFR); control of aircraft engaged in VFR flight; and existent security risks in unsecured tower communications system.

ATC 1405 Air Traffic Control Nonradar Procedures

Principles of conventional approach control operations including separation standards, terminology, inter- and intrafacility coordination, and procedures for control of aircraft without use of radar equipment.

ATC 1406 Air Traffic Control Radar Procedures

Principles of approach control radar operations and equipment; includes simulated operations requiring use of terminology, identification procedures, separation, and basic control instructions for aircraft in terminal radar environment.

ATC 1408 Air Traffic Control Fundamentals

Weather briefing procedures, observations, and reports and application of aeronautical charts including instrument approach procedure charts, standard terminal arrival route charts, visual and instrument flight rule supplements, and terminal instrument procedures. Basic theory of flight and aircraft performance characteristics.

ATC 2405 Airspace Management

Design, coordination, and management of airspace required for Air Force operational training activities to include national airspace system, categories of airspace, military training route program, military operations areas, airspace, and air traffic control criteria.

ATC 2407 Terminal Instrument Procedures

Development of terminal instrument procedures to include applications of trigonometry and analytic geometry; elements of airspace design and utilization; nonprecision approach and radar procedures; textual development; administrative techniques; and planning criteria for airspace design and utilization.

ATC 2408 Air Traffic Control Facility Management

Guidelines, rules, and regulations governing facility operations. Experience in terminal instrument procedures, national airspace system, mishap investigation and reporting, flight operations, manpower requirements, training programs, and facility management techniques.

ATC 2409 Tactical Air Command and Control Management

Close air support mission planning. Includes assessment of resources, operational planning, and readiness management.

Audiovisual Arts

AVA 2405 Visual Information Management

Visual information support center management techniques. Identification of effective work center administration, workload planning, and production cost accounting; development of effective resource controls; analysis of quality/production control procedures; and implementation of programs designed to foster effective customer relations.

AVA 2802 Audiovisual Methods

Designing/developing audiovisual materials for training. Includes learning theories and communication process, media selection, and operation of production and playback equipment, development of visual materials, application of writing principles for audiovisual packages, development of audio narratives, construction of audiovisual storyboards, and production of audiovisual lessons.

Avionics

AVI 1705 Automatic Flight Control Systems Theory

Circuit analysis/operation of pitch, yaw, and roll axis channels and stability augmentation system.

AVI 1706 Automatic Flight Control Systems Maintenance

Trouble analysis, adjustment, and repair of automatic flight control systems/components; includes principles of navigation systems and use and maintenance of associated test equipment.

AVI 1707 Fundamentals of Avionic Systems

Principles of avionic maintenance, hardware care, use of special tools, and repair of wiring and solderless connectors.

AVI 1708 Engine Instrument Maintenance

Operational theory, functional analysis, troubleshooting procedures, adjustment, and calibration of aircraft engine instruments with emphasis on maintenance/inspection of tachometer, oil pressure, fuel flow, pressure ratio, and fuel quantity systems.

AVI 1709 Integrated Flight and Navigational Instrument Maintenance

Operation, analysis, and maintenance of integrated flight and navigational instruments; includes magnetic compasses, transmitter indexing and calibration, optical transfer, electrical swing, and flight director systems.

AVI 1710 Flight Instrument Maintenance

Operation, analysis, and maintenance of pitot-static and vertical scale indicating systems, mechanical airspeed indicators, altimeters, air data computers, computer modules, sensors, and automatic attitude reporting systems.

AVI 1717 Avionic Maintenance Management

Principles of supply systems and avionic maintenance management, procedures for maintenance inspections, and evaluation of maintenance activities.

AVI 1726 Avionic Manual Test Station Maintenance

Principles and operation of manual test stations and equipment used to maintain avionic systems.

AVI 1727 Avionic Manual Test Station Maintenance

Practical experience in maintenance of manual test stations. Involves user calibration and limited maintenance.

AVI 1729 Integrated Avionic Systems Theory

Operational characteristics of integrated avionic systems; includes technical descriptions, theory of operation, and circuit analysis of integrated avionic systems.

AVI 1730 Integrated Avionic Systems Laboratory

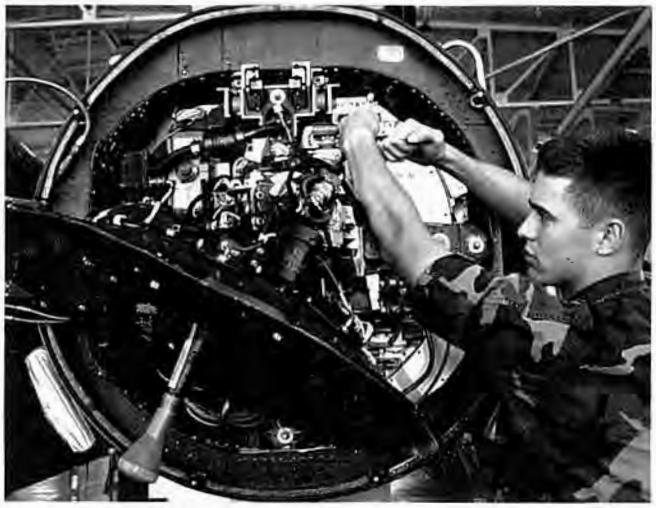
Maintenance and troubleshooting of integrated avionic systems; includes operational checkout, malfunction detection, maintenance of system components, alignment, and application of circuit analysis techniques.

AVI 1731 Avionic Radar Systems Theory

Operation and maintenance of monopulse helical scan radar; power supply; transmitter; receiver; and indicating circuits.

AVI 1732 Avionic Radar Systems Maintenance

Avionic radar trouble analysis and maintenance procedures; includes detailed data flow and logic analysis of transmitter, receiver, antenna, indicating, ranging, tracking, and synchronization circuits.



AVI 1733 Weapons Control Systems Maintenance

Operational theory and detailed circuit analysis of weapons control system; includes analysis, checkout, and fault isolation of test equipment used in malfunction isolation techniques.

AVI 1734 Optical Sighting Systems

Theory and circuit analysis of optical systems; includes analysis, checkout, and fault isolation and use of special test equipment.

AVI 1735 Avionic Radar Navigation Systems Theory

Inertial navigation systems theory and detailed circuit analysis of stable platforms and computers; includes integrators, accelerometers, gyroscopes, and resolvers.

AVI 1736 Avionic Radar Navigation Systems Maintenance

Circuit analysis, alignment, and adjustment of avionic inertial and radar navigation equipment and use of special and general test equipment.

AVI 1737 Avionic Terrain-Following Radar

Detailed circuit analysis of transmitter, receiver, antenna, power supply, computer, and indicator. Trouble analysis using wiring diagrams and test equipment.

AVI 1738 Electronic Warfare Systems Theory

Comprehensive electronic warfare systems and equipment theory; includes infrared, panoramic receivers, recoding, radar homing, and other electronic warfare subjects.

AVI 1739 Basic Electronic Warfare Systems Maintenance Laboratory

Analysis, alignment, and adjustment of electronic warfare equipment and use of special and general test equipment.

AVI 1740 Electronic Warfare Systems Maintenance Laboratory

Troubleshooting, repair, cable fabrication, soldering techniques, and wiring diagram analysis of electronic warfare systems.

AVI 1741 Automatic Test Station Operation

Terminal operation, equipment hookup, testing, and troubleshooting procedures. Use of equipment in performing diagnostics on a wide variety of avionic equipment.

AVI 1742 Automatic Test Station Maintenance

Operational checkout, troubleshooting, and repair of automatic test stations used to maintain avionic equipment.

AVI 1743 Avionic Inertial Navigation Systems Theory

Principles, theory, and concepts applicable to airborne inertial navigation system; includes system data flow and analysis.

AVI 1744 Avionic Inertial Navigation Systems Maintenance

Inspection, adjustment, performance testing, malfunction analysis, and corrective maintenance of inertial navigation system.

AVI 1746 Avionic Sensor Systems Laboratory

Circuit analysis, troubleshooting, disassembly, repair, reassembly, and calibration of sensor control equipment.

AVI 1747 Infrared Sensors Theory

Principles, characteristics, and functional analysis with emphasis on circuit analysis using wiring diagrams and logic symbols.

AVI 1748 Infrared Sensors Maintenance

Functional analysis and maintenance of infrared sensors; includes operational checkout, alignment, troubleshooting, and repair using both specialized and standardized test equipment.

AVI 1749 Laser Systems Theory

Principles and applications of laser system; includes block diagram analysis and use of related test equipment.

AVI 1750 Laser Systems Maintenance

Functional analysis and maintenance; includes operational checkout and troubleshooting using both specialized and standard test equipment.

AVI 1751 Avionic Camera Systems Theory

Operational theory and circuit analysis of precision mapping cameras.

AVI 1754 Avionic Radio Communications Systems Theory

Operational characteristics of avionic communications equipment; includes use of schematic diagrams, data flow, and detailed circuit analysis of receiver and transmitter systems.

AVI 1755 Avionic Radio Communications Systems Laboratory

Operational testing, adjustment, inspection, malfunction analysis, and maintenance.

AVI 1756 Avionic Radio Navigation Systems Theory

Operational characteristics of avionic radio navigation equipment; includes use of schematic diagrams, data flow, and detailed circuit analysis of navigational receiver and transponder systems.

AVI 1757 Avionic Radio Navigation Systems Laboratory

Operational testing, adjustment, inspection, malfunction analysis, and maintenance.

AVI 1759 Airborne Warning and Control System (AWACS) Familiarization

Introduction to AWACS avionic systems including power distribution, cooling systems, and use of safety and security procedures and technical publications.

AVI 1760 Intercommunications System

Operating characteristics, circuit analysis, and troubleshooting procedures of typical aircraft intercommunications system; includes block diagram and detailed circuit analysis.

AVI 2204 Advanced Aircraft Instrument Repair

Operation, circuit analysis, troubleshooting, adjustments, and calibration of liquid quantity, compass system, and aircraft engine, gyro, and pressure operated instruments; includes operation of special test equipment for checking and calibrating instrument systems.

AVI 2251 Identification Equipment

Tactical uses, operation, adjustment, alignment, block diagram analysis, and trouble analysis of aircraft identification system.

AVI 2715 Flight Director System

Maintenance and troubleshooting procedures; includes operational theory, circuit analysis, use of associated test equipment, service inspections,

malfunction detection and isolation, and repair of system components.

AVI 2716 Avionic Systems Laboratory

Removal and installation of line replaceable units and operational checkout of avionic systems; includes use of specialized/general test equipment.

AVI 2717 Doppler Navigation Systems

Systems theory; includes detailed analysis of transmitter, receiver, antenna, indicator, computer, and frequency tracker circuitry using wiring diagrams and test equipment.

AVI 2718 Airborne Early Warning Radar

Search radar principles and applications; includes circuit analysis of stabilization, inertial, height finder, and indicator systems through use of schematic diagrams.

AVI 2719 Avionic Search Radar

Circuit analysis, operational checks, and adjustments of monopulse helical scan, search radar; includes transmitters, receivers, indicators, antennas, power supplies, and flexible waveguides.

AVI 2720 Avionic Track Radar

Phase and amplitude monopulse radar transmitting, receiving, and ranging circuits; includes troubleshooting and alignment of all components.

AVI 2721 Avionic Forward-Looking Radar

Data flow and systems analysis; includes application of search and navigation radar principles and techniques peculiar to forward-looking radar, inspection, performance testing, alignment, and repair.

AVI 2722 Electronic Countermeasures

Identification and recognition of passive and active countermeasures, electronic counter-countermeasure techniques, and data processing.

AVI 2723 Radar Homing and Warning Systems

Principles of radar homing and warning systems; includes functional diagram analysis and maintenance procedures.

AVI 2724 Stellar Metrics

Astral tracking systems theory and operation; includes block diagram and logic and circuit analysis of decommutators, simulators, and associated equipment.

AVI 2725 Electro-Optical Viewing System

Theory of target sensing and display using low-light television, holography, and computer-aided graphic processing to detect and display targets; includes operational checkout, alignment, troubleshooting, and repair of electro-optical viewing system using specialized and standard test equipment.

AVI 2726 Radar Mapping

Principles, theory, and wiring diagram analysis of side-looking radar system used in radar mapping; includes detailed analysis of receiver, transmitter, timing, antenna stabilization, and power distribution circuitry.

AVI 2727 Avionic Camera System Maintenance

Advanced camera system alignment; includes camera controls, photographic sensitive controls, image motion controls, and camera magazines.

AVI 2728 Data Display Systems

Circuit analysis through use of logic symbols/ schematics; includes troubleshooting and bench checks.

AVI 2729 Maintenance and Operation of Aircraft Test Equipment

Certification, repair, and operation of avionic test equipment used in troubleshooting, repair, and alignment of aircraft electrical components and test benches.

AVI 2730 Advanced Avionic Systems

Indepth avionic systems principles, characteristics, and uses; newest electronic innovations and repair techniques. Includes maintenance procedures/ capabilities, limitations, and techniques in employment of avionic systems.

AVI 2731 Digital Interfacing Systems

Theory and maintenance of digital interface circuits, analog-to-digital, digital-to-analog, and digital-to-digital conversion circuits to include data-flow analysis, troubleshooting of conversion circuits, and tie-in to other digital/nondigital systems.

AVI 2732 Airborne Command Post Communications Systems

Advanced theory and operation of satellite communications systems; includes data flow, circuit, and systems analyses.

Bioenvironmental Engineering

BEE 1301 Introduction to Bioenvironmental Sciences

Application of mathematics and physical/biological principles to personal protection and measurement of illumination and ionizing/nonionizing radiation.

BEE 1302 Bioenvironmental Protection

Concepts of acoustics; analysis of generation, measurement, and control of noise; principles of ventilation; and respiratory protection.

BEE 1303 The Occupational Environment

Principles of occupational health and toxicology, establishment of case files, environmental pollution detection and control, and use of detection devices to determine level of exposure to hazards.

BEE 1304 Water Systems Management

Collection and chemical testing of water samples, monitoring of water treatment facilities, and preparation of reports with recommendations for preventing contamination.

BEE 1305 Waste Management

Collection, treatment, and disposal of liquid and solid waste materials.

BEE 2010 Respiratory Protection

Development/management of respiratory protection programs within specific American National Standards Institute and National Institute of Occupational Safety and Health guidelines.

BEE 2101 Introduction to Ergonomics

Anticipation, recognition, evaluation, and control of ergonomic hazards. Includes discussion of health effects, recognition of risk factors, methods of evaluation, standards and criteria, control of principles and methods, administrative controls, personal protective equipment, field surveys, and other current issues in ergonomics.

BEE 2102 Bioenvironmental Engineering

Planning, organizing, implementing, and evaluating bioenvironmental engineering activities. Includes contract management, equipment accounts, budgeting, work controls, applied statistics, drinking water surveillance, water pollution, hazardous materials and waste management, air pollution, ergonomics, review and control of case files, and management of occupational health programs.

BEE 2300 Environmental Protection

Interpretation of standards and criteria applicable to environmental pollution control; implementation and evaluation of air, water, noise and solid-waste pollution surveys; and preparation of reports containing recommendations for co-control measures to ensure compliance with Environmental Protection Agency standards.

BEE 2301 Industrial Hygiene Measurements

Evaluation and control of industrial health/safety hazards based on standards set in Occupational Safety and Health Act, Department of Labor, and Environmental Protection Agency, practicum in sampling techniques and specimen collection, and laboratory analysis of results.

BEE 2302 Radiological Hazards Identification

Identification, evaluation, and control of ionizing/nonionizing radiation hazards found in medical, industrial, and recreational facilities.

BEE 2313 Hearing Conservation

Measurement of auditory risk, automatic audiometer monitoring, selection and issue of personal ear protection devices, methods of monitoring noise

exposure, and management of hearing conservation program.

BEE 2315 Lead Hazard Inspection

Lead hazard identification, field monitoring instruments, and environmental sampling.

BEE 2316 Hazardous Waste Operations

Evaluation and control of hazardous waste operations and remediation activities at hazardous waste sites in accordance with Occupational Safety and Health Administration standards.

BEE 2317 Pollution Prevention

Regulatory compliance, source reduction, management of wastes, and fundamental concepts of prevention.

BEE 2318 Site Restoration Tools, Techniques, and Technologies

Environmental laws/regulations and science and technology of hazardous site remediation/restoration. Includes environmental models, case studies, public notification, investigation techniques, and ecological risk assessment.

BEE 2319 Bioenvironmental Engineering Readiness

Medical readiness training program development and management. Includes peacetime and wartime plans; nuclear weapon accident response; hazardous material accident response; and medical aspects of nuclear, biological, and chemical warfare.

BEE 2320 Ionizing Radiation Management

Radiation protection development and management. Includes radioactivity and principles of radiation, interaction with matter, biological effects of radiation, external/internal dosimetry, radiation instrumentation, and transportation and disposal of hazardous materials.

Biomedical Equipment Technology

BET 1318 Biomedical Equipment Maintenance Management

Installation and troubleshooting of hydrotherapy, x-ray, environmental, vision measurement, and shock therapy systems. Safety procedures emphasized.

BET 1319 Therapeutic Support Equipment Systems I

Theory, application, restoration, rectification, and renovation of electrical and mechanical apparatus used for therapeutic procedures; includes dental operating, ultrasonic, electrosurgical, anesthesia, and inhalation therapy systems.

BET 1320 Therapeutic Support Equipment Systems II

Theory, application, technical analysis, rectification, and renovation of electrical and mechanical apparatus used for therapeutic procedures; includes infusion devices, diathermy, infant incubator/isolette, dental laboratory, suction and pressure, sterilization, ultrasonic cleaning, and surgical/obstetrical suite environmental systems.

BET 1321 Diagnostic Support Equipment Systems

Inspection, operation, troubleshooting, repair, and testing of tissue-processing, optical-magnifying, centrifuge, electronic particle counting, spectrophotometric, and flame photometer systems.

BET 1323 Diagnostic Support Radiographic Systems

Radiation physics and safety; design/maintenance of advanced diagnostic radiographic systems; and inspection, operation, troubleshooting, repair, and testing procedures applicable to medical/dental radiographic systems.

BET 1324 Physiological Monitoring Systems

Operation, inspection, analysis, and repair of hearing measurement, cardiac measurement, and other physiological monitoring systems.

BET 1325 Field Equipment Support Systems

Maintenance, operation, and inspection of power production, distribution, lighting, forced-air, heat/air-conditioning, and refrigeration/steam generation systems.

BET 2308 Advanced X-Ray Principles

Principles and procedures used for installation, troubleshooting, repair, and calibration of x-ray systems. Includes image intensifier principles, closed-circuit television, dental x-ray, and three-phase radiologic systems.

BET 2318 Installation and Maintenance of X-Ray Systems

Practicum in setting up, troubleshooting, and repairing advanced radiologic systems, image intensifiers with closed-circuit television, and automatic collimator systems.

BET 2322 X-Ray System Technology

Preinstallation surveys; procurement, installation, and calibration of x-ray systems; radiographic and fluoroscopic principles; and Bureau of Radiological Health Compliance testing.

BET 2401 Managerial Functions in Biomedical Equipment

Biomedical equipment manager responsibilities, workload and manpower management, administration of contractual and financial matters, employee development, maintenance and supervision of equipment, safety programs, and information management.

Carpentry

CAR 1501 Introduction to Carpentry

Construction materials, drawings, and technical publications. Selection of handtools and cutting materials for cabinet construction, joint fitting, surface sanding, and cabinet assembly.

CAR 1503 Building Construction

Light frame construction; includes scaffold, foundation, form, roof, porch, and stair construction.

CAR 1504 Building Finishing Work

Installation of building finishing materials including roofing, doors, windows, interior walls, flooring sizing, vents, louvers, insulation, and prefabricated units; erection of prefabricated buildings; heavy timber construction; and man-hour and material cost estimates.

CAR 1505 Structural Contingency Training

Damage assessment and repair of runways, facilities, and fencing. Includes surface marking, construction of culverts, tent hardbacking, and contingency responsibilities of civil engineering personnel.

CAR 2801 Advanced Roofing Repair

Roof construction; includes selection of materials, tar kettle operation and inspection, and removal/repair of damaged roofs.

Chemical Decontamination and Control

CDC 1501 Chemical Defense and Decontamination

Chemical defense procedures for ground crews; includes use and maintenance of protective equipment and organizing/managing protective shelters and contamination control areas. Includes simulated shelter exercises.

Applied Chemistry

CHE 2404 Applied Technical Chemistry

Chemistry principles with theoretical and practical applications; includes periodic table, chemical compounds, bonding, states of matter, chemical reactions, and solutions. Includes radiochemistry, chemical and gas analyses, and spectrometers and chromatographs.

Civil Engineering

CIV 1101 Civil Engineering Organization and Work Force Management

Functional responsibilities associated with various base civil engineering operations and management; principles of work information management and civil engineering materiel acquisition systems including capabilities of each; total quality management including awareness, process improvement, and quality focus; real property maintenance requests, job orders, service calls, and work orders; career field structure, progression, and ladder; safety and security; and contingency responsibilities of civil engineering personnel.

CIV 1102 Work Scheduling and Programming Resources

Basic procedures used in material research and preparation for various types of work associated with base civil engineering support and preparation of inservice work plans and programs.

CIV 1150 Technical Engineering

Introduction to drafting and conventional surveying. Includes drafting sketches; pictorial views; architectural and engineering drawings; basic survey, horizontal, and directional distance measurements; differential and trigonometric elevations; topographic surveying and mapping; road, building, and utility layout; contingency operations; and total quality management.

CIV 1151 Structural Apprentice

Introduction to structural repair. Includes construction drawings and specifications, mathematics, tools, woodworking, forming and reinforcing, concrete, masonry, framing, stair construction, interior and exterior finishing, composition shingles, heavy timber bridges, pre-engineered building, doors and windows, suspended ceilings, floor and wall tile, interior trim, drywall, demolition, structural layout, sheet metal fabrication, doors and gates, welding, and contingency operations.

CIV 1501 Introduction to Site Development

Surveying; includes application of related mathematics, emphasizing trigonometry/mathematical applications to surveying, calculators, and metric system.

CIV 1504 Basic Drafting

Operating reproduction machines, lettering, line weights, dimensioning, and sheet layout.

CIV 1507 Multiview Drawings

Construction of multiview drawings; includes geometric principles, orthographic projections, and isometric drawings.

CIV 1508 Engineering Drawings

Interpretation of basic engineering drawings to include blueprint reading; architectural plans and details; and structural, mechanical, electrical, and curl engineering drawings.

CIV 2104 Work Planning

Procedures used in material research and preparation. Includes planning of structure; selecting proper protective coating, electrical, plumbing, metal, and masonry materials; managing multishop work; and preparing various management reports.

CIV 2106 Mechanical and Electrical Design

Estimation and design of mechanical/electrical systems based on preliminary facility construction criteria. Includes plumbing, heating, and air-conditioning.

CIV 2502 Civil Engineering Functions and Automated Management System

Civil engineering organization emphasizing functional responsibilities; includes programming of maintenance and repair requirements, purpose of automated management system, and use of system products.

CIV 2508 Construction Management

Contract management; includes material and equipment acceptance, workmanship, operational testing, and report preparation.

CIV 2509 Soil Engineering and Pavements

Soil identification to include listing specific gravity and grain size, moisture states and soil classification system, compaction control, California Bearing Ratio, density determination, field identification, and soil exploration; includes flexible and rigid pavements.

CIV 2510 Design Requirements

Analysis of engineering design documents; includes sizing members for required strength, cost estimating, and master planning.

CIV 2514 Construction Materials and Methods

Application of related mathematical functions and blueprint reading; includes concrete, masonry, metals, wood, plastic, and thermal/moisture protection. Application of related mechanical/electrical materials.

CIV 2516 Survey Computations

Analysis of trigonometric functions, traverse data, earthwork volumes, grade stakes, road curves, and distances.

CIV 2517 Architectural and Structural Design

Preparation of required program documents, design sketches, and architectural/structural working drawings as well as use of mix data. Preparation/ testing of plastic concrete for slump and air content and use of mixed concrete to prepare cylinder and beam test specimens.

CIV 2519 Civil Engineering Management

Civil engineering force management, resources, and training. Includes advanced topics in environmental awareness, manpower assessment, scheduling, evaluation of contracts and projects, budgeting, development of job qualification standards, determination of job proficiency, and establishment of upgrade qualification training programs.

CIV 2520 Contract Construction Inspector

Construction inspector role, blueprints, contract documentation, government furnished property, preperformance conferences, material submittals, warranties, guarantees, surveillance, acceptance procedures, safety, environmeotal awareness, and site work. Includes inspection requirements for flexible and rigid pavements, masonry, metals, thermal/ moisture protection, woods, finishes, doors, windows, and mechanical and electrical systems.

Cardiopulmonary Laboratory Technology

CLT 1304 Fundamentals of Cardiopulmonary Anatomy and Physiology

Cardiovascular and pulmonary anatomy/physiology and dysfunction, intrinsic and extrinsic regulation, and acid-based physiology.

CLT 1305 Introduction to Cardiovascular Diagnostic Principles

Practice in invasive diagnostic cardiac catheterization. Physical principles governing such noninvasive cardiovascular diagnostics as electrocardiography, echocardiography, apex/phonocardiography, stress testing, and vector cardiography. Interpretation/management of electrocardiographic arrhythmia.

CLT 1306 Introduction to Pulmonary Diagnostic Principles

Fundamentals of gas laws and respiratory dynamics. Assessment of pulmonary functions making use of spirometry, diffusion, lung volume, airway resistance, flow/volume loops, compliance, and blood gases.

CLT 1307 Introduction to Respiratory Therapy

Principles of medical gases; specific medications used in respiratory therapeutics; physiological application of ventilatory support; and management of acute cardiopulmonary emergencies.

CLT 1308 Introduction to Cardiopulmonary Management

Management of cardiopulmonary emergencies, Joint Commission for Accreditation of Healthcare Organizations standards, medical record documentation, medical computer system, Occupational Safety and Health Administration standards, and basic cardiac life support.

CLT 2305 Introduction to Cardiopulmonary Instrumentation

Procedures and safety practices used in clinical application of blood gas analyzers and emergency equipment.

CLT 2306 Cardiovascular Noninvasive Diagnostic Procedures

Dynamic electrocardiography, stress testing, echocardiography, vectorcardiography, and apex/phonocardiography. Interpretation of medical findings, emergency procedures, and procedures for referral of cases.

CLT 2307 Cardiovascular Invasive Diagnostic Procedures

Clinical procedures for obtaining data during coronary arteriography and cardiac catheterization. Specialized biographical transducers and sensing devices, cardiac output and shunt flow systems, blood analyzers, computer systems, cineangiographic equipment processors, x-ray fluoroscopic equipment, and videotape recording system.

CLT 2308 Pulmonary Diagnostic Procedures

Clinical procedures for arterial puncture and blood gas analysis, calculation of results, and recognition of valid/invalid testing.

CLT 2309 Advanced Pulmonary Diagnostic Procedures

Assessment of pulmonary dysfunction as measured by lung volume, diffusion capacity, flow/volume loops, airway resistance, compliance, maximum oxygen, and ventilation/perfusion ratio, and use of computer/calculator systems to develop data tables and formulas.

CLT 2310 Clinical Respiratory Therapy

Recording patient history and physical condition, monitoring treatment, completing referral procedures, recognizing adverse reactions to medications, sterilizing and operating oxygen equipment, and performing fiber-optic bronchoscopy.

CLT 2311 Advanced Respiratory Therapy

Operation and maintenance of mechanical ventilators and augmentative devices, evaluating patient/ventilator interaction, maintaining patient's airway, and practice in weaning, referral, and emergency procedures.

CLT 2312 Cardiopulmonary Laboratory Management

Practices in cardiopulmonary laboratory operations. Demonstrated knowledge of regulatory and accreditation standards, clinical quality assurance and administration, health and safety standards, medical ethics, and control of fiscal and human resources.

CLT 2313 Critical Care Air Transport

Critical care related to air evacuation and transportation of the sick and injured. Emphasis on flight operational and clinical training and altitude physiology to include stresses of flight and flight safety.

Computer Maintenance and Repair

CMR 1402 Diagnostic Testing

Analyzing and isolating electronic equipment malfunctions using computer programs; includes use of technical manuals and general/special purpose test equipment.

CMR 1740 Computer and Central Processor

Operational theory and logic, circuit diagram analysis, and preventive/corrective maintenance; includes use of general/special purpose test equipment and technical manuals.

CMR 1741 Peripheral Equipment

Operational theory and logic, circuit diagram analysis, and preventive/corrective maintenance; includes use of general/special purpose test equipment and technical manuals.

CMR 1744 Data-Processing Multiplex Equipment

Operational theory and logic, circuit diagram analysis, preventive/corrective maintenance, and trouble-shooting; includes use of general/special purpose test equipment and technical manuals.

CMR 1746 Computer Maintenance

Operational theory and logic, circuit diagram analysis, corrective/preventive maintenance, and trouble-shooting; includes use of handtools, general/special purpose test equipment, and technical publications.

CMR 1748 Video Monitor Principles

Operational theory and logic of cathode-ray tube and associated circuits, circuit diagram analysis, corrective and preventive maintenance, and troubleshooting; includes use of handtools, general/special purpose test equipment, technical manuals, and applicable safety procedures.

CMR 1749 Line Printer Maintenance

Operational theory and logic, circuit diagram analysis, corrective/preventive maintenance, and trouble-shooting; includes use of handtools, general/special purpose test equipment, and technical publications.

CMR 1752 Computer Console Theory

Systems analysis and operation; includes keyboard inputs, control panel functions, logic, and circuit diagram analysis.

CMR 2101 Automated Systems Operation

Overview of computer fundamentals involving computer operating systems, computer system configuration, networking principles, and database management for local/wide area network environment. Includes operational theory of digital switching equipment, modems, data transmission principles, Ethernet bridge components, multiplexing devices, and associated signal/data-processing hardware.

CMR 2102 Automated Systems Maintenance

Analysis of computer network and system equipment operation to identify, isolate, and repair faulty hardware/software using diagnostic tests, debugging and troubleshooting techniques, general/special purpose test equipment, specific system/software manuals, and associated spare equipment.

CMR 2702 Memory Systems

Operational theory and logic, circuit diagram analysis, and malfunction diagnosis of computer memory systems.

CMR 2711 Timing and Control Systems

Operational theory and logic, circuit diagram analysis, preventive/corrective maintenance, and trouble-

shooting; includes use of general/special purpose test equipment and technical manuals.

CMR 2714 Data-Processing Equipment

Operational theory and logic, circuit diagram analysis, preventive/corrective maintenance, and trouble-shooting; includes use of general/special purpose test equipment and technical manuals.

CMR 2733 Data-Display Equipment

Operational theory and logic, circuit diagram analysis, preventive/corrective maintenance, and trouble-shooting; includes use of handtools, general/special purpose test equipment, technical manuals, and applicable safety procedures.

CMR 2751 Input and Output Control

Principles of data flow and timing; includes logic, circuit diagram analysis, and diagnosis of system malfunctions.

CMR 2770 Computer Systems

Advanced operational theory and configuration; includes data flow, logic, circuit diagram analysis, system operation, and diaguosis of system malfunctions.

CMR 2774 Tape Storage Systems

Operational theory and logic, circuit diagram analysis, preventive/corrective maintenance, and trouble-shooting; includes use of handtools, general/special purpose test equipment, and technical manuals.

CMR 2777 Display Electronics

Theory of display sweep, azimuth, and deflection circuits; includes ball tab and cursor, lines and leaders, display programmer, symbol integration, alpha-numeric positioning, data conversion, and pulse and video distribution.

CMR 2782 Disk Storage Systems

Operational theory and logic, circuit diagram analysis, preventive/corrective maintenance, and trouble-shooting; includes use of general and special purpose test equipment and technical manuals.

Communications

COM 1100 Communications System Operation

Operational theory of command communications systems including data and broadcast transmitting/receiving systems.

COM 1101 Key System Installation and Maintenance

Principles of operation, circuit analysis, installation, and fault isolation of key systems and associated equipment; includes safety procedures, technical publications and use of handtools and general/special purpose test equipment.

COM 1102 Solid-State Key System Installation and Maintenance

Principles of operation, circuit analysis, installation, and fault isolation of solid-state key systems and associated equipment; includes safety procedures, technical publications, and use of handtools and general/special test equipment.

COM 1400 Electronic Communications Theory

Transmitter and receiver systems; includes electronic principles, transmission lines, and antennas.

COM 1403 Radio Communications Theory

Transmitter principles, receiver tuning and operation, antenna, wave propagation, and communications procedures.

COM 1404 Communications Network Equipment Operation

Network equipment operating techniques/procedures for ensuring continuity, reliability, and speed of service; operation of relay station equipment, and concepts of operation of technical control facilities.

COM 1412 International Morse Code

Basics of international Morse code with laboratory.

COM 1427 Electronic Recorder and Reproducer Fundamentals

Audio and digital systems; includes theory of operation, fundamental applications, logic, schematic

analysis, malfunction isolation, corrective maintenance, and alignment procedures.

COM 1432 Ground Electronic Digital Timing Systems

Receivers, oscillators, counters, amplifiers, indicator units, and associated power supplies; includes theory of operation, functional applications, logic, schematic diagram analysis, malfunction isolation, corrective maintenance, and alignment procedures.

COM 1433 Airborne Radio Operations

Operation of various airborne radio communications systems and related electronic equipment.

COM 1439 Electronic Digital Communications Control Systems

Frequency shift converters, wire-line modulators/demodulators, digital-to-digital converters, control interfacing, radio modulators/demodulators, and associated power supplies. Includes theory of operation and functional applications, logic, schematic diagram analysis, malfunction isolation, corrective maintenance, and alignment procedures.

COM 1465 Communications Center Computer Functions

Computerized communications principles and communications center operational concepts with emphasis on use of optical character reader, disk storage unit, and magnetic tape unit.

COM 1466 Communications Security Analysis

Basic principles of communications security; includes intelligence structure, communications procedures, equipment, and applied electronics.

COM 1467 Command and Control Communications Countermeasures

Concepts and issues; identification of threats, capabilities, criticality, and vulnerability for both tactical and strategic command, control and communications; and interrelated responsibilities of communications intelligence and operations.

COM 1468 Command Post Fundamentals

Operation of voice and data information systems and procedures used for command and control reporting.

COM 1713 Telephone Fundamentals

Principles of telephony and sound; includes security, safety, maintenance management procedures, and use of general/special purpose test equipment and technical publications.

COM 1714 Electronic Telephone Switching

Four-wire communications, radio signaling, safety procedures, and fault isolation and repair/use of handtools and general/special purpose test equipment.

COM 1717 Introduction to Telephone Switching Systems

Principles of telephone operation, switching system fundamentals, basic circuit analysis, safety, and use of technical publications.

COM 1718 Fundamentals of Switch Marker

Block diagram analysis of switch matrix, time generator, transfer check and trouble access circuits; includes sequencing, common control call for service, line and trunk circuits (two-and four-wire), preventive maintenance routines, supervisory circuits and panels, and fault report interpretation.

COM 1719 Fundamentals of Common Control

Block diagram analysis of memory layout and addressing, register control circuits, call processing, final connection, peg count, trunk scanner, and memory programming.

COM 1720 Telephone Substation Installation

Terms, materials, specifications, telephone service orders, and conduit specifications; includes splicing drop wire, installation of substations and telephone instruments, and troubleshooting techniques.

COM 1723 Telephone Equipment Maintenance

Malfunction analysis and repair of basic telephone circuits, main distribution frames, and miscellaneous telephone equipment; includes use of safety procedures, handtools, and general/special purpose test equipment.

COM 1729 Pole Climbing Fundamentals

Care and use of climbing equipment, climbing techniques, first aid and general safety procedures, use of rope ties and splices, and raising/securing aerial

splicing equipment; includes use of handtools, cable cars, and technical publications.

COM 1730 Conductor Splicing

Principles of cable plant and communications cables and fundamentals of telephony; includes sealing cable ends, preparation of cables for splicing, and conductor splicing techniques.

COM 1733 Underground Cable Splicing

Analysis of cable plant maps and splicing diagrams; includes splicing techniques, safety procedures, and use of general/special purpose test equipment and technical publications.

COM 1734 Aerial Cable Splicing

Analysis of cable plant maps and splicing diagrams; includes splicing techniques, safety procedures, and use of general/special purpose test equipment and technical publications.

COM 1735 Cable Pressure Systems

Use of manometer pressure testing gauges and gas flow indicators, leak location, flow analysis, and connection/adjustment of contractor terminals; includes installation of pressure plugs, flanges, and valves.

COM 1741 Miscellaneous Telephone Equipment

Circuit analysis, maintenance, and repair of supervisory circuits, toll test equipment, automatic trunk router, power equipment, and office router; includes cabling and cross-connecting procedures.

COM 1754 Circuit Conditioning

Theory and operation of circuit-conditioning equipment used in telecommunications systems.

COM 1755 Communications Equipment Maintenance

Principles of operation, configuration, circuit analysis, and fault isolation; includes use of special/general purpose test equipment, technical publications, and handtools.

COM 1756 Telecommunications Systems

Analysis of electronic signals as applied to communications circuits; includes modulation and multiplexing applications, radio-wave propagation, networking principles, technical control operation, and reporting procedures.

COM 1757 Telecommunications Systems Testing

Test and measurement techniques used in circuit conditioning; includes systems analysis, alignment, adjustment, malfunction isolation, and use of general/special purpose test equipment.

COM 1759 Fiber-Optic Cable Splicing

Procedures and techniques for splicing, sealing, and testing fiber-optic cable; includes principles of fiber-optic systems, fusion and mechanical splices, and use of optical time domain reflectometers.

COM 1760 Cable Splicing and Sealing

Procedures and techniques for splicing, sealing, and testing lead and plastic sheathed cable; includes general/special purpose handtools, safety and straight, bridge, and butt splicing using auxiliary and lead sleeves.

COM 2100 Communications System Operations/Maintenance

Communications systems maintenance, management, and administration. Automation of record communications to include video, text, and voice. System administration includes maintenance of system and subordinate menus and hardware.

COM 2101 Advanced Command and Control Operations

Command post operations and communications security requirements. Includes development of operational checklists, control of classified information, physical security, communications, and supervision and training responsibilities.

COM 2411 Frequency Management Applications

Principles and techniques of applying frequency spectrum management controls. Includes organization and specific functions of international, national, and

Department of Defense agencies with practical application coordinating with and reporting to these agencies.

COM 2412 Systems Planning and Engineering

Propagation predictions, interference factors, and path reliability for various communications systems; includes site planning, selection, surveying, and use of system design parameters.

COM 2707 Telephone Outside Plant Fundamentals

Principles of pole climbing; basic rigging procedures; applicable safety procedures; fundamentals of AC and DC; Ohm's law and DC circuits; physical characteristics of communications cable; procedures for locating buried cable; and use of construction tools, multimeters, and megohmmeters.

COM 2708 Antenna Installation

Antenna construction, elementary surveying, lightning protection, guy fabrication and installation, and erection of antenna support poles.

COM 2709 Antenna Maintenance Fundamentals

Maintenance and installation of doublet, rhombic, discone, and UHF/VHF antennas. Introducing coaxial cable types, pressurization of transmission lines, inspection, and testing.

COM 2723 Cable Testing

Maintenance of cable system records, strip maps, route markers; use of frequency generators, multimeters, and Wheatstone bridge; includes location and tracing of buried cable, fault location, excavation and backfilling procedures, insulation resistance measurement/calculation, and use of security procedures.

COM 2725 Cable Construction and Installation

Aerial cable specifications in staking pole lines and distributing lines; erecting poles, guying, bracing, and anchoring, suspension strand installation; lashing aerial cable; terminal and stepping pole installation; and installation of buried cable. Includes use of technical publications, maintenance schemes, cable records, diagrams, cable car, and safety procedures.

COM 2733 Tactical Air Control Network Operations

Management of tactical air missions, communications operations, and weapons systems; includes weather report analysis.

COM 2734 Satellite Communications (SATCOM) Operation

Theory associated with technical aspects of SATCOM control and hypothetical problem-solving situations.

COM 2736 Introduction to Digital Switching Systems

Theory of telephone operation and call progression using applicable technical manuals; includes digital-to-analog/analog-to-digital conversions, time division multiplexing, peripherals, power equipment, and alarm circuits.

COM 2737 Digital Switching Systems

Basic principles of log utility module; translations used in call progression; and use of digital switching systems, database facilities, and data tables.

COM 2738 Digital Switching Systems Maintenance

Manual/automatic testing, inspection, trouble-shooting, and operation of digital switching equipment.

COM 2739 Communications Network Evaluation

Systems analysis to include applicable mathematics, transmission line theory, signal distortions, line conditioning, digital theory, multiplexing, modulation, and computer and switching systems.

COM 2740 Communications Network Testing

Practical approach to systems analysis; includes use of general/special purpose test equipment and technical manuals.

COM 2741 Digital Switching Systems Administration

Introduction to duties and responsibilities of systems administrator, interpretation of reports, and record documentation. Includes fundamentals of transmission lines and line testing.

Contracts

CON 1616 Introduction to Contract Administration

Procedures for contracts, purchase requests, sole source justifications, and contract sources; includes Small Business Program purchase procedures, functions of systems management branch, automated file lists, and maintenance of contract files.

CON 1617 Introduction to Contract Law

Legal terminology and elements of contracts including requirements and specifications, work statements, bonds, insurance, contract clauses, types of contract selection, modification, and termination, Government contracts versus private contracts, legal aspects of agency labor laws, and contract disputes and remedies.

CON 1628 Programs and Management

Automated/nonautomated procurement programs, computer input/output products and inquiries; includes management of integrated automated procurement programs.

CON 1633 Materiel Systems Management

Management of supplies, equipment, records, and finances, and support of maintenance activities.

CON 1643 Introduction to Government Contracting

Government contracting authority and responsibility including standards of conduct, security within contracting field, publications, and contract law.

CON 1644 Introduction to Small Purchases

Processing small purchase contracts including an understanding of small purchase policies and methods, procedures for nonappropriated fund purchases, modification of contracts, and small purchase administration.

CON 1645 Introduction to Contract Solicitation

Administration of contract solicitations including formal advertising, selecting bids, evaluating and awarding bids, contract compliance checks, and negotiation exceptions and corrections.

CON 1646 Contract Procedures

Procurement instrument identification numbering and procedures for acquisition instruments, customer-integrated automated purchasing system, and automated contracting. Basic cost analysis, fair and reasonable cost/price analysis, and use of competition.

CON 2109 Introduction to Contracting

Fundamentals of Government contracting. Includes contract law; planning, programming, and budgeting; types of contracts; contracting sources; methods of contracting; formal advertising/negotiation; small purchases and general contracting policies; uniform contract format; contract preparation; and file documentation.

CON 2114 Acquisition Fundamentals

Fundamentals of system acquisition from statement of operational need through program management responsibility transfer. Includes acquisition life cycle; ethics; program management and control; engineering; logistics; manufacturing quality assurance; test and evaluation; program transition; acquisition of communications-computer systems; total quality management; science and technology; and acquisition policies, initiatives, and trends.

CON 2607 Principles of Contract Administration

Procedures for administering contracts. Includes types of contracts; work statements; specifications; purchase descriptions; small purchase administration; quality assurance; warranties; foreign acquisitions; contract clauses; finance procedures; liquidated damages; contract modifications and disputes; contract negotiation methods; contract review, termination, and pricing; and accounting procedures.

CON 2611 Contract Advertising

Methods of soliciting and opening bids and awarding contracts; includes preparing invitations for bid, preinvitation notices, prebid conference procedures, release of contracting information, evaluation and award of bids, and resolution of protests against awarded contract.

CON 2613 Base Contract Procedures

Appropriate procedures pertaining to Government contracts. Includes contract publications and comptroller general decisions, contract sources and sole source justification, contract characteristics and numbering, and automated procedures associated with Customer Integrated Automated Purchasing System.

CON 2614 Utility Contracts Administration

Laws, regulations, and publications applicable to regulated and nonregulated suppliers. Includes utility contract team responsibilities; prenegotiation preparation; contract requirements and specifications; connection charges and termination liabilities; utility rate schedules and analysis; and contract preparation, negotiation, and administration.

CON 2616 Base-Level Service Contracting

Advanced service contracting policies, contract requirements, and surveillance planning. Includes case study on conducting job analysis, developing contract surveillance checklists, and evaluating contractor performance.

Corrosion Control

COR 1501 Corrosion Control

Identification of characteristics of metals and alloys, causes and types of corrosion, and mechanical/chemical removal of corrosion.

COR 1506 Fundamentals of Metallic Corrosion

Aerospace equipment, technical manuals, maintenance management, characteristics of metals, and corrosion principles.

COR 1507 Metallic Corrosion Control

Preparation of metal surfaces; includes corrosion inspection, preparation of fiberglass surfaces, mechanical and chemical corrosion removal, and surface treatment.

COR 1508 Metallic Protective Coatings

Practical care and use of coating equipment; includes determining composition of coatings, application of coating system, and identification of aerospace equipment markings.

COR 2501 Corrosion Control Laboratory

Application of preservatives and surface preparation; includes protection from environmental factors, measuring effects of temperature and humidity, analysis of corrosive factors, use of toxins and caustic agents, and compatibility of materials.

Cytology

CYT 1101 Cytology

Study of cells and changes caused by disease conditions. Determination of typical cells through systematic microscopic slide examination; staining of cytology specimens; examination of body fluids; interpretation of cytological changes; and preparation of smears, cell blocks, and microporous filters. Abnormal findings referred to pathologist for review.

Dental Specialist

DAS 1305 Basic Dental Sciences

Facial, cranial, and intraoral anatomy; tooth morphology; elementary physiology and chemistry; dental disease; infection control; and provider/patient relations.

DAS 1306 Clinical Procedures

Restorative and four-handed dentistry techniques and procedures, clinical/general emergency care, and dental instrument use. Use of materials and application of administrative regulations and procedures to dental record maintenance and patient scheduling.

DAS 1314 Preventive Dentistry Sciences

Periodontal anatomy, microbiology, progression of periodontal disease, anticariogenic agents, anomalies, patient psychology, and chairside counseling.

DAS 1315 Preclinical Procedures

Introduction to dental radiography, diagnostic and emergency dental procedures, clinical operations, surgical assisting procedures, and cardiopulmonary resuscitation.

DAS 1316 Clinical Phase

Oral hygiene techniques, operative assisting duties, and dental radiography emphasizing radiation exposure techniques and safety.

DAS 2101 Dental Clinic Administration

Dental clinic administration, management, and logistics. Includes computer applications, professional relations, training programs, acquisition and management of equipment and supplies, dental health records, and management of periodic dental examination programs.

DAS 2314 Advanced Dental Sciences

Head, neck, and oral anatomy; general/oral physiology; pathological/systemic disorders; dental therapeutics/ emergencies; nutrition; and infection control procedures.

DAS 2315 Advanced Dental Hygiene I

Preclinical dental hygiene techniques, concepts/ philosophies of preventive dentistry, progression of periodontal disease, and principles of calculus formation and dental caries.

DAS 2316 Advanced Dental Hygiene II

Treatment of oral hygiene and periodontal patients, finishing/polishing of metallic restorations, topical fluoride application, placement of pit and fissure sealants, and patient communication.

DAS 2317 Dental Administrative Procedures

Dental patient and record management, oral/ interpersonal communication, data automation, and resource management.

DAS 2318 Advanced Dental Oral Hygiene Management

Management of periodontal maintenance program, identifying administrative tasks, documenting periodontal status, charting, health and safety concerns, and professional and patient relations.

DAS 2319 Advanced Dental Oral Hygiene Clinical Skills

Didactic and clinical skills necessary in treatment and maintenance of periodontal disease through radiographic exams, referrals for oral lesions, scaling and root planing techniques, and patient education and motivation. Includes periodontal probing, plaque and calculus detection, use of disclosing solutions, healthcare instructions, infection control procedures, instrument sharpening, hand and ultrasonic instrumentation, fluoride therapy, dental sealants, and use of other ultrasonic devices.

Dental Laboratory Technology

DLT 1317 Dental Laboratory Fundamentals

Basic dental materials, equipment, and procedures for cast fabrication; morphology of natural teeth; intraoral anatomy; physiology of human skull; dental forms and records; ethics; and human relations.

DLT 1318 Complete Dentures I

Fabrication of master casts, base plates, and occlusion rims; mounting of casts; selection/arrangement of artificial teeth; and final wax-up, contouring, processing, and finishing of complete dentures.

DLT 1319 Complete Dentures II

Nonanatomic denture occlusion; complete denture reline/repair; and fabrication of immediate dentures, surgical templates, interim acrylic removable partial denture, and soft mouthguard.

DLT 1320 Construction of Removable Partial Dentures I

Principles of dental survey and design, casting of metal removable partial dentures, preparation and fabrication of metal frameworks from wax-up, and casting through finishing.

DLT 1321 Construction of Removable Partial Dentures II

Tooth arrangement on metal frameworks, wax-up and contouring of denture base, processing and finishing of acrylic portions, partial denture repair, and orthodontic appliances.

DLT 1322 Construction of Inlays, Crowns, and Fixed Partial Dentures I

Occlusion, creation of stone casts and dies, use of wax additive technique, and casting and finishing of gold alloys.

DLT 1323 Construction of Inlays, Crowns, and Fixed Partial Dentures II

Fabrication, assembly, and soldering procedures used in construction of inlays, crowns, fixed partial dentures, and acrylic resin crowns.

DLT 1324 Dental Ceramics

Metal ceramic single-unit restorations; wax-up, casting, and finishing of metal substructure; and application, firing, contouring, and glazing of porcelain.

DLT 2101 Dental Laboratory Administration

Dental service administrative functions and dental laboratory management. Includes computer applications, professional relations, training programs, acquisition and management of equipment and supplies, establishment of laboratory fabrication standards, and workload management.

DLT 2310 Porcelain and Metal Ceramic Restorations

Advanced theory and construction of dental porcelains and porcelain jacket crowns, substructure design, ceramic alloys, intrinsic/extrinsic color modification, and building/contouring of opposing porcelain occlusions to include extensive bridgework.

DLT 2314 Advanced Removable Prosthodontics

Survey and design, articulation, tooth arrangement, processing and recovery of complete and partial dentures; orthodontics appliance; and hard night guard.

DLT 2315 Functional and Esthetic Fixed Prosthodontics

Pouring and articulating of dies and master casts, creation of functional anatomic and metal-ceramic

wax-up, investing and burning out wax-up, casting metal, and applying porcelain.

Disaster Preparedness

DPO 1100 Nuclear Emergency Team Operations

Potential hazards of nuclear weapons accident to include biological effects of radiation and airborne radioactivity. Basic nuclear physics, radiation principles, contamination control station concepts, nuclear weapon accident response procedures, medical aspects of radiation, and exercises and decontamination proccdures using radiological equipment.

DPO 1101 Disaster Control Fundamentals

Organization of disaster control program. Includes planning procedures and publications; emergency preparedness measures; shelter theory and management; recognizing and managing natural disasters, civil disturbances, and dangerous materials; implementing emergency exercises; and procedures in major accident response exercises.

DPO 1102 Disaster Preparedness

Elements of disaster preparedness program including planning and management. Includes deployment and contingency operations, organization and responsibilities, personnel and equipment preparation, and unit management.

DPO 1103 Disaster Preparedness Application

Disaster preparedness unit survey program, exercises and evaluations, peacetime operations for major accidents and decontamination procedures, wartime defensive operations for nuclear and chemical attack, shelters, decontamination, and protective equipment and maintenance. Analysis of disaster preparedness programs and decontamination exercises.

DPO 1104 Warfare Defense

Nuclear, conventional, chemical, and biological warfare defense including wartime threat assessment, defensive measures, chemical/biological protective equipment, and chemical agent detection/ decontamination. Control center operations including warfare agent, hazard, and fallout prediction.

DPO 1105 Nuclear, Biological, and Chemical Cell Operations

Familiarization with nuclear, biological, and chemical cell operations. Includes report and warning organization, messages, mapping, chemical hazard prediction, and fallout predictions.

DPO 1106 Emergency Operations

Notification, response, withdrawal, and recovery phases of emergency operations including major accidents, both nonnuclear and radiological, and natural disaster operations.

DPO 1350 Disaster Medicine

Medical responsibilities and capabilities, physical and medical effects of peacetime nuclear weapon accidents, and chemical/biological warfare medical defenses.

DPO 1351 Disaster Preparedness

Disaster planning; includes analyzing problems encountered and determining medical role, sociological aspects, and Federal and local roles. Disaster casualty control planning and development of disaster/ emergency medical training program and evaluation of simulated disaster exercises.

DPO 2100 Disaster Preparedness Programs

Analysis of research and development, protective shelter concepts and procedures, major accident/ incident procedures, defense concepts, training and education requirements, reporting procedures, budgeting, and disaster preparedness planning routines.

DPO 2101 Effects of Nuclear Weapons

Analysis of nuclear weapon theories.

DPO 2102 Advanced Disaster Preparedness

Wartime operations including threat analysis and readiness postures; nuclear, biological, and chemical control center operations; passive defense; readiness mobility program; chemical/biological warfare defense; live agent training; and command and control. Peacetime operations including readiness flight management, major accident response, readiness training, and logistics.

DPO 2103 Disaster Preparedness Refresher

Advanced operational procedures and techniques. Includes new equipment; emergency information system; threat updates; and nuclear, chemical, biological, and conventional warfare defense concepts and operations.

DPO 2200 Airbase Operability

Processes and procedures to keep an airbase operable during peacetime/wartime disasters. Includes airbase management, planning, and operational exercises under adverse circumstances.

Data Systems

EDP 1101 Principles of Data Processing

Techniques, functions, and methods of data input to and retrieval from data systems; includes coding data punch cards and operation of remote terminals.

EDP 1104 Principles of COBOL Programming

Program organization, language structure, data organization, reference formats, table-handling and sorting techniques, identification, environment, data, and procedure division structure.

EDP 1106 Principles of Computer Operation

Introduction to basic components and features of computers, flowcharting, programming languages, numbering and coding systems, assembly, applications, and computer security.

EDP 1112 Computer Data Handler

Techniques, principles, functions, and methods of input for data-handler system; includes data punch-card coding and report generation.

EDP 1113 Data-Processing, Inquiry, and Retrieval Systems

Basic functions and characteristics of computer systems; operations performed by computer components from input through output; and procedures for data entry, inquiry, and retrieval. Methods required to construct, input, and retrieve data from computer using format statements.

EDP 1116 Operational Systems Utilities

Characteristics and application of systems utilities; includes system security and use of operational publications.

EDP 1117 Personnel Data Systems

System fundamentals; data flow; and use of central, local, and optional tables and management output products. Laboratory in interpreting formats, constructing and inputting immediate inquiry messages, and obtaining deferred retrieval products.

EDP 1118 Principles of Computer Systems

Introduction to digital computers and peripheral devices. Includes internal data representation and computer mathematics; basic characteristics of machine, assembler, and high-order level languages; operating system characteristics; computer facility operation; and computer security.

EDP 1122 Software System Design and Program Maintenance

File maintenance system, time-sharing, program linking and overlay, special software packages, and software systems design.

EDP 1128 Principles of Assembly Language Programming

Introduction to flowcharting, compiling, executing, and debugging programs; includes address modification, macros and pseudo-operation, file manipulation, and generation of user library.

EDP 1129 Top-Down Structured Programming

Development of support library, top-down documentation, design and implementation, structured walk-throughs, program logic, and coding.

EDP 1130 Introduction to System Software

Large-scale computer system software; includes catalog and file management software, library editor and utility software, and time-sharing procedures.

EDP 1131 Principles of Maintenance Management Information Systems

Information processing and analysis; includes preparing and inputting data and analyzing output data, file maintenance procedures, system

familiarization, subsystems, structures, Air Force online data system, system troubleshooting procedures, and processing techniques.

EDP 1132 Computer System Familiarization

Functions of computer systems; includes knowledge of computer security, electronic data processing, forms management, terminology, and organizational alignment.

EDP 1133 Remote Processing Station Computer Systems

Functions, features, characteristics, and operating procedures; includes system instructions for all peripherals and punch-card equipment, modes of processing, database management system, character representation, and procedures for interfacing with data-processing installation.

EDP 1135 Bar-Code Marking and Reading

Use of computerized bar codes for identification of materiel; includes theory of bar coding and operation and maintenance of marking and reading equipment.

EDP 1136 Microcomputer Software Applications

Microcomputer and software application; includes operating system, word-processing, spreadsheet, and database management applications.

EDP 1137 Principles of Ada Programming

Coding conventions, constants, variables, subscripts, control and specification statements, and subroutines.

EDP 1138 Information Management Systems

Introduction to information management systems and subsystem files. Includes computer and data communication terminology and work station components.

EDP 1201 Communications Computer Operator

Theory/operation of automatic digital network message equipment for receiving/sending messages. Includes message traffic routing and encryption optical card reader and scan unit, nine-track tape, paper tape, keypunch and procedures for receipt/distribution of hard copy messages.

EDP 1202 Software Engineering

Principles for developing software package for maximizing software life cycle. Emphasis on problem solving, algorithm design, and user interface.

EDP 1203 Principles of Database Applications

Principles and techniques of database design, utilization, and maintenance using commercial software on personal and mainframe computers. Use of Structured Query Language, tables, and indexes to create queries and reports.

EDP 1204 Introduction to Logistics Automated Data System

Introduction to standard base supply system with emphasis on operation and maintenance of automated data system. Includes initialization, remote processing, interfacing microcomputers, file structure, time sharing, query language processor retrievals, report generation, production control, and reject management.

EDP 1205 C Programming

Introduction to C-programming language. Interfaces between C and its environment with some emphasis on UNIX, DOS, and Windows.

EDP 1206 Principles of Object-Oriented Programming

Introductory course in object-oriented programming. Includes problem definition, strategy development, object and operation identification and implementation, and interface creation.

EDP 1400 Principles of Computer Programming

Analysis of various types of instruction, explanation and analysis of representative computer languages, performance analysis, and development of programs.

EDP 1701 Principles of Digital Techniques

Digital computer mathematics, Boolean algebra, logic circuits, and truth tables.

EDP 1702 Principles of Computer Mathematics

Decimal, binary, and octal number systems; logic functions; truth tables; adder circuits; Boolean equations; and logic diagram construction.

EDP 1706 Digital Computer Fundamentals

Operating and programming principles; includes computer mathematics, input and output devices, and digital logic.

EDP 1733 Data-Processing Equipment Operation

Theory and operation of memory units; input, output, and display systems; printers; transmitter units; error checking; and synchronization system.

EDP 1801 Computer-Aided Tactical Information System Imagery Interpreter

Fundamentals of imagery interpreter and review and validation functions.

EDP 2109 Data-Processing Systems Management

Real-time processing of messages; includes construction, maintenance, and interpretation of computer tables. Evaluation of computer data and study of mass file conversion products.

EDP 2126 Principles of JOVIAL Programming

Coding conventions; types and uses of constants; assignment, exchange, decision-making, and compound statements; modifiers; indexing; subscripts; strings; arrays; and subroutines.

EDP 2131 Advanced Assembly Language Programming

Advanced techniques; includes address modification, macros and pseudo-operations, file manipulation, and generation of user library.

EDP 2135 Database Management

Application of data access methods for input/output operations; includes coding, executing, and debugging language programs.

EDP 2136 Database Design

Advanced techniques; includes terminology, design considerations, file structure and handling, and database documentation requirements.

EDP 2152 Systems Design

Techniques and concepts of design based on state-of-the-art hardware and software computer systems. Includes security, control, and audit features; construction of decision logic tables; top-down structured programming design; and project development.

EDP 2178 Data Retrieval Systems

Advanced techniques for writing and inputting computer inquiry statements; includes coding and retrieving data to solve given management problems.

EDP 2183 Advanced Computer Networking

Theory of computer-to-computer communication; includes terminology and network configuration principles.

EDP 2184 Advanced Computer Operations

Indepth coverage of computer components and features, flowcharting, programming languages, numbering and coding systems, assembly, and computer operation.

EDP 2185 Advanced Computer Systems Analysis and Design

Computer systems development; includes data-processing system concepts, computer systems development life cycle, system feasibility studies, state-of-the-art computer technology, computer system design concepts, top-down structured design, and design documentation.

EDP 2195 Job Control Language

Production of single-step, two-step, and multi-step jobs; includes functions, features, execution, modification, and analysis of in-stream and cataloged procedures.

EDP 2201 Computer Systems Administrator

Overview of hardware, software, and operating systems. Use of systems software, database, networking, editor, and security software to customize operating environment to meet needs of using organization.

EDP 2202 Advanced Logistics Automated Data System

Advanced techniques in standard base supply system. Includes distributed communications architecture, transaction processing, database concepts and integrity, processing management, microcomputers, programming and debugging techniques, and report generation.

EDP 2203 Fundamentals of Ada Programming

Fundamentals of Ada programming language including Ada types, control structures, subprograms, packages, generics, file input/output, and tasking.

EDP 2204 Ada Programming Structures

Introduction to Ada programming structures using software engineering principles including variable types (scalar, record, array) and subprograms.

EDP 2205 Advanced Ada Programming

Advanced techniques in Ada designing and coding. Includes subprograms, packages, exception processing, type analysis (private, derived, access), input/output, tasking, and low-level features.

EDP 2206 UNIX Operating System

Introduction to UNIX operating system. Includes file system, shell, standard editor, network services, and shell programming.

EDP 2207 Network System Administrator

Local area network installation and operations. Includes local area network, wide area network, terminology, protocols, Windows environment, mail system, network administration functions, and hardware database management for users and passwords

EDP 2404 Advanced Data Inquiry and Retrieval

Application of file definition and generation tasks, task-loading routines, database recovery, file update tasks, file query function, retrieval tasks search processor, sort tasks, and output formats.

EDP 2611 Applications Programming

Advanced techniques in developing and maintaining unique software systems using executive control language, transitioning aids, debugging aids, and language processors; includes system hardware and software concepts.

EDP 2613 Computer Console Operation

Advanced operating techniques in creating, accessing, and manipulating data within a database management system using executive control language, transitioning aids, language processors, and database functions; includes system hardware and software concepts.

EDP 2614 Database Applications Programming

Advanced techniques in creating, accessing, and manipulating data within a database management system using executive control language, transitioning aids, language processors, and database functions; includes system hardware and software concepts.

EDP 2616 Database Administration and Maintenance

Advanced techniques of maintaining and administering a database management system in an operational environment with emphasis on concepts.

EDP 2619 Computer Systems Security

Procedures for administering/monitoring automatic data-processing security; includes security development, policies, duties and responsibilities, system abuse, and establishment of security training programs.

EDP 2732 Principles of ATLAS Programming

Statement and program structure, preamble statements, procedure statements, and program flow; includes laboratory in programming applications.

EDP 2803 Segment Operation

Advanced computer segment operation; includes system initialization, operational software, and operational evaluation.

Education and Training

EDT 1101 Training Resource Management

Application of management principles and concepts to satisfy organizational responsibilities for managing budget, facilities, equipment, and personnel resources. Includes comprehension of student management system, short- and long-term funding concepts, program objective memorandum, and procedures for identifying and resolving training deficiencies due to nonavailability of resources.

EDT 1102 Objective and Test Development

Theories and principles of learning, interpretation of training proficiency code keys, and correlation of objectives. Includes principles, analysis, administration, and construction of measurement items.

EDT 1501 Instructional Principles and Techniques

Learning process; includes application of communicative skills, instructional methods and aids, developmental approach, and instructional systems development.

EDT 1803 Instructor Fundamentals

Principles of lesson planning, various methods of instruction, use of instructional aids, and construction/administration of evaluations; includes learning theories. (Instruction suited to flight simulator, airborne, field, and conventional classroom environments.)

EDT 1804 Fundamentals of Speech

Principles of effective speaking. Includes organization and delivery using acceptable platform mannerisms and constructive/effective use of visual aids.

EDT 1808 Development and Management of Training Programs

Application of methods for determining training requirements: includes analyzing training data and directives, administering career development programs, determining job classification, and conducting staff visits to assist in setting up effective training programs.

EDT 1809 Use of Computers in Training

Application of computers in training/instructional programs; includes training files management, instructional systems development, and use of computer-assisted instruction principles in classroom environment.

EDT 1811 Computer-Based Instruction Development

Principles of constructing computer-based instruction using system software commands.

EDT 1812 Introduction to Computer-Based Instruction

Principles of computer-based instruction development. Includes design, specific computer language, program analysis, and application of related materials.

EDT 1813 Interactive Videodisc (IVD) Designer

Application of IVD to develop instructional materials; includes design process, specific authoring systems, program analysis, video integration, lesson conventions, flowcharts, storyboards, and scripts. Includes design/development of an IVD lesson.

EDT 2801 Instructional Systems Development

Systems analysis training requirements; criterion objectives; teaching steps and measurement devices; and planning, developing, validating, conducting, and evaluating instruction.

EDT 2802 Development and Management of Instructional Systems

Concepts and philosophies of training and educational process. Development/management techniques for effective instructional systems and educational programs.

EDT 2803 Applied Instructional Systems Development

Practical exercises in development/evaluation of an instructional system. Education/training requirements, objectives and tests, plan/validation of instruction, and evaluation of completed instructional system.

EDT 2806 Basic Counseling

Comprehension of human behavior to include adjustment mechanisms and different considerations in academic/nonacademic counseling. Application of various counseling approaches, use of referral agencies, documentation, and followup.

EDT 2807 Tests and Measurements

Test item construction to include development and correlation of objectives/standards; test item analysis; examination of characteristics of reliability, validity, comprehensiveness, and differentiation; measurement errors; test administration/proctoring; and test critique.

EDT 2809 Supervision of Instruction

Course control documents and instructional systems development, management of student academic programs, and measurement/evaluation of student and instructor performance.

EDT 2810 Advanced Technical Instruction

Modern instructional trends and innovations, analysis of problems related to teaching methodology, and application of video recorders in practice teaching exercises.

EDT 2813 Instructional Methodology

Fundamentals of teaching emphasizing proficiency in specialized skills, such as technical course writing, tests and measurements, programmed instruction, training supervision, instructional systems development, and technical academic counseling. Includes learning process, effective study methods, and audiovisual aids, such as single-concept films and automated teaching systems.

EDT 2814 Practice Teaching

Supervised application of teaching techniques and instructional methodology in regularly scheduled classes.

EDT 2823 Technical Writing

Techniques that enhance skills and knowledge in writing technical training materials; includes review of basic grammar and English composition with practical exercises in researching, organizing, and writing technical materials.

EDT 2824 Instructional Processes

Administration of programmed instruction; includes curriculum analysis, construction of objectives, and course validation and evaluation.

EDT 2834 Staff Development Trainer

Practice in conducting on-the-job training; includes comprehension of learning process, application of evaluation techniques, and comprehension of the role of job training.

EDT 2835 Staff Development Manager

Job classification procedures, job proficiency, training records, and on-the-job training programs.

EDT 2838 Resident Course Development

Resident training material planning/development; includes writing behavioral objectives and criterion-referenced tests and planning, writing, and editing a complete manuscript for an assigned unit of instruction.

EDT 2839 Correspondence Course Development

Preparation of correspondence course materials. Includes writing behavioral objectives; developing review exercises; preparing/using illustrations; using copyrighted material; and researching, planning, and writing correspondence courses.

EDT 2840 In-flight Instructor Training

In-flight training; includes observing and practicing instructional role under actual flight conditions.

EDT 2842 Training Management Supervision

Dual channel on-the-job training concept, training needs, management of related automated products, accomplishment of a master training plan, individual training records, and training assistance visits.

EDT 2843 Development and Application of Occupational Survey Data

Practice in constructing and administering occupational surveys for instructors and other training personnel. Includes use of occupational measurement centers, services, and products; development of job inventories; and analysis, validation, processing, and application of data resulting from surveys.

EDT 2845 Developing Course Training Plans

Identification and explanation of various types of training plans. Determination of offices of primary responsibility and discussion of specific responsibilities. Description and resolution considerations for problems generally anticipated in training plan development.

EDT 2846 Teaching Practicum

Practice teaching under supervision of an experienced instructor supervisor. Classroom/laboratory instruction, lesson planning, test administration, academic counseling, and preparation and use of audiovisual aids.

EDT 2847 Advanced Teleseminar Instructor

Prepares experienced instructors to teach in teleseminar environment. Includes teleseminar instructional design, planning for teleseminar environment, affective component of teleseminar instruction, production environment, storyboarding, teleseminar instructional methodologies, coordinating for successful delivery, and contingency planning for distance education environment. Writing cognitive and affective objectives and samples of behavior for teleseminar presentations and effectively planning and presenting teleseminar instruction.

EDT 4101 Foundations of Education

Theories and principles relating to enhanced learning. Includes appreciation for self-concept, individual differences and affective domain, creative thinking, observational skills of instructor, student/instructor interaction, and group dynamics.

EDT 4102 Principles and Methods of Teaching

Selection of teaching methods, organization of materials, and preparation of written plans with behavioral objectives. Includes practice in employing teaching interview, guided discussion, demonstration, performance, and lecture. Emphasizes communicative skills.

EDT 4103 Principles and Methods of Evaluation

Construction, use, and analysis of evaluation instruments; synthesis of valid decisions based on results of statistical studies; and examination of various evaluation instruments.

Electronic Equipment Operation

EEO 1201 Aircraft Control and Warning Operations I

Manual operating principles at plan position indicator, surveillance (plotter, teller, and recorder), and status clerk. Includes duties and functions of each position and proficiency in radarscope and plotting operations.

EEO 1206 Aircraft Control and Warning (AC&W) Operations III

Theory and operation of a combat reporting center including control and center operator consoles with operational procedures for all positions and overview of capabilities of 407L AC&W system.

EEO 1207 Spacecraft Ground Data Systems

Orientation and coverage of responsibilities of ground data satellite control systems. Includes ground station data flow, command and control subsystems, altitude control, propulsion, power production, status processing satellite readout, data reduction, simulation, and ground data monitoring operations.

EEO 1208 Semiautomatic Ground Environment Surveillance Operations

Apprenticeship and practical application in data handling for electronic warfare duties as radar inputs and countermeasures technician; includes a review of typical radar inputs and tracking methods employed in air surveillance and countermeasures operations.

EEO 1212 Combat Reporting Center/Control and Reporting Center Systems

Practical application of search scope alignments and radio operations; includes power-on procedures, plan position indicator alignment, test mode display procedures, determining azimuth and range using azimuth/range readout, various aspects of surveillance management, console switch actions that control automatic data link, site registration, point and strobe insertion, processing of data track, and interpreting fragmentary orders and geographical reference systems.

EEO 1213 Airborne Warning and Control Systems

Basic air surveillance console switch action operations necessary to effectively use computerized, multisensor systems. Includes detecting, identifying, and tracking surface/airborne objects; manual/automatic transfer of air defense information; basic sensor system employment; and combating electronic warfare.

EEO 1214 Airborne Warning and Control Systems Training Devices

Operation of computerized training devices designed to simulate airborne surveillance console operations, sensors, and scenarios with realistic demonstrations, practice, and evaluation.

EEO 1215 Airborne Warning and Control Systems In-Flight Activities

Application of flight activities designed to develop knowledge/skills used in strategic/tactical intercept operations; includes coordination procedures required to accomplish early warning intercept missions within worldwide multiservice and Allied air defense operations.

EEO 1216 Radar Operations

Operation of radar displays and techniques of detecting, identifying, and monitoring surface or airborne objects using primary or beacon radar systems. Includes circuit operation, equipment features, antennas, weather effects, and electronic warfare operations.

EEO 1217 Air Weapons Controller Procedures

Basic weapons applications for strategic and tactical intercept operations; includes automated systems familiarization, intercept geometry, positional simulation, and control procedures.

EEO 1218 Missile Warning Operations

Operation of computerized digital radar displays and equipment for detection and tracking of ballistic missiles. Includes communications capabilities and operational procedures for relay of missile warning information.

EEO 2101 Aerospace Control and Warning Systems Operation

Advanced techniques in employment of early warning radar system. Integration of digital computer systems with airborne and ground radar units for detecting, identifying, and monitoring surface or airborne objects. Includes communications capabilities, system interface, and procedures required to accomplish early warning missions.

Electronics

ELT 1101 Electric Motor Principles

Theory and operation of electric motors, application of test equipment, and job safety. Connection/disconnection and operation of motors and maintenance procedures under hazardous operating conditions.

ELT 1102 Modulator Equipment

Operational theory and logic, circuit diagram analysis, preventive and corrective maintenance, and troubleshooting; includes use of general/special purpose test equipment and technical manuals.

ELT 1103 Satellite Communications Systems

Operational theory and logic and circuit diagram analysis. Includes security and use of technical manuals.

ELT 1104 Satellite Communications Maintenance

Preventive and corrective maintenance and troubleshooting; includes use of handtools, safety procedures, general/special purpose test equipment, and technical manuals.

ELT 1105 General Maintenance Training

Introduction to maintenance concepts and practices; includes career ladder progression, security, use of Air Force publications, Air Force Office of Safety and Health safety precautions, Air Force supply system, and maintenance management.

ELT 1106 Introduction to Digital Electronics

Numbering system conversions, digital math operations, Boolean algebra, and digital logic functions; includes truth table counter circuits, register circuits, converters, troubleshooting techniques, and use of logic probe.

ELT 1107 Basic Soldering Connections

Basic performance laboratory; includes soldering techniques, safety, and soldering/desoldering of components to terminal connections and printed circuit boards.

ELT 1203 Solid-State Principles

Semiconductor physics; theory of P-N junctions and multijunction devices; analysis of amplifier configurations and characteristics; and operation and feedback of audio, video, intermediate frequency/radio frequency amplifiers.

ELT 1210 Basic Electronic Principles and Circuits

Basic electronics; electrostatics; and series, parallel, and series-parallel circuits. Changing currents, inductance, capacitance, inductive and capacitive circuits, transformers, resonance, and filters. Includes circuit analysis using electronic test equipment.

ELT 1211 Basic Electronic Circuits

Principles of triode, tetrode, pentode, multiunit, and multielement vacuum tube; introduction to P-N junctions, transistor operation, transistor amplifiers, coupling and waveshaping circuits, power supplies, sinusoidal and relaxation oscillators, handtools, and soldering techniques. Includes circuit fabrication using electronic fundamentals trainer and malfunction analysis using electronic test equipment.

ELT 1213 Modulator and Demodulator Maintenance

Schematic, logic, and malfunction analyses and adjustment and repair of monitor chassis and transmit, receive, and timing circuits. Measurement using special test equipment.

ELT 1215 Cryptographic Test Equipment Application

Electronic test equipment in analysis of cryptographic equipment circuits; includes oscilloscope, multimeter, electronic multimeter, and signal generator.

ELT 1218 Electronic Cryptographic System Maintenance Limited

Equipment features, modes of operation, malfunction analysis, and replacement of plug-in units; includes installation, adjustment, and operation of digital encryption devices using electronic multimeter, data-pulse generator, oscilloscope, and handtools.

ELT 1219 Electronic Cryptographic Systems Maintenance Depot

Milliwatt and microwatt logic, block diagram and circuit analysis, and operation of and component replacement for digital data encryption and decryption devices; includes input and output modules, power supplies, message indicators, clock start modes, synchronization circuits, special test equipment, and use of handtools for depot level repair.

ELT 1221 Tempest Problems and Solutions

Installation, inspection, and corrective maintenance procedures for cryptographic facilities to ensure suppression of undesirable emanations.

ELT 1223 Cryptographic Systems and Devices

Principles of secure communications systems. Includes use of electronic cryptographic devices; encrypted teletypewriter, data, and narrow- and wide-band secure voice terminals; system configurations; and emanation suppression techniques.

ELT 1224 Data Transmission Techniques and Equipment

Principles of methods and media, system timing, error control systems, and patch and test facilities.

ELT 1231 Command Equipment Maintenance

Limited operation of transmit and receive satellite communications equipment; includes fault isolation of malfunctioning printed circuit boards, power supply operation/adjustment, and safety procedures.

ELT 1232 Command Equipment Maintenance Depot

Operation, circuit, logic, and malfunction analyses and repair of transmit, receive, and ancillary satellite communications equipment; includes principles of milliwatt logic, power supplies, data subsystem, manual vehicle test modes, and decimal and octal number conversions applicable to command equipment circuitry.

ELT 1235 Command and Telemetry Systems Maintenance

Purpose of systems and applicable safety, security, and emanation suppression procedures; includes theory of decimal/octal/binary number conversions and milliwatt logic elements used in system and operational theory and adjustment of power supplies.

ELT 1236 Command and Telemetry Logic Control Assembly Maintenance

Logic analysis of clock, start/resume test, frequency generator clock gate, timing counter, bit time decoder, and message period timing circuits. Includes theory of pulse-code modulation extraction circuits, circuit card repair, malfunction analysis, and location of faulty elements of logic control assembly in a self-test configuration.

ELT 1237 Command and Telemetry Reference Loop Maintenance

Operation, analysis, and physical/electrical description of telemetry transmitter, simulator, receiver, transceiver, special tester, and associated circuits connected in a test configuration with logic control assembly; includes malfunction analysis on printed circuit boards.

ELT 1238 Command and Telemetry Command Reference Loop (CRL) Maintenance

Indepth analysis of message format, ternary data system, automatic message sequence, and message counter. Includes operation and analysis of CRL transmit and receive circuits; malfunction analysis of printed circuit boards; and location of faulty elements in command transmitter, receiver, simulator, echo verifier, and associated circuits connected in a CRL test configuration with logic control assembly.

ELT 1249 Emanation Suppression Techniques

Characteristics of data-processing equipment; causes of emanations; testing techniques; equipment interfacing; emanation analysis; narrow- and broad-band test scan and correction factors; and use of oscilloscope, spectrum analyzer, impulse generator, signal generator, and recording oscillograph.

ELT 1251 Tempest Analyst

Introduction to secure communications, message and voice processors, channel matrices, and analytical computation tools and instrumentation and analysis of recorded data and emanation suppression techniques.

ELT 1252 Cryptographic Equipment Maintenance

Integrated circuit analysis, malfunction analysis and repair of associated special test equipment, and principles of emanation suppression techniques.

ELT 1255 Vacuum Tube Principles

Operational characteristics of diodes, triodes, multigrid, and special purpose electron tubes.

ELT 1259 Introduction to Electronics

Electronic circuits and use in various electronic systems; includes power supplies, solid-state devices, digital techniques, digital mathematics, and basic troubleshooting.

ELT 1262 Metrology Measurement Principles

Tracing and verifying precision measurement equipment standards, publications forms, and supply management.

ELT 1264 Electromagnetic Pulse Detection Unit

Theory of electromagnetic pulse and electrostatic discharge effect upon electronic devices. Includes electromagnetic and electrostatic emission protective devices.

ELT 1270 Teletypewriter and Cryptographic Maintenance

Operation, circuit, and mechanical sequence analyses; adjustment, installation, malfunction analysis, and repair of encoding/decoding devices; applicable security, safety, and preventive maintenance procedures; and use of handtools and general test equipment.

ELT 1280 Timing Device Maintenance

Operation, malfunction analysis, digital logic, circuit analysis, and repair of timing devices; includes theory of frequency multiplier and oscillator and use of technical manuals, handtools, and general test equipment.

ELT 1281 Digital Converter Maintenance

Logic, circuit, and malfunction analysis and repair of digital converters; includes time division multiplexed, system familiarization, and use of handtools and general test equipment.

ELT 1282 Multiplexer Maintenance

Operation, logic, and malfunction analyses and repair of multiplexer and demultiplexer equipment; includes delay compensator, synchronizer monitor logic analysis, system troubleshooting, and use of handtools and general test equipment.

ELT 1294 Aircraft Electrical System Familiarization

Fundamentals of electricity, electrical circuitry, and system components as related to aircraft maintenance specialist; includes magnetism, electrical terms, symbols, circuit construction, Ohm's law, electrical measuring equipment, lighting, and related systems. Practical experience in performing operational checks, servicing batteries, and locating electrical components.

ELT 1419 Practical Electricity

Fundamentals of DC circuits, AC electricity, and structure of matter; analysis of basic electrical diagrams with emphasis on electrical safety; multimeter operation to determine resistance and voltage; and basic troubleshooting procedures.

ELT 1429 Cryptographic Equipment Operation

Assembly, disassembly, installation, and performance checks of operational cryptographic equipment.

ELT 1430 Power Supply Analysis and Maintenance

Block diagram, circuit, and malfunction analysis of power supplies; includes replacement of components and circuit boards.

ELT 1431 Speech Processing Circuits Maintenance

Block diagram, circuit, and malfunction analysis of cryptographic speech processing and switching circuits; includes replacement of components and circuit boards.

ELT 1432 Transmission Circuits Maintenance

Block diagram, circuit, and malfunction analysis of transmission circuits, transmit timing and preparation circuits; includes replacement of components and circuit boards.

ELT 1433 Coding and Decoding Circuits

Block diagram, circuit, and malfunction analysis of cryptographic coding and decoding circuits; includes replacement of components and circuit boards.

ELT 1434 Receiver Circuits Maintenance

Block diagram, circuit, and malfunction analysis of receiver circuits; includes replacement of components and circuit boards.

ELT 1435 Cryptographic Alarm Circuits Maintenance

Block diagram, circuit, and malfunction analysis of cryptographic alarm circuits; includes replacement of components and circuit boards.

ELT 1436 Key Generation Circuits Maintenance

Block diagram, circuit, and malfunction analysis of cryptographic key generation circuits; includes replacement of malfunctioning components and circuit boards.

ELT 1437 System Troubleshooting

Overall system troubleshooting; includes alignment, adjustment, and performance checks.

ELT 1438 Electronic Teletypewriter Maintenance

Operation, adjustment, logic, circuit diagram analysis, and repair or replacement of defective parts of electronic teletypewriter equipment.

ELT 1439 Narrow-Band Communications Theory

Evaluation of narrow-band (HF/VHF/UHF) telecommunications systems; includes characteristics of technical capabilities/limitations, theory/ principles of operation, techniques for link performance assessment and propagational path prediction and analysis, and measurement procedures for technical evaluation of worldwide defense communications system.

ELT 1447 Microwave Radio Maintenance

Principles of transmitter, receiver, and common circuits of microwave radio sets; includes alignment, trouble analysis, maintenance routines, and use of standard and special test equipment.

ELT 1450 Interface Equipment Maintenance

Operational theory and logic, circuit diagram analysis, and preventive/corrective maintenance of system interface equipment; includes troubleshooting and repair procedures.

ELT 1451 Fiber-Optic Cable Installation and Maintenance

Installation, splicing, and maintenance procedures for fiber-optic cables and equipment and use of specialized test equipment.

ELT 1452 Satellite Communications (SATCOM) Group Maintenance

Analysis of SATCOM terminal tracking and control systems to include maintenance, calibration, repair, and inspection of servo-electronic, monitor, control equipment, and alarm systems.

ELT 1453 Missile System Electronic Analysis

Signal flow analysis and applications to integral aerospace systems; includes loop data-flow analysis, operation of standard test equipment, troubleshooting, safety, and use of maintenance publications.

ELT 1454 Missile Systems Laboratory

Malfunction analysis of missile electrical systems through use of schematic diagrams and applicable test equipment.

ELT 1455 Communications Systems Theory

Principles of multiplexing, tunable microwave, and tropospheric scatter systems; includes performance laboratory emphasizing analysis, troubleshooting, maintenance, and repair using standard test equipment.

ELT 1456 Digital Data Communications Theory

Digital data communications systems theory; includes functional and circuit analysis of transmitters, receivers, power supplies, data reception and detection circuits, and receiver timing and detection circuits.

ELT 1457 Missile Launch Control Facility Maintenance

Operational theory and logic, circuit diagram analysis, preventive and corrective maintenance; includes general/special purpose test equipment and technical manuals.

ELT 1501 Electrical Power Generation and Distribution

Operation, troubleshooting, inspection, and maintenance principles of AC and DC power generating systems, associated equipment, and electrical power distribution systems.

ELT 1529 Power Production Equipment

Fundamental principles of power production equipment; includes operation, troubleshooting, and repair of internal combustion engines, generators, exciters, voltage regulators, launch facility power generation system, and launch facility and launch control facility power distribution system.

ELT 1537 Uninterruptible Power Supply Principles

Principles and characteristics of static uninterruptible power supplies emphasizing test equipment and three-phase AC power fundamentals. Unit module description and operational procedures of rectifiers, chargers, input filters, inverters, and battery units.

ELT 1538 Uninterruptible Power Supply Circuits

Principles of logic and control circuits. Includes annunciator, synchronization, digital control, rectifier leg module assembly, charge limit and inverter control; gate timing, inverter gate firing module; alarm annunciator, AC and DC protection, reverse transfer and static switch controls, and preventive maintenance.

ELT 1544 Security and Intrusion Detections

Principles of operation of control units, monitoring and display equipment, audible alarms, sensors (mechanical, capacitance proximity, vibration, ultrasonic motion magnetic weapons, and passive ultrasonic), and system checkout and troubleshooting.

ELT 1545 Electronic Traffic Control Systems

Theory, operation, equipment analysis, and maintenance of electronic traffic control systems.

ELT 1546 Electronic Radio Control Systems

Theory, operation, equipment analysis, and maintenance of electronic radio control systems.

ELT 1547 Energy Management and Control Systems Theory

Equipment configuration and theory/operation of energy management and control systems.

ELT 1548 Energy Management and Control System Maintenance

Equipment configurations, systems analysis, and maintenance of energy management and control systems.

ELT 1701 AC Circuits

Fundamentals of alternating current; includes motors, generators, meter movements, inductance, inductive reactance, capacitance, capacitive reactance, frequency spectrum, and use of oscilloscope.

ELT 1702 DC Circuits

Fundamentals of direct current; includes series, parallel, and series-parallel resistive circuits, magnetism, and relay operation.

ELT 1712 Basic Solid-State Theory

Solid-state power supplies and amplifiers; includes P-N junctions; transistors; rectifiers; filters; limiters and clampers; and power, special, and wide-band amplifiers.

ELT 1713 Transmitter and Receiver Systems

Basic analysis of transmitter and receiver circuits, transmission lines, waveguides, antennas, cavity resonators, microwave oscillators, frequency control and automatic gain control circuits, crystal mixers, and parametric amplifiers; includes schematic interpretation and troubleshooting techniques.

ELT 1714 Solid-State Applications

Fundamental principles of solid-state applications in wave generation. Includes basic, pulsed, and blocking oscillators, multivibrators, and time-based generators.

ELT 1716 Standard Test Equipment Laboratory

Operational theory, function and use of low-frequency generators, multimeters, electronic counters, frequency converters, audio oscillators, vacuum tube voltmeters, oscilloscopes, and differential voltmeters.

ELT 1717 Special Test Equipment Workshop

Operation and maintenance of test equipment used to maintain automatic programming and control equipment; includes schematic analysis and operation and maintenance of computer programming set and power supply.

ELT 1719 Sensing Systems Maintenance I

Functional descriptions, technical characteristics, installation and operation procedures, block diagram, circuit analysis, preventive maintenance, and troubleshooting procedures of wind and temperature dewpoint measuring equipment.

ELT 1720 Sensing Systems Maintenance II

Functional description, technical characteristics, block diagrams, circuit analysis, test equipment, troubleshooting, preventive maintenance, and operation of cloud height sets.

ELT 1721 Electrical Fundamentals

Ohm's law; series, parallel, and series-parallel circuit theory; meters and test equipment; and electrical code, terminology, and wiring diagrams.

ELT 1727 Electron Tubes and Circuit Applications

Theory and operation of diodes, triodes, multigrids, and special purpose tubes. Includes typical circuit applications, oscilloscope analysis, heterodyne, and principles of modulation and demodulation.

ELT 1729 Radar System Troubleshooting

Circuit analysis of transmitters, receivers, and transponders; includes use of test equipment, troubleshooting, and preventive maintenance.

ELT 1730 Radar Transmitters and Receivers

Circuit analysis of aircraft friend or foe/selective identification system; includes principles of solid-state circuitry, coding/decoding circuitry, system timing, interrogator, responder, signal processor, and display.

ELT 1731 Surveillance Indicator System

Circuit analysis of plan position indicator system; includes synchronization system, sweep circuits, video circuits, amplifiers, and cursors.

ELT 1733 Radar System Maintenance

Circuit analysis and maintenance procedures applicable to a radar system; includes use of detailed wiring diagrams and test equipment to isolate, identify, and repair system components.

ELT 1735 Applied Missile System Operation and Maintenance

Analysis of data loops and detailed block diagrams; includes alignment, calibration, checkout, and troubleshooting of missile systems using applicable consoles and optical equipment.

ELT 1743 Phased-Array Radar Techniques

Beam steering principles and techniques necessary to perform associated maintenance on phased-array radar; includes analysis of phase shifting networks, transmitter and receiver beam forming arrays, and signal processors.

ELT 1744 Radar System Circuits

Theory of operation and circuit analysis using logic symbols, schematics, and block diagrams; includes bench test, repair, and alignment of module boards and components.

ELT 1756 Electronics Analysis Laboratory

Analysis and maintenance of electronic monitoring and checkout systems; includes operation of portable checkout equipment, malfunction isolation, and repair techniques.

ELT 1757 Electronic Equipment Test Standards

Operational theory, circuit analysis, and malfunction isolation procedures applicable to missile electronic test standards.

ELT 1772 Wave Generation and Shaping

Principles and applications of wave-generating and shaping devices; includes limiters, clampers, oscillators, blocking oscillators, multivibrators, and time-base and sweep generators.

ELT 1784 Microprocessor Fundamentals

Introduction to integrated and microprocessor logic circuits; includes analysis of microcomputer systems and hardware/software considerations.

ELT 2112 Radio Equipment Theory

HF/VHF/ UHF communications equipment principles; includes performance laboratory in troubleshooting and repair of HF/VHF/UHF mobile and portable communications equipment.

ELT 2113 Ground Radio Theory

Principles of transmitters, receivers, audio and data intercept consoles, and automatic switchboard principles as applied to ground radio system.

ELT 2114 Radio Maintenance Laboratory

Trouble analysis and fault isolation of subunits of transmitter, receiver, and control sites.

ELT 2115 Spacecraft Acquisition System

Introduction to spacecraft acquisition ground station uplink/groundlink systems; includes base-band assembly, transmitter exciter and driver, power amplifier and feedhorn, parametric amplifiers and down converters, receivers, switching units, demodulators, and synthesizers.

ELT 2116 Spectrometer Maintenance/ Calibration

Operation, logic analysis, repair, troubleshooting, calibration, and alignment of fluid analysis spectrometer.

ELT 2117 Radiac Instruments Laboratory

Operation, circuit analysis, and troubleshooting of radiac instruments; includes practice in calibrating radiac instruments.

ELT 2118 Intermediate Solid-State Fundamentals

Fundamental principles of solid-state applications to include P-N junctions, diodes, rectifiers, transistors, zener diodes, integrated circuits, solid-state supplies and filters, power amplifiers, oscillators, multivibrators, electronic voltage regulators, logic diagrams, truth tables, and solid-state logic circuits.

ELT 2119 Line-of-Sight Radio System

Operation and circuit/functional analyses of line-of-sight radio terminals.

ELT 2120 Tropospheric Radio System

Operation and circuit/functional analyses of tropospheric scatter radio terminals.

ELT 2123 HF Receivers

Operation and circuit/functional analysis of HF receivers.

ELT 2125 Radio Transceivers

Operation and circuit/functional analyses of universal radio equipment transceivers.

ELT 2127 VHF Transceivers

Operation and circuit/functional analyses of VHF transceivers.

ELT 2128 Flight Facilities Equipment Systems

Operation and circuit/functional analyses of low-frequency beacons.

ELT 2129 Instrument Landing System

Operation and circuit/functional analyses of instrument landing system; includes familiarization with ground check procedures and flight inspection recordings.

ELT 2130 Ground Omnirange System

Operation and circuit/functional analyses of ground omnirange system.

ELT 2131 Flight Facilities Equipment Systems Maintenance Laboratory

Circuit analysis and alignment/adjustment of ground flight facilities equipment; includes systems analysis, troubleshooting, repair, cable fabrication, soldering techniques, wiring diagram analysis, and use of special/general test equipment.

ELT 2135 Video Mapper

Theory, troubleshooting, and maintenance of modularized redundancy, remote control, and video-switching circuits; includes pretrigger delay, sine/cosine converter, map scanner, video processor, meter simulator, and failure sensing.

ELT 2136 Video Processing

Circuit analysis of normal and moving target video-processing circuits, antenna azimuth processing circuits, and radar control circuits.

ELT 2137 Satellite Ground Station Equipment

Maintenance of satellite ground station equipment; includes alignment, adjustment procedures, and troubleshooting techniques using standard and specialized test equipment.

ELT 2138 Ground Tactical Air Navigation (TACAN) Theory

Introduction to flight facilities equipment systems theory. Operation, circuit, and functional analysis of ground TACAN system using test equipment and technical data.

ELT 2401 Radar Principles

Functional and circuit analyses of radar transmitters, receivers, and moving-target indicators. Includes modulator, high-voltage power supply; local oscillator; driver circuits; automatic tuning; master timing; radio frequency, intermediate frequency, and video circuits; and troubleshooting and repair techniques.

ELT 2408 Frequency Management Equipment Maintenance

Problems associated with high-frequency signal propagation. Includes analysis principles, frequency selection based on propagation analysis, equipment operation, detailed circuit analysis, preventive maintenance, and troubleshooting of transmitter, receiver, and spectrum analyzer components of frequency management equipment.

ELT 2421 Narrow-Band Signal Analysis

Theoretical circuit analysis and fault isolation of microprocessor controlled signal measurement receivers and data-processing equipment designed to measure spectral power density, effective radiated power, frequency, interpulse period, pulse width, and time of arrival. Includes signal deinterleaving and digitized transient signal analysis.

ELT 2422 Wideband Signal Analysis

Theoretical circuit analysis and fault isolation of instantaneous RF-to-IF down conversion receiver, Laser-Bragg Cell Acousto-Optic video-processing detection equipment, and microprocessor controlled signal parameter measurement equipment.

ELT 2704 Meteorological Radar System

Operational theory and circuit analysis of meteorological radar system; includes inspection, installation, calibration, alignment, performance checks, troubleshooting and repair procedures, and use of applicable test equipment.

ELT 2709 Receivers and Transmitters

Theory of receiver and servo systems and indicators; includes saturable reactors, magnetic amplifiers, electromagnetic radiation, analysis of functional circuits of transmitters, and radio frequency systems. Also covers amplitude, frequency, pulse modulation, waveguides, resonant cavities, and transmission lines.

ELT 2710 Test Equipment Laboratory

Practical experience in use of precision measurement equipment; includes waveform measuring devices and spectrum analysis.

ELT 2733 Logic and Circuit Analysis

Digital, logic, and circuit analysis of computer type circuits; includes basic circuits, adders, registers, and coder/decoders.

ELT 2739 Radar Transmitter Maintenance

Circuit analysis and repair of radar transmitters.

ELT 2740 Radar Receiver Maintenance

Circuit analysis and repair of radar receivers.

ELT 2741 Advanced Radio Frequency (RF) System

Advanced study of antennas and RF systems; includes circuit analysis of performance and maintenance monitors and antenna lubrication, cooling, and pressurization procedures.

ELT 2744 Radar Receiver Workshop

Advanced circuit analysis, system alignment, and repair of height finder radar receivers and display equipment.

ELT 2765 Digital Principles

Solid-state fundamentals including principles of logic circuits, amplifiers, multivibrators, and digital voltmeters.

ELT 2775 Multiplex Switching

Logic analysis of solid-state digital switching system; includes troubleshooting and repair.

ELT 5714 Specialized Instrumentation

Operational theory and application of special instrumentation principles; includes principles of video recording, closed-circuit television, and microwave and laser systems.

ELT 5717 Radar Data-Display Circuits

Operational theory, application, and maintenance of precision-timing circuits, waveshaping devices, sweep generation and video-processing circuits, and cathode ray tubes; includes troubleshooting and fault analysis using multimeters, vacuum tube voltmeters, and dual trace oscilloscopes.

ELT 5725 Maintenance and Operation of Test Equipment

Analysis of waveshaping circuits, tape-reading and decoding circuits, and calibration of tape programmed test equipment.

ELT 5728 DC and Low-Frequency AC Measurement

Introductory metrology of voltage, current, and power. Includes knowledge of instrument calibration standards, precision voltage and current measurement, differential voltmeters, thermal converter meters, vacuum tube voltmeters, voltmeter calibration system, resistance voltage dividers, ratio transformers, resistance bridges, measurement of capacitance and inductance, reactance bridges, low-frequency signal generators, function generators, and synchronization test equipment.

ELT 5729 Waveform Analysis

Oscilloscopes and calibrating equipment; includes analysis of waveforms. Practice in calibration of oscilloscopes and related equipment and stand sampling systems.

ELT 5730 Frequency Measurement

Measurement of frequency and time intervals; includes operational theory of frequency meters and distortion analyzers. Practice in calibration of frequency meter and phase-measuring equipment.

ELT 5771 Automatic Tracking Radar Theory I

Principles of transmitters, antennas, and radio frequency groups, receivers, and range and angle-tracking systems.

ELT 5800 Advanced Electromechanical Systems Laboratory

Auxiliary generator set operation/repair and applicable use of electrical wiring diagrams and engineering drawings to determine component operation, analyze circuitry, and visualize system interrelationships; includes prime mover, AC and DC generators, and controls. Practice in maintenance, inspection, trouble isolation, servicing, load banking, and adjustments.

ELT 5802 Integrated Circuit Analysis

Theory of integrated and discrete circuit characteristics; circuit analysis of logic modules and diagrams; conversions between number systems with bases 2, 8, and 10; binary coded decimals; and Boolean algebra.

ELT 5805 Advanced Missile Maintenance Laboratory

Diagram analysis, troubleshooting, alignment, calibration, and inspection of missile systems. Extensive practice in circuit analysis using detailed wiring diagrams and test equipment to isolate, identify, and correct malfunctions at component level.

ELT 5817 Intermediate Range Instrumentation Group (IRIG) Timing System

Functional analysis of IRIG timing and block diagram analysis of cesium standard and digital divider. Detailed logic and schematic analysis of time code, rehearsal time, and display test generators; timing system control unit, selector, and terminal; total seconds translator; and time-display distributor.

ELT 5820 Tape-Recorder Maintenance

Detailed circuit analysis of servo, record, and reproducing circuits; includes direct and FM recording methods and video and FM record and reproducing modes.

ELT 5824 Telemetry Tracking and Command System

Antenna structure, circuit analysis of servo-control equipment, antenna positioning, encoding subsystem, receiver antenna, transmitter console, and modes of operation.

ELT 6719 Airborne Communications Systems Maintenance Laboratory

Alignment, adjustment, troubleshooting, and maintenance of airborne communications equipment using special and general purpose test equipment.

ELT 6723 High-Reliability Soldering and Connections

Repair of miniature and microminiature electronic circuits and printed circuit boards; includes soldering of components and modules to printed circuit boards and various terminals used in electronic equipment, conformal coating removal, and replacement of solid-state components.

ELT 6778 Communications Control Console/ Landline Selector Control

Communications control console group and landline selector control group maintenance; includes equipment operation, circuit analysis, alignment and adjustment, and fault isolation.

ELT 6779 UHF Radio Communications

Analysis of UHF multichannel radio transceivers; includes performance testing, troubleshooting, alignment, and adjustment using associated test equipment.

ELT 6783 Communications Equipment Testing and Data Analysis

Intensive performance laboratory using a variety of test equipment in data validation, systems analysis, and technical evaluation required in maintenance management and upgrading of worldwide defense communications system.

ELT 6794 Command Post Maintenance

Analysis of specialized modems, alarms, and command synchronizers for satellite communications command operations; includes theory of operation, block diagram analysis, and operation and maintenance systems.

ELT 7718 Low-Level Teletypewriter Equipment Maintenance

Introduction to low-level keying and solid-state devices; includes low-level circuit analysis and circuit board repair.

ELT 7724 Analysis of Functional Transmitter Circuits

Amplitude and frequency modulation; includes theory of transmission lines, waveguides, resonant cavities, antennas, and pulse modulation.

ELT 7725 Analysis of Functional Receiver System Circuits

Receiver circuit analysis; includes theory of mixers, local oscillators, receiver amplifiers, detectors, receiver control circuits, and single sideband radio techniques.

ELT 7737 Radio (Air and Ground 50KHz)

VHF/UHF communications equipment principles; includes troubleshooting and repair of VHF/UHF communications equipment.

ELT 7750 Ground Navigational Maintenance

Operation and circuit analysis of ground-based timer synchronizer, monitor, receiver, and transmitter units; includes preventive maintenance and troubleshooting of systems using technical data.

ELT 7755 Airport Surveillance Radar System

Functional and circuit analysis of airport surveillance radar sets; includes transmitter, synchronization, radio frequency system, receiver system, and indicating system circuits.

ELT 7756 Precision Approach Radar System

Functional and circuit analysis of precision approach radar system; includes transmitter, receiver, indicator, synchronization, and remitting circuits.

ELT 7759 System Timing, Transmitter/ Receiver

Circuit analysis, alignment, and troubleshooting of transmitter and receiver master timing system; includes digital techniques.

ELT 7762 Digital Selective Identification

Functional and logic diagram analyses of digitized selective identification feature system; includes encoder/decoder and fault isolation.

ELT 7767 Radar Identification Equipment

Functional and circuit analyses of identification equipment (air traffic control and friend or foe); includes analysis of transmitter, receiver, control circuits, power supply, and system maintenance.

ELT 7780 Runway Visual Range Computer Systems

Functional description, block diagram, circuit analysis, use of test equipment, preventive maintenance, adjustments, and troubleshooting.

Emergency Medical Technology

EMT 1101 Emergency Response

First responder role and responsibilities, understanding the human body, preventing disease transmission, establishing priorities of care, one- and two-rescue CPR, treating injuries, identifying medical emergencies, and crisis intervention.

EMT 1102 Emergency Medical Technician-Basic

Theory and techniques of basic emergency medical care in prehospital setting. Includes patient assessment, CPR, airway management, medical emergencies, use of automated external defibrillator, and trauma care. Prepares student to challenge National Registry Emergency Medical Technician-Basic (EMT-B) examination.

EMT 1103 Emergency Medical Technician-Intermediate

Theory and techniques of advanced emergency medical care in prehospital and hospital settings. Includes patient assessment, advanced airway management, intravenous fluids, shock, and clinical duties. Prepares student to challenge National Registry Emergency Medical Technician-Intermediate (EMT-I) examination.

EMT 2101 Emergency Medical Technician-Paramedic

Theory and techniques of advanced emergency medical care. Includes emergency pharmacology, drug calculations, and pararescue specific medications. Medical emergencies including obstetrical, gynecologic, neonatal, psychological, behavioral, and combat stress related. Prepares student to challenge National Registry Emergency Medical Technician-Paramedic examination.

EMT 2102 Paramedic-Trauma

Paramedic response to serious trauma including external jugular/femoral, eye, dental, and advanced musculoskeletal injuries. Includes diseases, cystotomy, triage, equipment, and a lab. Prepares student to

challenge National Registry Emergency Medical Technician-Paramedic (EMT-P) examination.

EMT 2103 Paramedic-Cardiovascular Emergencies

Paramedic response to cardiovascular emergencies. Includes defibrillation, cardiac physiology, mega code, electrocardiogram interpretations, pharmacology, and advanced cardiac life support. Prepares student to challenge National Registry Emergency Medical Technician-Paramedic examination.

EMT 2104 Paramedic Clinicals-Field Internship

Practical experience in paramedicine. Application of skills acquired in formal course work under supervision of experienced paramedics or physicians. Hospital experience includes taking patient history, physical examinations, diagnoses of specific diseases, use of laboratory tests to support diagnoses, supervision of medical care, and medications. Responding to emergency calls with paramedic units. Prepares student to challenge National Registry Emergency Medical Technician-Paramedic examination.

EMT 2301 Introduction to Emergency Medical Technology

Medical terminology, basic pharmacy, therapeutics, medical laboratory, and post-mortem care. Techniques in lecturing on allied health subjects.

EMT 2302 Management of Common Medical Disorders

Care of acute dental, respiratory, eye, ear, nose, throat, genitourinary, integumentary, cardiovascular, gastrointestinal, neurological, and psychiatric disorders.

EMT 2303 Emergency Procedures and Examinations

Emergency treatment of fractures; dislocations; head, chest, abdominal, and thermal injuries; cricothyrotomy; intravenous therapy; minor surgery; temporary dental fillings; gastric lavage and gavage; and emergency childbirth.

EMT 2304 Public Health

Water purification, insect and rodent control, sewage and water disposal, rabies control, occupational health and health/sanitation procedures.

EMT 2305 Clinical Practicum

Hospital care of traumatic injuries, temporary dental care, taking patient history, physical examinations, diagnoses of specific diseases, use of laboratory tests to support diagnoses, supervision of medical care and medications, and skills required in remote duty areas.

EMT 2306 Emergency Service Management

Introduction to emergency service management. Provision of health care in emergency services by recognizing life-threatening conditions and providing advanced life-support techniques, diagnosis and treatment of broad spectrum of conditions commonly encountered in an emergency service. Includes utilization of available resources to ensure optimal care for nonemergency conditions, management, and operations of an emergency service.

EMT 2313 Advanced Emergency Medical Care and Pararescue

Procedures and techniques of paramedical care applied in simulated medical/surgical emergencies.

EMT 2314 Seminar in Emergency Medical Care

Reinforcement and expansion of previous basic medical instruction and experience by means of lectures, demonstrations, discussions, and solution of practical laboratory problems.

EMT 2316 First Aid and Self-Help

Identification and treatment of hemorrhage; shock; fracture and dislocations; burns; heat disorders; hypothermia; chemical and botanical poisons; and snake, insect, and marine life bites under field conditions. Application of drug therapy, artificial respiration, and heart massage.

Environmental Medicine

ENM 1301 Environmental Medicine Office Procedures

Principles of office and records management, equipment and supply procedures, communicative methods, and public relations.

ENM 1303 Epidemiology

Terminology, detection, and control of communicable diseases.

ENM 1305 Occupational Medicine/Industrial Hygiene

Measurement of occupational health hazards and use of personal equipment to minimize exposure to radiation, respiratory, and hearing hazards.

ENM 1306 Fundamentals of Hearing Conservation

Measurement of auditory risk, audiometry monitoring, selection and issue of personal ear protection devices, methods of monitoring noise-exposed personnel, and management of hearing conservation program.

ENM 1307 Food Preservation

Food preservation and storage techniques-refrigerating, freezing, packaging, curing, irradiation, fermentation, and use of additives.

ENM 1308 Evaluation of Food-Handling Training and Sanitation

Administration of programs designed to measure training of food-handling personnel and compliance of personnel and food-handling facilities with sanitation standards.

ENM 1309 Food Inspection Procedures

Inspection and analysis of various food commodities to ensure wholesomeness.

ENM 1310 Medical Entomology

Theory of entomology and its importance in public health and transmission of diseases.

ENM 1311 Operational Entomology

Epidemics, vector bionomics, and vector-borne diseases as they affect military; surveillance, prevention, and control of vector-borne diseases; and information, intelligence, and field operations.

ENM 2302 Advanced Epidemiology

Investigation, control, and prevention of communicable diseases; includes medical entomology, maintenance of public health standards, and food safety.

ENM 2303 Management of Occupational/Disaster Medicine Programs

Administration of occupational health programs, office activities, and environmental health personnel; institution of training programs; and functions of environmental health personnel in disasters.

ENM 2304 Advanced Occupational and Public Health Management

Introduction to Food and Drug Administration food code, epidemiological concepts, occupational/public health principles and programs, management principles, and trend analysis.

ENM 2305 Public Health Management

Management of information, personnel, and financial resources. Includes establishment and management of medical readiness programs, epidemiology, and current issues in public health.

ENM 2306 Public Health Emergency and Disaster Operations

Didactic and field training in public health preventive medicine for emergency and disaster operations. Emphasis on role of public health personnel in responding to disasters and complex humanitarian relief efforts; role of federal, state, and local governments in contingency planning and operations; field supplies, equipment, sanitation, and hygiene; chemical and biological monitoring and decontamination procedures; methods of ensuring safe food and water in field conditions; disease vector investigation and surveillance techniques; and site selection and setup.

Environmental Science

ENV 1101 Environmental Awareness

Environmental laws and regulations, forms and records, pesticide hazards and benefits, hazardous waste management characteristics, pollution prevention facts, compliance standards and documents, emergency planning, and spill response facts.

ENV 2101 Environmental Compliance

Environmental compliance, hazardous material/waste management, emergency planning, and spill response. Includes hazardous Communications Standard and National Environmental Acts and procedures to protect the environment and react to hazardous situations.

Electric Power Production

EPP 1100 Airfield Lighting System

Basic airfield lighting system configurations to include control system, beacon lights, lighting fixtures, regulators, and transformers. Condenser discharge cable repair, troubleshooting, and maintenance.

EPP 1101 Teledyne Power System Principles

Operation and circuit principles of uninterruptible Teledyne Net Power System. Includes input and output transformers and filters, rectifiers, inverters, voltage regulators, and power supply control logic. Diagnostic circuit analysis of electronic control card modules and interpretation of schematic diagrams.

EPP 1102 Teledyne Power System Maintenance and Alignment

Electronic circuit alignment procedures on card modules. Diagnosis of system interruptions and preventive maintenance, troubleshooting, system alignment, and calibration.

EPP 1502 Engine Systems and Associated Equipment

Operation and maintenance of conventional, gas turbine, and diesel engine systems including cooling, starting, lubrication, intake, exhaust, governor, and fuel.

EPP 1503 Equipment and Pole Climbing

Pole-climbing techniques using hot line tools and protective equipment, crossarm installation and removal, pole step installation, and civil engineering management procedures to include operations, communications security, general safety practices, and pole-top rescue techniques.

EPP 1504 Construction of Overhead Electrical Distribution Systems

Electrical prints and staking sheets for pole location and framing, setting, and erection techniques using anchors and guys to include insulated boom dielectric testing, pole grounding, inspection of substation fences, and vegetation control. Installation of lighting system, distribution transformers, and service drops using safe clearance procedures and conductor support devices; maintenance on electrical switchgear and equipment; emergency transformer connections;

conductor splices; deenergized conductor transfers; and line and aerial bucket operation and maintenance.

EPP 1505 Underground Distribution Systems Maintenance

Maintenance and inspection of underground electrical distribution system and manhole equipment to include fabricating and testing inline splices, installation of direct burial cable, replacement of underground cable, tape termination techniques, and termination point inspection and testing.

EPP 1506 Operation and Maintenance of Mobile Generator Sets

Generator set wire diagrams and automatic start, power transfer, and no-break power systems. Includes troubleshooting techniques and preoperation, single unit operation, and postoperation procedures.

EPP 1507 Generator Set Operation and Aircraft Arresting Barriers

Operating characteristics and configuration of aircraft arresting system, generator set associated equipment, and powerplant generator operation. Problem analysis and diesel engine tests and maintenance.

EPP 1508 Wiring Methods

Wiring diagrams, electrical terms and symbols, conduit application, and bending techniques. Branch circuit construction, switch and outlet installation, and troubleshooting techniques using test equipment and safety procedures per national electrical code guidelines.

EPP 1509 Electrical Special Purpose Systems

Maintenance, troubleshooting, and repair of transformers, voltage regulators, battery banks and chargers, and emergency lighting system; includes dining hall and domestic appliances.

EPP 1510 AC Power Generating System and Operation Principles

Operation, maintenance, and troubleshooting of AC power generation system and components to include switchgear instruments, circuits and their protective devices.

EPP 2100 High-Voltage Cable Testing and Splicing

Cable construction, splicing procedures, requirements for various underground systems, causes of underground cable failure and related preventive procedures, tape and hybrid splices, lead transition, tape termination, and separable insulated connectors.

EPP 2501 Generator Set, Switchgear, and Governor Operation and Maintenance

Operation, care, and maintenance of generator sets, equipment and components, gas turbine and diesel generators, hydraulic and electric governors, and automatic start and transfer switchgear.

EPP 2503 Transportable Distribution Systems

Setup, maintenance, troubleshooting, and repair procedures for electrical and secondary distribution centers under field conditions; includes use of electrical plant schematics, test equipment, and safety practices.

EPP 2504 Electrical Distribution Systems

Maintenance of hot line tools and advanced troubleshooting procedures for electrical distribution systems. Includes voltage regulator maintenance with application of electrical theories; replacement of single-phase lines, three-phase running corners, vertical construction, insulators on horizontal construction, crossarms using auxiliary sidearms, and crossarms and poles on dead ends; and changing straight line crossarm to double dead end and double crossarms on angles.

EPP 2505 Advanced Motors and Controls

Operational characteristics and troubleshooting of electric motors, frequency converters, transformers, and grounding systems. Includes electronic components, line and wiring diagrams, and motor accessories.

Explosives Handling and Disposal

EXP 1101 Explosive Ordnance Disposal Apprentice-Phase I

Methods for performing explosive ordnance reconnaissance, ordnance identification procedures, access and recovery of unexploded ordnance, and disposal operations involving nonnuclear and chemical/biological ordnance.

EXP 1102 Explosive Ordnance Disposal Apprentice-Phase II

Methods and procedures for safe identification, recovery, evaluation, and disposal of all conventional and nuclear explosive ordnance. Encompasses placed, projected, and dropped munitions and associated fuses; aircraft explosive hazards; guided missiles; and detailed instruction on recovery, evaluation, and disposal of nuclear weapons.

EXP 1705 Nuclear Explosive Weapons Maintenance

Application of safety practices pertaining to weapons maintenance, storage, handling, assembly, inspection, and preparation for shipment.

EXP 1706 Explosive Ordnance Disposal Orientation

Explosive ordnance disposal mission and history. Includes associated mathematical formulas, munitions identification, publications, nonelectrical firing procedures, and base recovery and chemical operations.

EXP 1707 Introduction to Munitions Supply

Munitions management to include item accounting procedures, file maintenance, publications, nuclear ordnance commodity managed manual accounting, personnel reliability programs, and operational security.

EXP 2101 Advanced Explosive Ordnance Disposal

Management skills and operations training for explosive ordnance disposal craftsman. Includes base recovery after attack, emergency off-base response, explosive ordnance reconnaissance, and environmental protection considerations.

EXP 2601 Explosives Accounting Procedures

Analysis of explosives supply system; includes determining human reliability, evaluation of security handling, identification of records and forms, issue and turn-in, maintenance support, receiving, shipping, storage, inventory, stock replenishment, application of explosives safety quality assurance, and fire prevention.

Food Service

FDS 1615 Food and Beverage Preparation

Preparation of basic menu items using current culinary techniques; includes use of spirits and wines in gourmet dishes or for service.

FDS 1805 Introduction to Food Preparation

Principles and techniques of quantity food preparation. Includes meat, poultry, and seafood identification, grading, and preparation; cooking terms; seasoning agents; weights/measures; recipe conversions; and food quality.

FDS 1810 Food Service Techniques

Methods and principles of food service techniques. Includes standard food service publications; employee, customer, and contractor duties and relationships; sanitation; nutrition; preparation and use of subsistence records; accounting for meals served; storeroom procedures; and catering of flight and missile crews.

FDS 1811 Dining Hall Operations

Operations of standard cafeteria facilities and meal preparation in central kitchen concept; includes breakfast, lunch, dinner, and short order preparation and service.

FDS 1812 Introduction to Baking

Preparation of breads and pastries; fundamentals of nutrition, procurement, storage, and recipe breakdown; sanitation; and equipment as related to bakery products and operations.

FDS 2620 Food Facilities Management

Administration of dining room facilities. Includes supervisory principles, organization of dining rooms and staff, interpersonal relations, customer relations, and food service principles.

Finance

FIN 1107 Basic Accounting

Accounting principles with practice in preparing accounting reports and transactions; types of journals; posting to accounts; charting accounts; and preparation of vouchers, inventories, and cash controls.

FIN 1108 Financial Management

Basic concepts of business law, contracting, finances, accounting, reporting, insurance, and legal problems.

FIN 1109 Budgeting

Formulation of budgets at various organizational levels. Capital cost, operating expenses, and computations including validity and credibility, priorities-program balance, budget execution plans, funding distribution and flexibility, fiscal control, management controls and reports, and fiscal year closeouts.

FIN 1113 Introduction to Financial Analysis

Financial statement analysis; includes preparation of financial statements and horizontal, vertical, and ratio analyses.

FIN 1116 Automated Accounting Systems

Concept and operation of automated accounting systems; includes analysis of source documents, system output, coding, and processing of accounting transactions.

FIN 1119 Financial Planning

Basic principles of financial planning; includes development of fund requirements for personnel, nonpersonal services, materiel, and travel budget functions.

FIN 1122 Introduction to Accounting and Finance

Functions and responsibilities of accounting and finance systems used in governmental operations.

FIN 1123 Travel Pay Accounting

Computation of travel allowances; includes permanent change of station, dependent travel entitlements, dislocation, temporary duty, movement of mobile homes, and leave accounting for travel generated leave.

FIN 1124 Paying and Collecting Procedures

Policies and procedures for payment and collection of funds; includes pay-agent and cashier operations, check payments, foreign payments, and accounting systems used for payment and collection functions.

FIN 1125 Military Pay Accounting

Policies and procedures for military pay system; includes determination of pay entitlements, deductions, allowances, and leave. Preparation and control of military pay documents pertaining to each type of pay transaction.

FIN 1126 Government Funds and Systems

Treasury funds and accounting systems used by Department of Defense; includes accounting structure and computer codes, general governmental accounting and general ledger accounting systems, and reporting procedures. Practical experience in addressing and posting internal accounting records, batch processing, and nonremote direct input of data for accounting records.

FIN 1127 Commercial Services Accounting

Accounting procedures used in disbursement, collection, and transaction processing of commercial services. Includes individual orders; accrued expenditures; and open allotment and budget transactions pertaining to commitments, obligations, and payments.

FIN 1128 Materiel Accounting

Recognition and application of disbursement, collection, and transaction processing of materiel items with special emphasis on automated materiel accounting system.

FIN 1129 Accounts Control

Recognition and application of military personnel, civilian payroll, and supply cost systems; includes daily audit/reconciliation and preparation of monthly/quarterly/annual financial statements and reports.

FIN 1130 Civilian Pay Accounting

Policies and procedures applicable to civilian pay operation; includes types of entitlements/deductions, processing permanent and temporary changes, voucher and payroll preparation, time-and-attendance procedures, leave processing, mechanized procedures, and reports. Emphasis on accounting and distribution procedures.

FIN 2101 Managerial Accounting

Advanced managerial accounting for planning and controlling. Includes managerial theories and practices of cost accounting, standard cost system, distribution analysis, and budgeting.

FIN 2114 Automated Accounting

Advanced computerized methods including applications, data elements and codes, established records, remote operations, batch and interface processing, accounting and finance outputs, and system recovery procedures.

FIN 2115 Advanced Automated Materiel System

Computerized materiel accounting system; includes categories and sources of inventory, local procurement, disbursement transactions, issues, turn-ins, receipts of materiel, accounting and finance adjustments, system failure and recovery, and practical application to materiel system.

FIN 2116 Cost and Economic Analyses

Application of concepts and techniques of cost and economic trend analyses. Includes data collection methods; establishment of cost, performance, and operational standards; and analysis of cost, fiscal, and related accounting reports to develop cost and economic trends and performance indicators.

FIN 2119 Resource Management Accounting System

Organization and functions of base-level accounting and finance office and various accounting systems used in base-level accounting.

FIN 2120 Automated Comptroller Systems

Practical applications of automated systems used in Government comptroller function; includes information retrieval, data design/development with emphasis on organizational structure, automated data programs acquisition, and legal constraints.

FIN 2122 Advanced Accounts Control

Management of major treasury funds. Includes analysis of authorization process; methods to control public funds; availability periods and status of appropriations; components in expenditure and collection accounting; general accounting procedures for receipts (general, special, trust); deposits and reimbursement (revolving, open); and refund accounts.

FIN 2123 Advanced Pay

Policies and procedures for payment of personnel with emphasis on management functions and responsibilities associated with compensation systems; includes terms of pay, deductions from pay, collections, leave accounting, and management of quality assurance programs.

FIN 2124 Advanced Travel Pay Accounting

Accounting procedures applicable to travel pay entitlements.

FIN 2125 Advanced Commercial Services Accounting

Policies and procedures applicable to disbursement, collection, and transaction processing of commercial services.

FIN 2128 Advanced Civilian Pay Accounting

Functions and responsibilities of automated civilian pay operations; includes computation of pay, entitlements/deductions, permanent and temporary changes, voucher/payroll preparation, time-and-attendance procedures, supplemental offline payments, master pay, and retirement records.

FIN 2129 Advanced Budgeting

Planning, programming, and budgeting system for resource management and scope of responsibility in financial planning and management. Includes Federal budget cycle and accounting system for operations and working capital funds. Formulation of budgets at various organizational levels, exercises in capital cost, operating expenses and computations including validity and credibility, priorities program balance, budget execution plans, funding distribution and flexibility, fiscal control, management controls and reports, and fiscal year close-outs.

FIN 2130 Advanced Operating Budget Development

Principles and procedures of operating budget development. Includes practical exercises in zero-based budgeting, distribution of approved funding, and techniques for budget presentation.

FIN 2132 Advanced Automated Travel Record and Accounting System

Analysis of travel fund accountability and mechanized travel accounting system; includes procedures for batch processing, direct input and non-remote subsystems, transaction responses, and management products in day-to-day operation of travel accounting.

FIN 2133 Advanced Financial Analysis

Cost and economic analysis, use of statistical techniques and communicative skills in support of analytical efforts, support agreements, financial planning and management systems, status of funds, contingency operations, and management and supervisory responsibilities.

Fire Protection

FIP 1101 Basic Hazardous Materials

General principles of hazardous materials. Includes recognizing and identifying hazardous materials, analyzing the incident, planning and implementing response, evaluating progress, and other competencies necessary to perform at awareness and operations levels of hazardous materials response.

FIP 1804 Structural Firefighting

Principles and techniques of structural firefighting. Includes identification and use of personal protective equipment, forcible entry, rescue practices, vehicle extrication, ladders, and ventilation practices. Structural fire ground operations include fire hose, appliances, and stream; salvage and overhaul; sprinklers; and practice in fire control.

FIP 1805 Aerospace Vehicle Firefighting

Aircraft fire response and firefighting principles. Includes aircraft and airport familiarization, rescue procedures, turret/pump operation, resupply of aircraft rescue firefighting vehicles, and live training fires on various aircraft.

FIP 1806 Vapor and Fire-Detection Systems

Operation and maintenance of the following fire detection systems: main propulsion and fuel cell, liquid hydrogen and hypergolic hazard warning; portable vapor, and vehicle hazardous gas.

FIP 1807 Fire-Protection Fundamentals

Fire-protection mission, organization, and publications; occupational health and safety; Quality Air Force principles; portable fire extinguishers; and fire ground basics, behavior, alarm communications center, and prevention and readiness. Includes fire-protection contingency responsibilities.

FIP 2100 Advanced Fire-Alarm Systems

Operation and maintenance of fire-alarm and suppression systems and development of related inspection checklists; includes practical experience in connecting, testing, troubleshooting, and repairing electrical/electronic portions of representative fire-detection, alarm, and suppression systems.

FIP 2101 Advanced Hazardous Materials

Advanced principles of hazardous materials. Includes incident management system, hazardous materials mitigation, use of monitoring devices, and other competencies necessary to perform as hazardous materials technician or incident commander.

FIP 2807 Hazardous Materials

Protection of hazardous and explosive materials; includes firefighting techniques, propellants used in

rockets and missiles, planning for disasters, use of special purpose equipment, and security education programs.

FIP 2808 Fire Service Rescue

Principles of rescue. Includes use of protective clothing and equipment, emergency first aid, and rescue tools; aircraft fundamentals; building construction; egress system; pressure suits; and rescue vehicles and equipment.

FIP 2810 Firefighting Vehicle Systems

Inspection and operation of special purpose vehicles including fuel, electrical, air, hydraulics, heating and cooling, drive train assembly, and firefighting systems. Includes operator maintenance on aircraft firefighting and rescue vehicles.

FIP 2812 Fire Investigation Technology

Fire investigation procedures and requirements; includes legal aspects of fire investigations, nature and behavior of fire, flammable gases, classification of fire causes, building collapse hazards, incendiary fires, automotive and structural fire investigations, and role of firefighters in investigations.

FIP 2815 Fire-Prevention Inspecting

Advanced analysis of various functions of technical services branch of fire-protection organization; includes building and facilities engineering and design criteria for installed and portable fire-protection systems, funding and programming, and administrative and inspection procedures.

FIP 2816 Advanced Fire-Protection Technology

Command and control ground fire operations; includes structural and aerospace vehicle situations, tactics and strategies of ground fire operations, hazardous materials incidents, preplanning for contingency operations, and innovative technology for fire-protection career field.

FIP 2817 Fire-Protection Management Principles

Fire operation activities; includes supervision and coordination of personnel, facilities, equipment, labor relations, publications, and records management.

FIP 2818 Supervisory Firefighter

Supervisory fire-protection duties and responsibilities. Includes firefighting tactics and strategies, command and control using incident management system, aircraft emergency entry, budgeting, manning, and quality fire-protection programs. Extensive use of ground and simulator exercises for performance of various crew duties.

Fabric, Leather, and Rubber Products

FLR 1103 Sewing Principles

Sewing machine operation; includes sewing finished projects.

FLR 1104 Sewing Machine Maintenance

Inspection, timing, adjustments, troubleshooting, and major overhaul of sewing machines. Includes 31-15, 111W series, Consew 206B series; and special sewing machines-7-33, 47W70, and 143W2.

FLR 1107 Automatic Parachutes

Principles of automatic back, seat, and chest parachutes; includes describing automatic ripcord release, preparing/assembling automatic parachutes, and servicing chutes in accordance with technical publications.

FLR 1109 Inspection and Use of Life-Support Equipment

Inspections and maintenance of personal parachutes, liferafts, survival kits, protective helmets, oxygen survival system, life preservers, full pressure suits, and anti-exposure suits and use of life-support equipment by aircrew members.

FLR 2115 Advanced Parachute Packing

Inspections and packing of F-/RF-4 parachutes; includes personal, drogue, and deceleration parachutes. Removal and installation of F-/RF-4 parachute assemblies.

FLR 2116 Advanced Fabrication and Parachute Theory of Operation

Theory of operation of parachute and survival equipment. Includes parachute failure analysis, repair of survival equipment, explosive safety, product improvement programs, blueprint and repair symbols, supply management, analysis of quality/reliability improvement programs, and change forecasting operations theory.

Food and Nutritional Science

FNS 1301 Basic Medical Food Service Administration

Supervision and training of medical food service personnel and security and maintenance of forms, records, and medical materiel.

FNS 1302 Nutrition and Diet Therapy

Principles of normal nutrition, metric system, food nutrients, und digestion and absorption; includes recommended daily allowances, therapeutic nutrition, and professional and patient relationships.

FNS 2301 Advanced Medical Food Service Administration

Personnel management and scheduling, management of training programs, professional conduct, administration of funds and budget, and materiel procurement procedures in a medical food service department.

FNS 2302 Advanced Nutrition and Dietetic Therapy

Medical and dietetic terminology, nutrition, food nutrients, digestive system, recommended dietary allowances, applied clinical nutrition, patient interview, and diet instructions.

FNS 2303 Subsistence Management

Menu planning and budgeting, standardized recipes, food supply management, quality food standards, and mass feeding procedures during disasters.

FNS 2304 Nutritional Medicine Administration

Nutritional medicine management and procedures. Includes menu planning and development, subsistence requirements, operating Nutrition Management Information System, nutritional medicine, and diet therapy.

Family Support Center

FSC 1101 Family Support Center Management

Introduction to operation and services of family support center. Includes leadership, management, administration, evaluation, and marketing of support programs and services.

Foreign Technical Language

FTL 1401 Intermediate Technical Russian

Application of technical vocabulary and language used to describe military equipment, operations, and control procedures. Emphasis on development of skills necessary to translate oral and written communications. Prerequisite: completion of resident language course or demonstrated proficiency.

FTL 1404 Intermediate Technical Vietnamese

Application of technical vocabulary and language used to describe military equipment, operations, and control procedures. Emphasis on development of skills necessary to translate oral and written communications. Prerequisite: completion of resident language course or demonstrated proficiency.

FTL 1405 Intermediate Technical Spanish

Application of technical vocabulary and language used to describe military equipment, operations, and control procedures. Emphasis on development of skills necessary to translate oral and written communications. Prerequisite: completion of resident language course or demonstrated proficiency.

FTL 1406 Intermediate Technical Arabic

Application of technical vocabulary and language used to describe military equipment, operations, and control

procedures. Emphasis on development of skills necessary to translate oral and written communications. Prerequisite: completion of resident language course or demonstrated proficiency.

FTL 1409 Intermediate Technical Korean

Application of technical vocabulary and language used to describe military equipment, operations, and control procedures. Emphasis on development of skills necessary to translate oral and written communications. Prerequisite: completion of resident language course or demonstrated proficiency.

FTL 1410 Intermediate Technical Hebrew

Application of technical vocabulary and language used to describe military equipment, operations, and control procedures. Emphasis on development of skills necessary to translate oral and written communications. Prerequisite: completion of resident language course or demonstrated proficiency.

FTL 1412 Intermediate Technical Persian-Farsi

Application of technical vocabulary and language used to describe military equipment, operations, and control procedures. Emphasis on development of skills necessary to translate oral and written communications. Prerequisite: completion of resident language course or demonstrated proficiency.

Fuel Service

FUS 1501 Fuel System Maintenance Laboratory

Application of fuel system equipment; includes manual valves, pumps, gauges, pipeline, hand and specialized tools, bonding and grounding, and fluids and hydraulics.

FUS 1503 Hydrant Systems Maintenance

Operation, inspection, and servicing of original/modified Panero and Pritchard hydrant systems; includes loading/offloading facilities, filters and separators, gauges, valves, and strainers.

FUS 1507 Fuel Subsystems (Mechanical)

Operation, inspection, and maintenance of fuel mechanical subsystems; includes tanks, filtration equipment, meters, and loading/offloading equipment.

FUS 1508 Specialized Fuel Systems and Tank Entry

Identification of components of Type III Phillips and motor vehicle fueling systems. Principles of troubleshooting, inspecting, and operating. Procedures for tank entry and deactivating fuel systems.

FUS 1509 Fuel Hydrant and Air Transportable Systems

Operation and maintenance of permanently installed hydrant and air-transportable systems to include Panero and Pritchard hydrant and application of hydrant accounting relative to transferring, receiving, issuing, and defueling.

FUS 1511 Aerial Bulk Fuel Delivery

Principles of loading and unloading bulk fuel delivery systems used in cargo aircraft.

FUS 1601 Operation of Mechanical Fuel Dispensing Systems

Extensive practice in operating various refueling systems that receive, issue, and transfer fuel; systems include mechanical, hydrant, and portable units. Includes application of petroleum product quality control procedures.

FUS 1602 Operation of Fuel Servicing Vehicles

Operation of various fuel servicing vehicles, associated components, and hose carts; includes practice in driving and application of procedures used to service various aircraft with fuel and related expendables.

FUS 2503 Fuels Analysis

Analysis of fuels using color and particle assessment, matched weight monitor, undissolved water content of aviation fuels, heavy hydrocarbon contamination test, fiber determination, conductivity testing, bottle method, aircraft sump samples, flashpoint, and fuel system icing-inhibitor testing.

FUS 2504 Air Transportable Hydrant Refueling Systems

Operation and maintenance of various air-transportable fueling systems that receive, issue, and transfer fuel. Includes implementation of petroleum product quality control procedures.

FUS 2601 Quality Control of Aircraft Fuels

Application of quality assurance principles. Includes identification of contamination sources; sampling methods and use of equipment; laboratory hygiene and safety standards test intervals; and practice in testing for solids, water, conductivity, fuel system icing inhibitor, potential hydrogen odor, and flashpoint.

FUS 2602 Fuel Storage Facilities Maintenance

Application of complex maintenance techniques and repair procedures for filtration equipment, electrical controls, pumps, and conventional hydrant fuel systems.

FUS 2603 Fuel Stock Fund Accounting

Application of stock fund accounting principles; includes facilities operation, inventory management, implementation of administrative procedures, quality assurance of facilities operation, and implementation of management information system using remote computer terminals.

FUS 2607 Fuels Management

Application of advanced techniques for planning, organizing, directing, and coordinating fuels activities involving personnel, facilities, and equipment.

FUS 2608 Petroleum Tank-Cleaning Supervision

Supervision of tank-cleaning operations. Tank acceptance, precleaning, and safety equipment inspections. Procedures for tank entry, cleaning, and return to service. Analysis of tank preventive maintenance records and as build drawings.

Applied Geography

GEO 1403 Area Studies

Geographic, climatic, economic, political, and military characteristics of a major area of interest. Emphasis on political and historical development of the area and impact of geography on deployment of weapons systems.

GEO 1406 Third World Country Studies

Geographic, political, and military aspects of Middle Eastern, Far Eastern, Latin American, and African countries.

Applied Government

GOV 1406 Government Organization and Structure

Structure of governmental organizations and service missions. Includes historical, geopolitical, economic, and military analyses. Emphasis on military support of political ideology.

Geophysical Sciences

GPS 1402 Seismic Analysis

Procedures and methods required to analyze seismic observations, such as identification and application of seismic travel time charts and tables, event types, and distance ranges; includes teleseismic, special, deep-event, regional, and near-regional/local analyses.

GPS 1403 Seismic Techniques

Introduction to theories of Earth's interior construction and physical properties. Includes seismic-wave propagation; theory and principles of longitudinal, transverse, and Rayleigh wave generation; and transmission through and around the Earth.

GPS 1404 Seismic Equipment Operation

Introduction to seismic equipment and station operation; includes station block diagrams, logs and routine forms, and timing and signal subsystems theory/operation, oscilloscope operation and timing synchronization, seismic signal generation/ transmission, and methods of signal amplification and control.

GPS 1406 Seismic Station Operation

Practical application of seismic theory, observation, analysis, and equipment; includes equipment operation under simulated field conditions, data analysis and reporting, and station documentation.

GPS 1407 Hydroacoustic Theory and Principles

Introduction to hydroacoustic theory; includes sound propagation through liquid media, sound reflection, refraction, and spectra of various phenomena.

GPS 1410 Radiation Detection Principles

Theory of operation and characteristics of various radiation detection equipment units.

GPS 1411 Scientific Technician Orientation

Professional responsibilities, selection and use of various publications, equipment and personal safety, and areas directly associated with scientific analysis.

GPS 1412 Detection Systems

Introduction to seismic, hydroacoustic, and satellite detection systems; includes operational characteristics and concepts.

GPS 1413 Satellite Detection Systems

Introduction to orbital mechanics and satellite equipment operations; includes physics of orbit, conic sections, and sensor theory.

GPS 2402 Seismic Analysis

Specific procedures and methods used to analyze and report seismic observations. Includes identification and application of travel time charts and tables and analysis procedures, such as initial phase incident angle determination, phase minus P time, phase type determination, envelope, and travel path-travel time chart comparisons, logical identification, and reporting of all event types.

Graphics

GRA 1101 Visual Information

Graphics, lettering, basic drawing and perspective, applying basic illustrating techniques, reproduction methods and processes, visual communication, and graphic imaging.

GRA 1800 Introduction to Graphics

Care and use of graphic arts equipment and materials plus establishment and use of comprehensive art files.

GRA 1801 Lettering

Theory, principles, and practices of freehand, mechanical, and prepared lettering for illustration.

GRA 1803 Drawing and Illustration Techniques

Line and tone media techniques; includes selection of mediums for illustration, color techniques, basic forms, perspectives, sketch and shape descriptions, layouts, compositions, landscapes, cartoons, and caricatures.

GRA 1805 Visual Communications

Methods of data presentation emphasizing graphic techniques; includes preparing display charts and

graphs, illustrating maps, and artwork for television and overhead projection devices.

GRA 1806 Computer-Automated Graphics

Theory and basic operation of computer automated graphics. Includes familiarization and use of hardware and software.

Heating, Air-Conditioning, and Refrigeration

HAR 1100 Fundamentals of Heating

Principles of heating; includes use of tools and precision-measuring instruments, pipefitting, soldering, brazing, and welding while demonstrating safety principles.

HAR 1101 Domestic Heating

Oil and gas-fired space heaters, unit and domestic water heaters, oil burners, warm-air and water-heating systems, and coal-burning equipment.

HAR 1102 Boiler Water Treatment and Corrosion Control

Boiler water treatment (external and internal systems) and component corrosion control. Water sources, characteristics, and effects on heating equipment. Construction of water treatment logs, external corrosion control, and sample submission requirements.

HAR 1103 Boiler Controls and Feedwater Systems

Theory of combustion through operation of boiler controls. Repair, replacement, and adjustment of major components of boiler control system and operation, repair, replacement, and adjustment of feed-water system components.

HAR 1104 Water and Steam Heating Systems

Operation and maintenance of low- and high-temperature water and steam heating systems.

HAR 1105 Refrigeration and Air-Conditioning Systems

Fundamental principles for operating, maintaining, and troubleshooting the following systems and components: refrigeration, air-conditioning, pneumatic, electronic/electrical controls, dampers, air handlers, fan units, dehumidifiers/humidifiers, evaporators, generators, condensers, air compressors, water pumps, refrigeration lines, filters, water chillers, cooling towers, ventilation, control center, launch duct, computer room air-conditioning, and air balancing.

HAR 1106 Domestic and Commercial Refrigeration

Maintenance, troubleshooting, and repair of cold storage and small commercial systems. Includes cooling towers; evaporative condensers; water pumps, air-compressing equipment with electrical, electronic, pneumatic, motor controls, and devices.

HAR 1107 Fundamentals of Air-Conditioning Systems

Operating, monitoring, and troubleshooting chilled and cooling water systems and their functions. Components include airflow, control switches, air requirements, supply dampers, exhaust and return dampers, humidity and temperature control, purge operation, overpressure control, and alarm panel.

HAR 1108 Pneumatic Controls

Control fundamentals and devices, and calibration and adjustment of controllers. Includes connecting, adjusting, and operating pressure selectors and cumulators; installation and calibration of transmitters and receiver controllers; and application of system accessories, such as airflow instruments, air driers, and sensors.

HAR 1109 Electrical and Electronic Controls

Fundamentals of electrical and electronic control operation and application. Installation, adjustment, troubleshooting, and maintenance on electrical control circuits, sensors, controllers, and control devices. Includes cybernetics and energy monitoring control systems.

HAR 1110 Environmental Systems

Principles of environmental systems. Includes operation and maintenance of chillers; heat recovery, hydraulic cooling water, and steam boiler systems; air handlers; exhaust fans; and purge air system.

HAR 1111 Air-Conditioning/Refrigeration Fundamentals

Basic operation, maintenance, troubleshooting, and repair of air-conditioning and refrigeration equipment. Includes use and care of tools, fabrication of refrigeration lines, application of soldering and brazing techniques, physics, refrigeration components, accessories, and compressor checks.

HAR 1112 Coal Handling

Characteristics of coal and coal storage, burning equipment, and sampling under guidelines of Coal Quality Assurance Program.

HAR 1113 Heating Systems

Operation and maintenance of heating systems. Includes low- and high-temperature water and steam; oil and gas-fired space heaters and burners; warm-air and water heating systems; water heaters; coal-burning equipment; and water treatment.

HAR 1114 Steam Boiler Systems

System maintenance, operation, and identification of steam boiler types. Includes feed-water, fuel, and steam distribution systems used in boiler plant operations.

HAR 1115 Heating, Air-Conditioning, and Refrigeration Contingency Training

Heating, refrigeration, and water treatment equipment associated with contingency operations. Includes miseellaneous support equipment, international electrical systems, and contingency responsibilities of civil engineering personnel.

HAR 2100 Steam and Hot-Water Systems

Operation and maintenance of steam and high-temperature water boilers and heating plant auxiliary equipment.

HAR 2102 Refrigeration Maintenance Laboratory

Advanced installation, servicing, repair, and maintenance of ventilating, refrigeration, and air-conditioning equipment. (May be repeated for credit on various refrigeration and air-conditioning systems.)

HAR 2103 Automotive Air-Conditioning

Operation, service, inspection, and maintenance of automotive air-conditioning systems.

HAR 2104 Industrial Water Treatment

Industrial water treatment processes. Chemical treatment of industrial heating and cooling equipment water.

HAR 2105 Liquid Oxygen Storage Tank Maintenance

Operation and maintenance of liquid oxygen storage tanks. Use of special test equipment to analyze malfunctions, bench test, and repair storage tanks.

HAR 2106 Oxygen/Nitrogen Plant Components

Advanced operation and maintenance of oxygen/nitrogen plant components and support equipment. Includes prime movers; air compressors; air-purification, refrigeration, and air separator systems; cryotainers; gas storage cylinders; purity testing; and quality control.

HAR 2107 1.5-Ton Oxygen/Nitrogen Plant Operation

Principles of plant operation; includes concepts of flow controls and inspections and maintenance of expansion engines.

HAR 2108 Industrial/Indirect Expansion Systems

Theory of operation; determining equipment operation efficiency; maintenance and troubleshooting package liquid chiller, centrifugal, and absorption air-

conditioning systems and cascade applications; and adjustment of related equipment controls.

HAR 2109 Environmental Control System Procedures

Advanced environmental control system procedures. Malfunction diagnoses and corrective measures on ventilation systems, brine chillers, and air-conditioning systems.

HAR 2110 Heating, Ventilation, and Air-Conditioning System Controls

Advanced operation, maintenance, and trouble-shooting techniques for pneumatic controls including transmission system/components, and electric and electronic controls. Analysis of thermodynamics and psychometrics on equipment design. Schematics and use of calibration equipment on various system configurations.

HAR 2111 Advanced Air-Conditioning and Refrigeration

Application of physics in refrigerant; refrigeration cycle characteristic and system component applications; brazing and soldering techniques; and system maintenance procedures.

Hyperbaric Medicine

HBM 2300 Organization of Clinical Hyperbaric Medical Facility

Management of clinical hyperbaric team and planning and analysis of budgetary and manpower requirements for hyperbaric chamber operations.

HBM 2301 Hyperbaric Chamber Operations and Maintenance

Hyperbaric chamber design, operation, and maintenance and facility safety codes.

HBM 2302 Clinical Research

Protocol and techniques of data collection in clinical investigations of both animal and human subjects and use of tissue oxygen measuring equipment.

HBM 2303 Supervised Clinical Practicum

Hyperbaric chamber procedures accomplished under supervision of a physician and instructor; patient assessment, scheduling, and treatment; wound management; and operation of monitoring equipment.

HBM 2304 Hyperbaric Training for Health Care Technicians

Physiological problems associated with diving and decompression procedures. Management and treatment of decompression sickness; arterial gas embolism; management of gas gangrene, carbon monoxide poisoning, and disorders treated with hyperbaric therapy; and hyperbaric chamber operation and safety procedures.

Heavy Equipment Operation

HEO 1513 Maintenance Equipment Principles, Servicing, and Operation

Operation, inspection, and servicing of various types of heavy equipment. Includes snow and ice control methods, snow removal equipment, and welding procedures and equipment.

HEO 1601 Pavement/Construction Equipment Operator

Operating techniques and operator level maintenance for various types of construction equipment. Includes sweepers, tractor-trailers, 5-ton dump trucks, loaders, industrial tractors, graders, backhoes, dozers, distributors, and pavers. Introduction to rigid and flexible pavement construction and maintenance, fencing, snow and ice control, welding, drainage structures, career field structure, contingency responsibilities, total quality management, and safety.

HEO 2501 Advanced Construction Equipment Operation and Servicing

Operation and maintenance of various types of construction equipment to include crawler tractors, graders, cranes, scrapers, dump trucks, and loaders.

HEO 2502 Soil Conditioning and Surface Compaction

Advanced understanding of soil classification, compact conditioning requirements, roller and rotary tiller operations, water distribution, and related mathematical calculations.

Applied History

HIS 1501 Introduction to Air Force Unit History

Comprehension of Air Force history; includes development of history program, qualifications and duties of unit historian, historical concepts and techniques, nature and source of historical materials, and application of historical methodology.

HIS 1502 Methods of Historical Research

Principles and methods of historical research and organization of historical materials. Includes researching sources, evaluation of documents; selection, use, and maintenance of supporting documents; conducting oral interviews; and writing historical narratives.

HIS 1503 Independent Research and Historical Writing

Techniques of independent research for conducting oral interviews and historical writing; includes preparation of outline, footnotes, and bibliography and writing narrative and abstract.

Histologic Technology

HIT 1101 Histology

Study of human organs and tissues for developing histotechnological skills; emphasis on recognition, composition, and functions of organs and tissues and autopsy, surgical, and cytological procedures.

HIT 2301 Histologic Technology Laboratory Practicum

Histochemistry; specimen processing techniques such as fixation, dehydration, embedding, sectioning, decalcification, microincineration, mounting, and routine special staining; preparation of reports and maintenance records; preservation and shipment of pathologic materials; ethics; and morgue duties.

HIT 2302 Histopathology Procedures

Introduction to histopathology, laboratory/ environmental safety, mission, organizational structure, and patient/professional relations. Includes publications, administration, medical materiel procedures and terminology, and laboratory calculations.

HIT 2303 Histologic Specimens and Slide Processing

Principles and techniques of using microtome and cryostat and sectioning, staining, and mounting slides. Includes fixation, decalcification, tissue dehydration, and embedding.

HIT 2304 Autopsy

Identification of major organ groups and techniques for performing autopsies.

HIT 2305 Histologic Practicum

Practical application in identifying microscopic tissue types and performing administrative procedures, tissue processing, microtomy, decalcification, autopsies, gross surgical procedures, and specimen filing.

Health Services Administration

HSA 1305 Health Care Management

Introduction to medical computer systems, medical service account, documentation, and communication management; includes publications and forms management, collection of fees, preparation of vouchers, medical expense and performance reporting system, report of patients, and typed communications.

HSA 1306 Patient Administration

Introduction to interpersonal relations, admission and disposition of patients, maintenance of clinical and medical treatment records, release of medical information, eligibility for medical care, quality assurance/risk management, and medical terminology.

HSA 2001 Resource and Information Management

Operation and function of resource management office. Includes analysis of medical manpower standards, management of Medical Expense and Performance Reporting System, Quality Air Force procedures, methods improvement, correspondence management, report of patients, and controls and procedures for patient valuables.

HSA 2313 Hospital Administration

Indepth study of components of health care delivery system. Includes organization and structure; understanding concepts, processes, and techniques used in health administration; and behavior theory applicable to work environment.

HSA 2315 Medical Readiness Planning

Introduction to planning, exercises, readiness training, National Disaster Medical system, status of resources, and unit medical training system.

Hotel Management

HTM 1101 Consumer Services Management

Management responsibilities and policies in functional areas of military exchange services and commissary, billeting, linen exchange, laundry, and drycleaning operations. Includes facility utilization, merchandising, retail sales, funding, and concession operations associated with each functional area.

HTM 2103 Lodging Facility Management

Lodging facility operation and techniques to identify, analyze, and correct problems in a total quality management environment. Includes check-in procedures, reservations, and termination of quarters.

Internship

INT 3000 Internship-Apprentice

Successful completion of apprentice training requirement of Air Force dual channel on-the-job training (OJT) program. OJT program includes completion of career field fundamentals and basic principles through technical training, demonstration of job proficiency of task outlined in specialty training standard; and supervisor's recommendation for advancement to apprentice level.

INT 5000 Internship-Journeyman

Successful completion of fully skilled journeyman training requirements of Air Force dual channel on-the-job training (OJT) program. OJT program includes a minimum of 6 months' satisfactory experience at apprentice level; completion of comprehensive Air Force career development course with a closed-book, proctored examination or other approved written training materials needed to increase knowledge of career field beyond apprentice level; minimum of 12 months' satisfactory, full-time performance in a journeyman specialty; and supervisor's recommendation for advancement to journeyman level.

INT 7000 Internship-Craftsman

Successful completion of craftsman training requirements of Air Force dual channel on-the-job training (OJT) program. OJT program includes a minimum of 18 months' satisfactory, full-time performance in a craftsman specialty; comprehensive Air Force career development course with a proctored, closed-book examination on skill area and/or management requirement and/or formal craftsman training; completion of management training through

Airman Leadership School; and supervisor's recommendation for advancement to craftsman level.

INT 9000 Internship-Superintendent

Awarded upon promotion to grade of senior master sergeant, completion of USAF Senior Noncommissioned Officer Academy course in residence, and recommendation by supervisor for advancement to superintendent level.

Intelligence

ITL 1101 Intelligence Fundamentals

Mission and organization, intelligence cycle, libraries, administration, and data-handling systems. Emphasis on recognition of document, operations, and communications security.

ITL 1102 Analysis and Reporting of Intelligence Data

Identification of essential elements of information; selection of reporting vehicle; and production of concise, timely, technical summaries

ITL 1103 Intelligence Operations Lab

Comprehensive laboratory of intelligence operations scenarios.

ITL 1104 Basic Morse Code

Recording international Morse code; typing and computer keyboard familiarization; theory of radio wave propagation; radio communications; and operational security. Includes recognition and reporting of various types of distress signals.

ITL 1105 Morse Interceptor

Interception, copying, and processing transmissions keyed in international Morse code. Includes computer-based recording, storing, and forwarding; transcribing signals through varying degrees of interference; frequency search missions; frequency measurement; and maintenance of operation logs.

ITL 1106 Communications Signals Collection and Processing

Collection and processing of international communications signals, principles of security, classification requirements, and intelligence community operations.

ITL 1201 Airborne Intelligence Operations

Procedures relating to airborne command, control, and communications. Encompasses pre-mission preparation; aircraft system operation; mission objective orientation; crew coordination; and airborne battle staff support including electronic combat, weapons systems and targeting, and post-mission operations.

ITL 1301 Aircrew Intelligence Training

Aircrew intelligence using available resources and use of presentation media in aircrew intelligence training in evasion and escape, survival and rescue, and enemy capabilities.

ITL 1401 Electronic Signal Exploitation

Analysis of electronic signals to obtain electronic intelligence (ELINT); includes technical documents, computerized data for management and analysis, and potential for ELINT usage in electronic combat.

ITL 1402 Radio Communications Analysis

Computerized data in analysis of radio communications network administration. Includes determining network organization, operation, and types of related communications.

ITL 1403 Data Transmission System

Identification and analysis of tactical and strategic data transmission systems. Determination of command-level and service component use of system.

ITL 1404 Signal Analysis

Use of oscilloscope and sonograph for radio signal analysis and analyzing, identifying, and recording communications.

ITL 1501 Orientation to Imagery Interpreters

Various forms of imagery, photographic, space radar, and advanced sensor systems. Fundamental interpretation of various imagery forms to determine significant cultural and manmade points of reference.

Use of related equipment to assist in evaluation process.

ITL 1502 Imagery Radar Interpretation

Operational theory and types of radar and imagery systems. Determination of radar significant cultural and manmade features. Use of related equipment types to assist in evaluation process.

ITL 1503 Photographic Interpretation I

Analysis of photographs to determine structural characteristics of industrial transportation, power, and housing facilities.

ITL 1504 Synthetic Aperture Radar

Application of synthetic aperture radar to detect, classify, and identify various natural and manmade points of reference.

ITL 1505 Radarscope Interpretation

Principles and techniques of radarscope cartographic interpretation. Includes identification of significant points of reference and plotting/aligning radarscope photography.

ITL 1506 Automated Imagery Interpretation

Use of computer-assisted tactical information system to enhance imagery interpretation capability. Includes management, querying system database, and generating interpretation reports.

ITL 1507 Photographic Interpretation II

Photographic interpretation of military facilities and equipment. Includes analysis of capability, activity, and camouflage, and concealment and deception techniques.

ITL 1508 Sensor Systems

Sensor systems and collection platforms and equipment. Includes analysis of system malfunctions, processing stations, and capabilities.

ITL 1509 Infrared Imagery Analysis

Overview of infrared imaging systems. Focus on infrared theory, principles, and order-of-battle analysis. Includes explanation of electromagnetic spectrum and infrared portion and subregions.

ITL 1601 Mission Planning and Support

Target determination and analysis of threat parameters and selection and plotting of mission tract using all available intelligence data.

ITL 1602 Conventional Weapons Application

Use of computer-assisted weaponeer data, target analysis, and knowledge of delivery systems to solve weapons application problems.

ITL 1902 Introduction to Cryptanalysis

Statistical considerations in determining cryptographic system; includes unilateral and diagraphic frequency distributions and discriminant indicators encryption system.

ITL 1903 Target Materials Management

Indexing, maintaining, and issuing target materials to fulfill unit intelligence and mission requirements. Use of reference documents and procedures to keep materials current.

ITL 2101 Intermediate Cryptanalysis

Cryptographic systems using both manual and computer-assisted methods. Applications of logic, reasoning, mathematical techniques, statistics, and basic language characteristics to identify and recover message text and encryption keys for various hand-generated systems.

ITL 2401 Voice Intelligence Collection

Aural recognition/comprehension of foreign language voice communications, recognition/communication procedures, and weapons systems parameters unique to various nations.

ITL 2402 Airborne Intelligence Collection

Application of operational procedures relating to collection of communications and electronic intelligence. Encompasses ground preparation; aircraft system components to include interphone and keyboard equipment and operation; briefing on emergency procedures; performance of pre-engagement, engagement, and post-engagement operations.

ITL 2503 Advanced Sensor Interpretation

History and current methods of reconnaissance and imagery interpretation equipment; includes application of recording and processing techniques and management procedures for collection and exploitation of intelligence data.

ITL 2504 Multisensor Analysis

Multispectral analysis of designated system capabilities to counter specific Department of Defense intelligence problems. Includes special operations, denial and deception, low-intensity conflict, and possible solutions.

ITL 2505 Theory and Fundamentals of Electromagnetic Spectrum Sensors

Electromagnetic spectrum and light table orientation and theory, operation, and parameters of electro-optical, infrared, radar, and multispectral systems.

ITL 2506 Exploitation Support Data

Imagery interpretation and analysis in support of Department of Defense designated intelligence problems using imagery titling and exploitation support data with mensuration techniques.

ITL 2507 Electronic Systems Security Assessment

Processing, analyzing, and reporting electronic emissions from all sources for deficiency and weakness identification in organizational security. Interviewing techniques and report writing used to provide customer feedback.

Law Enforcement

LAW 1801 Marksmanship Laboratory

Qualification training in use of revolvers, shotguns, automatic handguns, and rifles. Includes nomenclature, capabilities, and characteristics of specific weapons; operator care, cleaning, and maintenance procedures; application of marksmanship fundamentals; weapons safety practices; analysis of force policies; clearing procedures; function checks; and ammunition types and uses.

LAW 1803 Fundamentals of Law Enforcement

Legal and procedural aspects of police operations. Physical apprehension and restraint techniques; searches and seizures; procedures for lawful apprehensions; patrol operations including enforcement of traffic laws; operation of speed detection equipment; resource protection; emergency first aid; weapons safety; arming and use of force; confrontation management; antihijacking and accident scenes; crisis intervention; and antiterrorism/airbase ground defense operations.

LAW 1804 Investigative Principles

Principles of police investigations. Includes advisement of rights, administering oaths, obtaining oral and written statements, preparation and conduct of interviews and interrogations, and preparation/processing of investigative incident/accident reports. Covers crime scenes to include legal considerations and procedural aspects dealing with collection and handling of evidence.

LAW 1850 Patrol Dog Training Techniques

Training and conditioning techniques used to prepare both military working dog and handler to work effectively as a team. Includes operant conditioning; dog obedience; controlled aggressiveness; health checks and first aid for dogs; and maintenance/care of dog, kennel, and associated support equipment.

LAW 1851 Patrol Dog Operations

Specialized training techniques designed to prepare military working dog team to perform a variety of police functions. Includes vehicle and foot patrols; tracking, detecting, and alerting; area searches; gunfire conditions; and concepts of utilization (airbase ground defense, security, and law enforcement duties). Preparation and maintenance of required records, reports, and forms.

LAW 1852 Police Survival Tactics

Personal defensive tactics with special emphasis on shooting situations. Includes review of vulnerabilities of armed personnel and their relationship to mental states of awareness; control of weapons; and stress-related responses before, during, and after shootings. Includes practical exercises in weapon retention techniques, disarming suspects, and recognition and use of cover and concealment.

LAW 2101 Police Administration and Supervision

Police administration and supervision at line and staff levels. Includes application of personnel and resource management fundamentals; manpower and resource requirements; personnel reliability; minority groups and community relations; physical security concepts; law enforcement functions; application of military authority; and unit training programs.

LAW 2801 Patrol Dog Detection Techniques

Specialized training techniques that prepare military working dog handlers to perform drug/explosive detection operations. Includes dog conditioning, drug and explosives identification/detection, and legal aspects of searches and seizures.

LAW 2805 Security Police Administration and Supervision

Police administration and supervision at line and staff level. Includes application of personnel and resource management fundamentals, determining manpower and resource requirements; personnel reliability requirements; minority groups; community relations; supervision of physical security/law enforcement functions; application of military authority; and unit training programs.

LAW 2806 Advanced Law Enforcement Principles

Administration of police line operations. Includes analysis of legal and procedural aspects of interviews and interrogation; searches and seizures; response to disaster and other high-risk situations; and supervision of traffic management, crime prevention, resource protection, military working dog, and corrections/detention programs. Introduction of police supervisors to criminal justice data-automation system.

LAW 2811 Traffic Planning and Management

Analysis of police traffic functions and services and traffic patterns and movement in response to emergency situations. Includes theory of traffic control and safety procedures, analysis of traffic trends and accident causes, preparation of reports and records, traffic engineering and control techniques, research and development, and use of speed-measuring devices and breathalyzer units.

LAW 2815 Fundamentals of Special Investigations

Analysis and application of special agent responsibilities. Includes ethical standards, prosecutory jurisdiction, investigative thought process, apprehension policies, and preparation of investigative plan. Also includes detachment and individual operations; surveillance; professional liaison; and use of spot reports, case briefings, and reports of investigation.

LAW 2816 Military Law

Analysis of history and evolution of military law and military justice system with special emphasis on US Constitution, Uniform Code of Military Justice, and *Manual for Courts-Martial*. Application of rules of

evidence and legal aspects of apprehension, search, and seizure with regard to suspect's constitutional rights and legal/procedural aspects of court testimony.

LAW 2817 Behavioral Science Study of Sources and Interviews

Analysis of techniques and psychological aspects of interviewing. Emphasis on interrogation process, which includes preparation for interviews and interrogations, administering oaths, use of interrogation techniques, appreciation of the relationship between investigator's attitude and effective interviews, and post-interview/investigation requirements.

LAW 2818 Investigative Techniques

Application of methods and techniques used to conduct investigations. Includes practical exercises in observation and description; surveillance; collection and preservation of evidence; apprehension, search, and seizure; crime scene searches; and firearms training. Covers photographic and scientific aids to investigation.

LAW 2820 Criminal Investigations

Analysis of special techniques and procedures used to investigate homicides; sex offenses; assaults; misconduct; larceny and theft of Government property; robbery; housebreaking; narcotics, customs, and postal violations; arson; forgery; counterfeiting; black-market activities; fraud; impersonation; and perjury.

LAW 2821 Counterintelligence Investigations

Analysis of historical development of intelligence services and threat, structure, and tactics of hostile intelligence services. Includes explanation of terms; policies; elements of proof; special investigative techniques concerning sabotage; security violations; special inquiry cases; protection of dignitaries; and direction, collection, analysis, and dissemination phases of intelligence collection cycle.

LAW 2824 Principles of Traffic Accident Investigation

Analysis and application of advanced techniques used to gather facts and determine causes of traffic accidents. Includes review of traffic safety procedures; preparation of field sketches, diagrams, and traffic violation/accident investigation reports and forms; and techniques used to teach traffic accident investigation to other policemen.

LAW 2826 Emergency Service Team Operations

Physically intensive training in special weapons and tactics used to counter barricaded suspects, hostage situations, and terrorist operations. Employment of team concept in all tactical situations. Includes use of special observation devices, climbing and rappelling in stable and unstable modes, tactical building entry and searches and weapons employment, use of chemical agents, temporary restraining devices, extraction techniques, hostage negotiations, and extensive use of physical conditioning techniques.

LAW 2829 Protective Service Operations

Advanced techniques required to protect personnel and resources through assessment of principal threat. Includes application of advanced procedures (route/site surveys, identification of potential hazards and safe havens), practical exercises in foot and motorized escorts, and employment of antiterrorism techniques.

LAW 2836 Military Working Dog Supervisors

Advanced training for military working dog supervisors designed to prepare them for positions as kennel masters. Includes management of military working dog sections; maintenance and care of dog, kennel, and associated equipment; and conditioning, proficiency training, and utilization of dog teams.

LAW 2837 Advanced Electronic Surveillance

Application of electronic surveillance techniques used to perform audio, video, and physical surveillance of selected targets. Includes development and use of technical surveillance plan; use of communications network, body pack, and fixed site (radio frequency and video) installation techniques; analysis of source control techniques; use of acoustics and microphones; and practical exercises in surreptitious searches, site surveys, and vehicle tracking.

LAW 2838 Locks and Locking Devices

Assembly/disassembly procedures for common types of locks and locking devices as applied to advanced security vulnerability investigations.

LAW 2839 Economic Crime

Economic crime investigation. Includes contracting, contract law, criminal/civil law, remedies, kickbacks, bribery, environmental crime law/investigations, product substitution, base target areas, and other areas associated with local level fraud.

LAW 2840 Advanced Surveillance Operations

Advanced principles and techniques of surveillance operations. Includes theory, philosophy, methodology, legal authority, sensitive source handling, area casing, target studies, and overseas legal and operational considerations. Also includes joint operations, jurisdiction, and specialized equipment.

LAW 2841 Confidential Informant Operations

Introduction to confidential informant operations. Includes documentation, security of informant identification, behavioral concepts, recruitment and management, and methods for teaching confidential informant operations for field application.

Legal Service

LEG 2101 Court Reporting

Operational techniques of closed-microphone equipment to record, transcribe, and assemble records of court proceedings. Requires using court-reporting equipment to take dictation at a rate of 175 words per minute and transcribing at a rate of 40 words per minute using typewriter.

LEG 2103 Legal Administration

Law library, legal office automation, pretrial administration, and post-trial procedures including relationship with attorneys and clients.

LEG 2104 Claims Investigation

Fundamentals of Military Claims Act and Federal Tort Claims Act, techniques of investigating incidents and accidents, and legal procedures for claims. Includes special research assignments relevant to transportation, recovery, hospital damage, Government property, and admiralty claims.

LEG 2105 Military Justice

Pretrial procedures, evaluation of evidence, confessions and searches, appellate review, nonjudicial punishment, automated military justice analysis management system, post-trial matters, records of trial, actions of convening authority, courts-martial orders, and recent developments in military justice.

LEG 2107 Legal Office Management

Law library management, legal research, staff judge advocate/noncommissioned officer-in-charge relations, office budgets, on-the-job training, USAF judiciary, human relations, and paralegal utilization. Practical exercises for effective oral/written communicative skills and civil service employee matters.

LEG 2108 Legal Claims and Tort Litigation

Procedures for processing general claims and tort litigation. Includes approving authority actions, emergency and advanced payments, prohibited acts, Article 139, *Uniform Code of Military Justice* claims, personnel and transportation claims, Military Claims Act, foreign and international agreement claims, Federal Tort Claims Act, and other claims.

LEG 2109 Advanced Claims Investigation

Interviewing witnesses, legal research, and investigative report writing; includes procedures for conducting and reporting investigations, special types of investigations, and investigations for other services.

Leadership, Management, and Military Studies

LMM 1101 Leadership and Management

Leadership role and responsibilities of journeymen; theories, techniques, and practical application of leadership/followership; supervision; management; stress management; problem solving; concepts of human behavior; standards of discipline; effective counseling techniques; evaluation of enlisted personnel; and current social issues.

LMM 1102 Managerial Communications

Principles of oral/written communication for airmen, theories/concepts of communication, factors influencing the communicative process, speaking techniques including oral presentations, and principles of effective writing.

LMM 1103 Military Studies

Organization, mission, and history of Air Force; dress and appearance; drill/ceremonies; customs/courtesies; respect for flag; military deterrence; democratic process; code of conduct; and personal readiness.

LMM 1104 Introduction to Total Quality Management I

Introduction to total quality approach to management. Includes quality Air Force commitment; seven-step continuous improvement process; quality environment, tools, metrics, roles, and responsibilities; and effective team-building concepts.

LMM 1111 Leadership and Management I

Role and responsibilities of working leaders; includes theories/techniques of effective leadership and concepts of human behavior in leadership situations; practice in maintaining standards of discipline, counseling/interviewing personnel, personnel management, problem-solving techniques, and work distribution; and social issues.

LMM 1112 Managerial Communications I

Principles of oral/written communication for airmen, theories/concepts of communications, factors influencing the communicative process, speaking techniques including oral presentation, and principles of effective writing.

LMM 1113 Military Studies I

Aviation, organization, and mission of Air Force, military justice system, customs/courtesies, principles of world politics, US national interests, and forces necessary to deter threats to national security and relation to role of working leader.

LMM 2121 Leadership and Management II

Role and responsibilities of craftsman/supervisor. Includes concepts of human behavior; standards of discipline; effective counseling techniques; methods of orienting new personnel; principles of motivating individuals within groups; evolution of management theory; personnel management skills; and applied problem-solving techniques in management, social relations, and labor relations.

LMM 2122 Managerial Communications II

Principles of oral and written communications applicable to technician/supervisor. Includes planning and organizing for effective communication by applying principles and theories of oral presentations, analyzing methods for improving listening, lessening barriers to effective communication, and writing principles.

LMM 2123 Military Studies II

Organization and mission of the Air Force military justice system and relationship of US foreign/domestic policies to military readiness.

LMM 2124 Quality of Life

Introduction to management of quality-of-life issues. Includes counseling of subordinates on importance of physical fitness, suicide awareness, human relations, management of human resources, and stress management. Also includes introduction to hazards of tobacco usage/substance abuse.

LMM 2125 Introduction to Total Quality Management II

Introduction to total quality management at craftsman level. Includes Quality Air Force system and principles, team dynamics, leadership skills, continuous improvement process, human relations, management of human resources, and issues and programs in Quality Air Force.

LMM 2131 Leadership and Management III

Senior noncommissioned officer responsibilities for managing military resources using selected leadership/management theories, concepts, techniques, and skills necessary to maintain order/discipline including roles/views of human resources in management hierarchy and methods for improving worker performance through analytical decision making.

LMM 2132 Managerial Communications III

Advanced practical experience in communication through written/oral reports on various military topics.

LMM 2133 Military Studies III

Elements of international relations, national policy, and employment of military force in achieving objectives over a broad range of circumstances; includes international relationships and role of national security organizations, particularly the Air Force, in achieving national objectives, and application of USAF/joint forces in various military environments, past and present.

LMM 2134 Organizational Theory and Behavior

Organizations and their structure and intensive examination of important behavioral processes. Includes organizational norms, conflict, motivation, self-concept, values, stress, and interpersonal relations. Theories discussed in terms of behavioral, technological, and communicative factors.

Logistics

LOG 1101 Introduction to Supply Management

Organizational structure and functions, definitions, terminology, basic concepts, and processes of Air Force supply system.

LOG 1601 Logistic Maintenance Support

Interpreting automated records and file maintenance; includes rejects and inquiries, repair cycle, bench stock, issue procedures, and inventory.

LOG 1602 Stock Control

Maintenance of proper stock levels. Includes practical exercises in requisitioning, materiel control, monitoring requirements, due-out releases, and shipments.

LOG 1603 Equipment Management

Management of equipment allowances and authorizations; includes practice in turn-in procedures, records maintenance, and special procedures.

LOG 1606 Item Identification Methods

Procedures for researching supply stock fund, supply manuals, national supply catalogs, cataloging handbooks, master cross-reference lists, and technical publications.

LOG 1607 Materiel Facilities Operation

Storage, shipment, warehousing, pickup, and delivery using automated procedures; includes operation of remote computer terminal.

LOG 1608 Stock Fund Management

Management and control of inventories; analysis of stock fund management reports and listings; and interrelationships of accounting and finance, base supply, and supported organizations. Relationship of stock fund transactions and monetary records, satellite procedures, reporting procedures, interface of accounting and finance and supply computer records, and preparation of general support operating program.

LOG 1609 Introduction to Medical Materiel

Supply discipline; includes principles and concepts of property accounting by computer systems and use of medical materiel publications and computer terminals.

LOG 1610 Supply Data Records and Documents

Document control maintenance; includes establishing and maintaining master record and computer output products.

LOG 1611 Medical Stock Control

Stock control procedures peculiar to medical materiel. Includes issues, inventory control, requisitioning, maintenance of due-in/due-out files, and receipts resulting from requisitions.

LOG 1612 Medical Asset Management

Storage and warehousing; includes potency dated items, controlled medical items, quality assurance, inventory stratification, turn-ins, disposition of medical materiel, physical inventories, and quality control after daily processing cycle.

LOG 1613 Medical Equipment and Support Operations

Management and repair of reserve assets, linen supply service, nonmedical materiel support, and application of medical materiel procedures.

LOG 2101 Advanced Logistics Planning

Advanced logistics planning techniques. Includes wartime and contingency planning, logistics command and control systems, and deployment management.

LOG 2601 Introduction to Planning and Programming

Logistics planning techniques; includes types of plans, composition of plans, mobility planning, and logistics center operation.

LOG 2602 Automated Logistics Plans Management

Advanced techniques, principles, functions, and methods of entering data into and retrieving data from a computer for logistics plans; includes data maintenance procedures, methods, and purposes as well as uses of retrieved data and computer output products.

LOG 2603 Logistics Management

Management practices that ensure effective and economic accomplishment of group and project objectives of entire field of logistics.

LOG 2604 Electronic Communications Programs Management

Principles of planning, programming, and implementing electronic communications systems; includes techniques and procedures for determining manpower and budgetary requirements, construction planning at all levels of command, monitoring program implementation, managing systems and records, and administering minor changes to ongoing programs.

LOG 2605 Supply System Management and Analysis

Understanding supply computer system, customer support procedures, materiel and financial management, and supply management analysis; includes extensive use and analysis of management reports and listings.

LOG 2606 Mission of Medical Materiel Management

Mission objectives, organization, and responsibilities of medical materiel function; includes property responsibility and supply discipline, concepts and principles of automatic data processing, quality assurance, turn-ins, reserve assets inventory, and inventory adjustments, property disposition, quality control, and corrective actions.

LOG 2607 Data Records and Document Control

Establishing, revising, and updating master record, catalog change actions, validation of records, computer products, and maintenance of document files.

LOG 2608 Medical Equipment Management and Budgeting

Medical equipment management, repair, and budgeting.

LOG 2610 Medical Materiel Customer Training

Preparation of training booklets and handouts on customer training procedures, development of training programs, and forecasting training requirements.

LOG 2613 Expendable Asset Management

Concepts of supply support objectives to include stockage policies, requisitioning requirements, Air Force stock fund, and visibility/control processes.

LOG 2614 Air Force Equipment Management Systems

Procedures and techniques for equipment management to include equipment funding, retention control, and equipment reporting.

LOG 2615 Controlled Assets Management Procedures

Methods and procedures pertaining to Air Force Recoverable Assembly Management System to include transaction processing and reporting requirements, repair cycle management, depot mission capability management, cannibalization, aerospace vehicle inventory status, and standard reporting designation systems.

LOG 2616 Principles of Customer Support

Customer support to include customer interface, source of supply interface, analysis of supply support, and special supply support concepts.

LOG 2619 Munitions Inventory Procedures

Explosive munitions supply system and security handling and storage. Includes maintenance support, property accounting, files maintenance, and Nuclear Ordnance Commodity Managed Asset Manual accounting. Concepts and procedures for issue, turn-in, shipping, receiving, stock replenishment, inventory control, and supply discipline.

LOG 2620 Contingency/Wartime Support

Strategic materiel management during wartime contingencies. Includes wartime processing procedures and manning and reporting actions using concepts from combat supply management and weapons system management information systems. Combat follow-on supply systems using war reserve materiel, deployable assets, and war-readiness spare kits.

LOG 2621 Combat-Oriented Supply Organization Procedures

Combat supply procedures for aircraft maintenance unit support personnel. Includes issue-processing procedures, tool management, parts redistribution procedures, support equipment management, demonstration of parts requisition and accounting, bench stock procedures, shelf-life, waste prevention programs, and management of daily reports.

LOG 2622 Contingency Wartime Planning Course

Introduction to contingency wartime planning and basics of Air Force planning including players, resources, plan development, execution, analysis, force selection, support planning, operational plan development, and base support planning.

Machinist

MAC 1101 Machine Shop Fundamentals

Fundamentals of machine shop operations; includes shop mathematics and problem solving, care and use of precision-measuring devices, construction and interpretation of shop drawings and sketches; use of shop data; manufacturing parts; layout operations; fitting, assembly, and disassembly of machine parts; operation and maintenance of general shop equipment; hazardous and toxic waste management; and safety.

MAC 1102 Tool Design

Tool design methods; fabrication techniques; machine preparation; and use of special tools, jigs, fixtures, and

attachments. Contour machine; power cutoff saw; precision and surface grinding operations; and identification and selection of metals from drawings.

MAC 1103 Lathe Operations

Lathe operations within drawing specifications. Includes turning operations (straight, shoulder and taper); filing, parting, knurling, boring, external and internal threading, tool grinding, center alignment, facing and center drilling, drilling, and reaming operations.

MAC 1104 Milling Operations

Milling operations within drawing specifications. Includes plain and face, angular, form, gear-cutting, and internal milling operations and adjustment, maintenance, storage, and cleaning of milling equipment and attachments.

Mapping

MAP 1401 Introduction to Cartography

Maps and charts, geographic coordinates, world geographic reference system coordinates, and universal transverse Mercator coordinates; includes determination of true and magnetic courses.

MAP 1501 Analytical Photogrammetric Positioning System

Introduction to use of analytical photogrammetric positioning system. Topics include stereo pair determination and alignment; extraction; validation and accuracy of coordinates and elevations; mensuration; and writing, altering, and using programs for calculators.

Masonry

MAS 1501 Introduction to Masonry

Identification of techniques for masonry planning projects; concrete mixtures; construction layouts; forms preparation; reinforcement material selection; and concrete mixing, curing, maintenance, and repair.

Mathematics

MAT 1103 Introduction to Statistics

Principles of frequency distribution and computing and interpreting probability, discrete and continuous probability distributions, binomial formulas, and probability tables. Statistical methods to emphasize variance analysis, correlation procedures, standard deviation, and correlation programs.

MAT 1104 Applied Algebra and Trigonometry

Algebraic functions and graphs; includes polynomials and complex numbers, circular functions, solution of triangles, and trigonometric functions and graphs.

MAT 1105 Management Engineering Statistics

Analysis of mathematics for statistics, general statistics, and queuing theory.

MAT 1405 Spectrum Analysis Mathematical Applications

Basic mathematical functions used in determination of emission symbols as they apply to spectrum management. Includes square root, exponents, plain and solid geometry, and basic algebraic and trigonometric functions.

MAT 1601 Electronic Mathematics

Mathematic principles and their application to electronics; includes algebraic expressions, solution of equations, word problems, and trigonometric functions.

MAT 2103 Applied Statistics

Application of statistical techniques and principles to maintenance, manpower, or general management data. Includes statistical inference; trend analysis; hypothesis testing; tests for significance; correlation coefficients; and statistical analysis and application of such statistical techniques as T-Test, Chi-Square, Cochran C Test, and Spearman Rank Correlation Coefficient.

Measurements

MEA 2707 Optical Measurements

Theory of geometry of reflection and refraction; includes lens system, optical tooling instruments, and optometric and special devices.

MEA 2710 Electronic Measurements

Time and frequency measurements. Includes practice in phase, distortion, and frequency measurements; waveform analysis; and use of oscilloscope calibrating equipment.

MEA 2716 Precise Time and Frequency Calibration Systems

Advanced precise time and frequency calibration; includes measurements, standards, and time transfer methods.

MEA 2717 Microwave Theory and Application

Theory of microwave measurements and mathematics, transmission lines, signal generators, laboratory equipment, microwave impedance concepts, and systems analysis.

MEA 2718 Fixed-Frequency Microwave Measurements

Advanced fixed-frequency microwave power measurement, attenuation measurement, and spectrum analysis.

MEA 2719 Swept-Frequency Measurements

Advanced swept-frequency attenuation and reflectometer measurements, impedance, and wave-meter calibration.

MEA 2720 Applied Physical Measurements I

Introductory physical, linear, and angular measurements and technical applications.

MEA 2721 Applied Physical Measurements II

Physical measurements including temperature, mass weight, force density, viscosity and flow, and pressure measurements.

MEA 2722 Applied Physical Measurements III

Physical measurements including rotary motion, torque, humidity, sound, and vibration.

MEA 2724 Engine Measurement Systems

Theory, operation, alignment, and calibration of jet engine equipment and test stands; includes theory and calibration techniques using block diagrams.

Mechanical Maintenance

MEC 1208 Introduction to Ground Heaters

Principles and functions of ground heater system and components. Includes operation, inspection, use, and interpretation of electrical schematics and flow diagrams; trouble analysis; and isolation and correction of system malfunctions.

MEC 1209 Basic Reciprocating Engines

Principles and functions of reciprocating engine systems and components. Includes selection and use of handtools, special tools, and test equipment; service inspections; engine operation; trouble analysis; and isolating and correcting malfunctions with stress on safety procedures.

MEC 1211 Maintenance Orientation

Mechanic responsibilities and maintenance concepts; includes professional responsibilities of technician; maintenance management and inspection systems; selection and use of manufacturer's technical data, maintenance records, and forms; and safety.

MEC 1212 Auxiliary Ground Support Equipment

Inspection, maintenance, and repair of both powered and nonpowered aircraft support equipment. Includes hydraulic, electrical, and pneudraulic schematics; maintenance stands; mobile work platforms; jacks and testers; oil and hydraulic servicing carts; chassis maintenance of liquid nitrogen and oxygen carts; air cycle machines; tank dollies; towbars; cowling trailers; seat-removal cranes; and fuel reclamation units. (May be repeated on various types of support equipment.)

MEC 1224 Generator Sets

Electrical systems, scheduled inspections, and load bank testing; includes familiarization with generator and components, trouble-isolation procedures, and generator set component maintenance.

MEC 1225 Hydraulic Support Equipment

Principles and theory of operation of hydraulic systems and components applicable to aircraft hydraulic test stands. Includes familiarization with operating procedures, service inspections, and trouble-isolation techniques; correction of malfunctions; and use of schematic and circuit diagrams and manufacturer's technical manuals during trouble analysis and repair.

MEC 1227 Bomb-Lift Equipment

Systems and components used in bomb lifts; includes performing operational checks, inspections, troubleshooting, and maintenance of hydraulic, electrical, and mechanical subsystems.

MEC 1228 Gas Turbine Compressors

Theory of operation and maintenance of gas turbine air compressors. Interpretation and use of airflow, electrical, lubrication and pneumatic schematics; operation; inspection; trouble-isolation procedures; repair and testing of components; pneumatic load testing, and remote control use of pneumatic analyzers. (May be repeated for credit on different gas turbine compressors.)

MEC 1229 Conventional Air Compressors

Theory of operation and maintenance of rotary and reciprocating air compressors. Interpretation and use of airflow and electrical schematics, operation, trouble-isolation procedures, inspection, testing, prime mover repair, adjustment and repair of both high- and low-pressure systems, and use of hydrostatic test equipment. (May be repeated for credit on different conventional air compressors.)

MEC 1507 Mechanical Fundamentals (Missile Complex)

Knowledge of principles of mechanics; includes configuration of a missile complex, use and care of handtools, security, weapons system operational capabilities, technical orders, civil engineering manuals, maintenance management, and missile safety.

MEC 1511 Motors and Controls

Principles of electric motors and operating characteristics. Motor control circuit analysis and single- and three-phase motor connections.

MEC 1702 Facilities Maintenance

Maintenance and repair of industrial facilities. Includes water and waste disposal; pneumatic, hydraulic, and battery systems; power generation and distribution; environmental control; personnel access system; and closure control.

MEC 1703 Hydraulic Systems

Hydraulic principles, components, and systems; includes use of hydraulic and electrical schematics to analyze system operation and isolate malfunctioning components and procedures for servicing, inspecting, repairing, and controlling contamination of selected systems.

MEC 1716 Facility Systems

Purpose, operation, inspection, troubleshooting, and maintenance of air-conditioning, heating, and ventilation systems; includes protection and detection systems and motorized doors.

MEC 2206 Truck-Lift Maintenance

Theory of operation and application of maintenance, inspection, and trouble-isolation procedures on

ground-support truck lifts. Includes prime movers; hydraulic, traction, and electrical systems; and accessories. (May be repeated for credit on various truck lifts.)

MEC 2208 Ground Heater Maintenance

Application of advanced principles, theory, and operation of ground heaters; includes service inspections, operating procedures, safety precautions, trouble isolation, and repair of system components. (May be repeated for credit on various ground heaters.)

MEC 2213 Diesel Engine Overhaul

Advanced diesel engine maintenance to include disassembly, inspection, and maintenance of engine components; reassembly; and servicing and operational checks.

MEC 2214 Powered Aerospace Ground Equipment Operation

General principles, functions, preoperation inspections, and operation of hydraulic test stands/testers/carts, air compressors, generator sets, air-conditioners, truck lifts, and floodlights.

MEC 2215 Ground Support Equipment Electricity and Electronics

Advanced treatment of electricity and electronics as applied to ground support equipment. Analysis of effects of electric and electronic components including solid-state devices in varied complex circuits and exploration of principles and functions of various motor, motor control, and generator components. Extensive use of schematic diagrams, technical manuals, and test equipment to analyze diverse electrical and electronic circuits, motors, motor controls, and generators. Includes isolation and correlation of system malfunctions. (May be repeated for credit on various pieces of ground support equipment.)

MEC 2216 Powerplant Solid-State Electronics

Analysis and application of principles of solid-state devices. Includes theory, performance testing, and evaluation of function of diodes and transistors in specific engine/generator circuitry. Indepth application of switching circuits; logic circuits; and turbine, generator, and alternator control and output circuits. (May be repeated for credit on various engine circuits).

MEC 2501 Diesel Generator Maintenance Laboratory

Troubleshooting, repair, and maintenance of diesel-powered generating equipment.

MEC 2503 Diesel Engine Maintenance Laboratory

Operating characteristics and malfunction analysis of diesel engines; fuel system components; governing, cooling, and lubricating systems; and associated powerplant accessories.

MEC 2504 Maintenance of Aircraft Arresting Systems

Theory and practical training in operating principles and maintenance of friction and hydraulic arresting mechanisms used in modern aircraft arresting systems; includes training on both engaging and arresting mechanisms.

MEC 2505 Advanced Gas Turbine Engine Maintenance Laboratory

Theory and maintenance procedures applied to specific auxiliary gas turbine engines. Includes theory of operation; air and fluid flow; control features and inspection; trouble isolation; and servicing, testing, and installation procedures.

MEC 2506 Advanced Hydraulic Test Stand Maintenance Laboratory

Inspecting, cleaning, servicing, bleeding, repairing, operating, adjusting, testing, and replacing components in hydraulic test stands used to operate aircraft hydraulic systems during ground maintenance; includes systems analysis, trouble isolation, contamination checks, and electrical and hydraulic schematics. (May be repeated for credit on various hydraulic test stands.)

MEC 2507 Advanced Air-Compressor Maintenance Laboratory

Servicing, repairing, and testing air compressors; includes theory of operation, manufacturer's technical manuals, safety precautions, and trouble-isolation procedures. (May be repeated for credit on various air compressors.)

MEC 2511 Auxiliary Heating Equipment

Operation and maintenance of specialized mobile heating equipment for field condition use.

Medical Assistant

MED 1301 Introduction to Medical Assisting

Preventive, occupational, and disaster medicine; hearing conservation programs; clinical procedures; office file maintenance; and ordering and management of office supplies/materials.

MED 1302 Medical Assisting

Techniques for preparing, examining, and treating patients; patient relationships; basic pharmacology; assisting in minor surgery; cardiopulmonary resuscitation; emergency treatment of shock and injuries; recording and screening results of refraction, visual testing, audiometry, and conductive/perceptive deafness; and electrocardiography procedures.

MED 1303 Human Anatomy and Physiology

Characteristics and functions of gastrointestinal, respiratory, cardiovascular, genitourinary, nervous, musculoskeletal, endocrine, and integumentary systems and effects of hypoxia, pressure breathing, decompression, and spatial disorientation.

Metalworking

MEL 1514 Sheet Metal

Characteristics of metals, engineering drawings, sheet metal layouts, tools and equipment, fabrication of sheet metal components, inspection/maintenance of metal doors, operations, and resource management.

MEL 1515 Fundamentals of Airframe Repair

Principles of airframe repair. Includes performance of shop mathematics, identification of aircraft structures and component balancing, use of handtools, working characteristics of metals and types of corrosion, safety, constructing flat pattern and metal layouts, nonpowered cutting and bending, powered cutting, and maintenance management.

MEL 1516 Forming and Hand Riveting

Forming and hand riveting of aircraft parts. Includes nonpowered bending, radius bends, hand and machine forming, forming joggles, rivet identification and pattern layout, hand drilling, countersinking dimpling, riveting, and rivet removal.

MEL 1517 General Structure Repair

General structural repair of aircraft. Includes proficiency in pneumatic drilling, dimpling, countersinking, and riveting; nonflush skill and sealed skin repair; and substructural and skill repair.

MEL 1518 Aircraft Specialized Repair

Aircraft specialized repairs. Includes repair of fiberglass and metal bonded honeycomb as well as use of aerodynamic smoothing compound and installation of special fasteners, cable assemblies, and aircraft tubing.

MEL 1520 Shot Peening Equipment

Practice in setup and use of equipment, proficiency in production peening with different types of shot, application of intensity measurements, and identification of saturation curves.

MEL 2101 Advanced Aircraft Structural Repair

Advanced structural repair techniques for metal bonded sandwich structures. Includes surface preparation, fiberglass doublers, glass fabric laminates, adhesive and hot bonding methods, and specialized scarf and step-joint repair of radomes. Application of potted repairs, and one- and two-skin core repair, aluminum core external patches, and transition and trailing edge area repairs of metal bonded honeycomb panels.

MEL 2514 Structural Repair of Composite Materials

Airframe repair dealing entirely with composite structures including evaluation and repair of various types of damage.

MEL 2518 Battle Damage Assessment

Analysis of design considerations, categories of structures, technical publications, damage assessment, evaluation of markings and

documentation, practice safety, and foreign object damage prevention.

MEL 2520 Shelter Maintenance

Shelter maintenance and structural repair. Includes identification of shelter and major structural components, use of handtools, safety precautions, panel assembly repair, honeycomb and fiberglass repairs to shelters, and classification of damages.

Meteorology

MET 1802 Meteorology and Weather Instruments

Elementary meteorology providing a foundation for understanding and observing weather elements. Includes applied concepts in using temperature, humidity, pressure, wind, cloud height instruments; weather radar; and communications equipment.

MET 1803 Weather Observation

Practice in observing weather elements; making instrument evaluations; encoding/recording weather observations of sky conditions, cloud forms, atmospheric phenomena, visibility and obstructions, wind, temperatures, humidity, pressure, and precipitation; and classification of storm echoes received on storm detection equipment.

MET 1804 Plotting Weather Maps and Charts

Preparation of maps and charts from land, airways, and ship station reports; includes thermodynamic diagrams, constant pressure charts, aircraft meteorological reports, and local area surface charts.

MET 1805 Weather Station Operation

Weather observer duties in a simulated weather station. Includes taking actual weather observations, operating station instruments and equipment, preparing weather products, maintaining publications, and implementing work center safety procedures.

MET 1807 Environmental Support of Electro-Optical Systems

Principles of operation and environmental sensitivity of precision-guided munitions. Application of physics of atmospheric radiative heat transfer to provide data necessary for target acquisition and tactics.

MET 2102 Automated Weather Data-Handling System

Operation and management of automated weather data-handling system; includes man-machine interface, loop/sequences, composites, graphic editing alerts, tables, plot models, command sequences, data types, and products.

MET 2103 Field Weather Operations

Installation and operation of tactical weather equipment and performance of weather related duties under simulated conditions. Establishment of encampment and perimeter defenses and simulation of actions necessary to protect resources.

MET 2801 Weather Radar Operation

Principles and operation of weather radar system with emphasis on interpretation of weather radar echoes.

MET 2804 Climatology Data Analysis

Use of frequency and distribution curves to interpret and present climatological data with charts, graphs, and tables.

MET 2806 Synoptic Meteorology

Analysis of pressure, coriolis, centrifugal, and friction forces on wind motion; includes solar radiation and its effect on air stability, elementary thermodynamics, fronts, and pressure systems. Also includes preparation and presentation of weather briefings.

MET 2807 Operational Weather Forecasting

Subjective and objective forecasting techniques for flightpaths and terminals. Use of teletype and facsimile data plus current data from functional weather equipment and radar for analysis and forecasting exercises. Primary emphasis on developing forecasting techniques and identifying parameters associated with severe weather.

MET 2809 Central Weather Facility

Theories and techniques of weather analysis and forecasting in a simulated weather station environment. Includes operational mission duties of weather map analysis, forecasting, development of

specialized products, and development and presentation of weather briefings.

MET 2817 Tropical Meteorology

Identification and analysis of tropical weather data from wind field to establish a sound basis for tropical forecasting. Includes applicable streamline-isotach techniques of direct kinematic analysis; tropical meteorology; and application of theoretical, climatological, and empirical analytic methods.

MET 2818 Environmental Meteorology

Analysis of synoptic climatology. Includes photo interpretation based on visual and infrared imagery, numerical weather prediction, use of computer weather products, severe weather forecasting, radarscope interpretation of severe weather echoes, air-pollution diffusion estimates, application of techniques for weather modification, air-sea interaction, solar observations and forecasts, tropical analysis, short-range forecasting techniques, analysis of findings from environmental research projects, and preparation of special forecasts for allied agencies.

MET 2819 Satellite Picture Interpretation

Application of principles of satellite tracking, picture gridding, and interpretation of satellite imagery and meteorological phenomena.

MET 2821 Atmospheric Physics

Interpretation of concepts of force, motion, friction, work, energy, velocity, acceleration, thermodynamics, and pressure as applied to characteristics and structure of atmosphere and heat transfer process.

MET 2822 Weather Prognosis Techniques

Advanced analysis of synoptic features and application of rules and methods to prognosticate their movement. Includes long and short waves, pressure system, fronts, and vorticity patterns. Application of rules, methods, and materials used to predict movement of above features. Also includes isallobaric indicators, tropospheric flow and steering, time differential charts, and grid and J.J. George methods.

MET 2824 Oceanography

Advanced oceanographic principles relative to ocean-atmosphere interface and effect on naval operations. Ocean currents and waves and wave models to produce drift results and surf forecasts. Thermal structure of ocean as related to sound properties and acoustic forecast information supplied for antisubmarine warfare use.

MET 2825 Advanced Weather Station Operations

Requirements and procedures for acquisition/ management of weather resources and programs, environmental support plans, certification of weather personnel, unit quality control programs, management information system input, and obtaining meteorological support from weather agencies. Determination of concepts and procedures to support unique operations requirements.

Management and Supervision

MGT 1100 Fundamentals of Human Relations

Interpersonal relations, values, problem solving, individual and group behavior, labor relations, and orientation to management process.

MGT 1106 Introduction to Management Analysis

Management principles that contribute to financial, economic, and performance analysis.

MGT 1108 Data Collection and Analysis

Collecting and extracting data from such sources as man-hour reporting systems, vehicle integrated management system documentation, on-equipment/ off-equipment maintenance transaction reports, and preparing data for statistical analysis.

MGT 1109 Overview of Maintenance Systems Analysis/Scheduling

Maintenance concepts, policies, and procedures; includes career progression, security, publications, Air Force supply system, safety precautions, and Air Force Occupational Safety and Hazard program.

MGT 1110 Introduction to Maintenance Scheduling

Responsibilities and duties of various organizations connected with maintenance activities. Automated

products, time cards, slides, logs, and records to plan, schedule, track, and/or report maintenance actions with emphasis on use of computer terminal. Introduction to time compliance technical order system.

MGT 1116 Maintenance Management

Management responsibilities for maintenance and maintenance production activities. System concepts and responsibilities, inspection concepts, and various centralized and decentralized maintenance activities.

MGT 2104 Work Measurement

Rating, leveling, allowances, and timestudy; includes work sampling and data control techniques using correlation and regression analyses.

MGT 2107 Integrated Management System

Advanced organizational/functional responsibilities; system description and operation; data input documentation and conversion; file update; determining data maintenance procedures, methods, and purposes; and use of retrieved data and computer output products.

MGT 2114 Vehicle Integrated Management System

Automated management system. Procedures for data input; maintenance file update and data retrieval; and use of performance indicators on daily, weekly, and monthly computer products to determine vehicle maintenance effectiveness.

MGT 2115 Data Analysis/Visual Presentation

Compilation and application of statistical techniques and principles of maintenance data to identify trends concerning various maintenance functions; includes developing charts and graphs depicting data and presenting a narrative. Computation of standard deviation, statistical inference, hypothesis testing, correlation coefficients, and statistical analysis.

MGT 2116 Production Control Management

Production control management techniques. Includes interpreting work requirements, planning duties, controlling work requests, and applying material management techniques.

MGT 2117 Civil Engineering Performance Standards

Application of established theories and performance standards to preparation of lump sum, labor, and material estimates for projects.

MGT 2120 Engine Manager

Advanced preparation for a base engine manager position. Includes data-processing fundamentals; specific data for loading, updating, and maintaining comprehensive engine management system; recovery procedures; and use of remote terminal devices.

MGT 2204 Production Scheduling

Control/cycling of aircraft or missile accessories through maintenance and supply channels to ensure expeditious repair and prevent supply backlogs; includes computer reports and data systems and computation of man-hour availability using standard job times and workload conditions to schedule work.

MGT 2205 Planning and Scheduling Vehicle Maintenance

Forecasting manpower and vehicle capabilities; includes scheduling vehicles and support equipment, developing maintenance plans, and conducting vehicle inspections.

MGT 2206 Maintenance Control

Controlling maintenance, reporting vehicle and equipment status, and operating maintenance control room facility.

MGT 2207 Management Analysis

Middle manager orientation on recognition, investigation, and correction of complex managerial problems with emphasis on use of computer products to identify potentially harmful managerial trends; includes essentials of managerial organization, quality control, inquiry system, and trend indications.

MGT 2212 Advanced Maintenance Management

Detailed analysis of vehicle maintenance structure. Includes supervisory responsibilities; self-inspection system, maintenance programs; material/maintenance control functions; environmental awareness; and

requirements for manpower, budgeting, mobility, contingencies, and training.

MGT 2510 Life-Support Supervision

Maintenance of publications and files, shop and training facilities, manpower and support organizations, on-the-job training, safety programs, modification of cost center equipment, required operational capability, operational test and evaluation, hazard reports, materiel deficiency reporting, aircraft accident investigation and reporting, certification of personnel, training assistance and requirements, selection and training of instructors, use of training aids, and planning/presenting aircrew training.

MGT 2600 Management Applications, Functions, and Techniques

Management principles and techniques, organizational assessment skills, and supervisory/ leadership techniques. Application of principles to planning and scheduling use of resources.

MGT 2601 Maintenance Systems Management

Concepts; data systems; creating reports; forecasting manpower requirements; scheduling aerospace vehicle/equipment needs; producing generation flow plans, maintenance plans, and engine tracking procedures; and managing supply forms.

MGT 2963 Electronic Communications Program Management

Introduction to principles of planning, programming, and implementing electronic communications systems; includes techniques and procedures for determining manpower and budgetary requirements, construction planning at all levels of command, monitoring program implementation, management of systems and records, and administration of minor changes to ongoing programs.

MGT 2964 Advanced Communications-Electronics Maintenance Management

Techniques/concepts of electronic communications system maintenance and personnel management. Major focus on required documentation and publications; understanding configuration controls; hardware quality control, tracking, engineering, and installation; support resources, organizational design specifications; mobile communications and command and control systems; wide-area network usage; unique functional organizations and mission needs; and personnel training and supervision.

Military Science

MIL 1201 Military Operations

Concepts and principles of ground, air, and naval operations; includes strategic, tactical, and support operations.

MIL 1202 US and Allied Offensive/Defensive Forces

Components, functions, and capabilities of US and Allied offensive and defensive forces. Emphasis on weapons systems and method used for effective employment.

MIL 1203 Third World/Nonaligned Nations

Forces components, functions, and capabilities of offensive/defensive forces of nonaligned nations. Emphasis on weapons systems and employment.

MIL 1301 Communist Offensive/Defensive Forces

Force components, functions, and capabilities of Soviet, Warsaw Pact, and Third World Communist offensive and defensive forces. Emphasis on weapons systems and method of employment.

MIL 1302 Offensive and Defensive Forces

Force components, functions, and capabilities of foreign offensive and defensive forces. Emphasis on weapons systems and methods of employment.

MIL 1402 Air Defense

Principles of territorial air defense stressing command, control, communications, and warning procedures as well as map reading relating to plotting of airborne aircraft locations.

MIL 1403 Tactical Air Operations

Tactical air operations stressing command and control. Includes ground attack, aerial interact, and general aerial operations.

MIL 1406 Aviation Transportation

Concepts and principles of air transport operations; includes organization, facilities, command, control, communications, and operational procedures.

MIL 2401 Communist Air Forces

Evaluation of command, control, communications, and employment capabilities of Communist air forces. Includes organizational structure, installations, and equipment.

MIL 2403 Analysis of Foreign Air Forces

Evaluation of command, control, communications, and employment capabilities of foreign air forces. Includes organizational structure, installations, and equipment.

MIL 2501 Communist Ground Forces

Evaluation of command, control, communications, and employment capabilities of Communist ground forces. Includes organizational structure, installations, and equipment.

MIL 2503 Analysis of Foreign Ground Forces

Evaluation of command, control, communications, and employment capabilities of foreign ground forces. Includes organizational structure, installations, and equipment.

MIL 2601 Communist Naval Forces

Evaluation of command, control, communications, and employment capabilities of Communist naval forces. Includes organizational structure, installations, and equipment.

MIL 2602 Foreign Naval Forces

Evaluation of command, control, communications, and employment capabilities of foreign naval forces. Includes organizational structure, installations, and equipment.

MIL 2701 Strategic Industries

Analysis of development and capabilities of foreign industries to produce military equipment and nuclear, chemical, and biological weapons.

MIL 2702 Special Military Studies

Analysis of foreign and domestic force denial and deception techniques, specialized war-fighting concepts, and counternarcotic operations. Includes study of special operations forces, US Government and Department of Defense functions relating to special operations, and domestic and international legal theory relative to military operations.

MIL 2801 Offensive Missile Systems

Evaluation of command, control, communications, and employment capabilities. Includes organizational structure, operational and test facilities, and specific equipment of foreign offensive missile forces.

MIL 2802 Defensive Missiles

Analysis of foreign defensive missiles including organizational structure, installations, and employment. Includes functions and components of launch sites, support facilities, and related electronic equipment.

MIL 2901 Strategic Electronic Systems

Analysis of strategic telecommunications systems, defensive radar facilities, and strategic space and electronic warfare systems.

Marksmanship

MKS 1101 Marksmanship Laboratory

Qualification in use of handguns, shotguns, rifles, machineguns, and grenade launchers. Includes basic nomenclature, capabilities, and characteristics of specific weapons; operator care, cleaning, and maintenance procedures; application of marksmanship fundamentals, weapons safety, and clearing procedures; and ammunition types and uses.

MKS 1102 Firearms Maintenance

Operation and maintenance of handguns, shotguns, rifles, machineguns, mortars, and grenade launchers. Includes safety procedures, technical order indexes, and detailed disassembly/assembly. Functioning cycle and causes of malfunctions; visual and nondestructive mechanical inspections; repair, replacement, and adjustment of firearm components; and use, care, and handling of special tools associated with firearms.

MKS 1103 Firearms Instructor

Fundamentals of teaching emphasizing proficiency in specialized skills, such as technical course writing, tests and measurements, programmed instruction, instructional systems development, and academic counseling. Includes learning process, effective study methods, and audiovisual aids, such as single-concept films and automated teaching systems, dry and live fire supervision, coaching, and firearms range operation/safety.

Medical Laboratory Technology

MLT 1304 Hematology, Serology, and Blood Banking

Elements of basic hematology, coagulation, blood banking, serology, and quality control. Study of hemoglobin, hematocrit, blood differentials, and manual cell counts. Erythrocyte sedimentation rate; erythrocyte/leukocyte maturation; sickle cell testing; blood coagulation, grouping, typing, and compatibility testing; detection and identification of atypical antibodies; hemolytic disease of newborn; donor services; antigen-antibody reactions; serological testing procedures for autoimmune diseases and infections; and laboratory management and administration.

MLT 1305 Clinical Chemistry

Elements of basic chemistry; quality control; use of glassware and balances; pipetting techniques; laboratory math; metric conversions; solution calculations; venipuncture techniques; specimen analysis for electrolytes; renal and liver functions; protein, glucose, and enzyme testing using automated and manual spectrophotometric principles; and urinalysis chemical analysis.

MLT 1306 Clinical Microbiology

Elements of basic microbiology, quality control, bacteriological techniques, bacteria cultivation from clinical material, antimicrobial susceptibility, parasite identification, fungal examinations, overview of viruses and rickettsia, laboratory asepsis and sterilization techniques, microscopic urinalysis, and patient sensitivity.

MLT 2302 Clinical Laboratory Procedures

Medical materiel procedures and receipt/preparation of blood, fluids, cultures, and stool specimens in a hospital environment. Includes laboratory administration, professional/patient relations, supervision, and publications.

MLT 2303 Immunology and Blood Banking

Theoretical and supervised practical application of immunology, blood banking, and immunohematology. Includes antigen-antibody reactions; serological testing; quality assurance; atypical antibody studies; and transfusion, donor service, and blood storage procedures.

MLT 2304 Hematology

Theoretical and supervised practical application in hematology; includes cellular morphology, automated analysis, quality assurance, and coagulation studies.

MLT 2305 Clinical/Chemistry Laboratory

Theoretical and supervised practical application of chemistry; includes quality assurance, safety, toxicology, blood gases, special chemistry procedures, and urinalysis.

MLT 2306 Medical Microbiology

Theoretical and supervised practical application of medical microbiology, parasitology, mycology, and virology; includes collection of clinical specimens, sterilization, storage, quality assurance, microscopic examination, and culture procedures.

MLT 2307 Medical Laboratory Administration

Principles and procedures of procurement/disposition of laboratory equipment and supplies, supervision of personnel, quality improvement, and required standards to maintain accreditation/regulatory agency guidelines.

MLT 2308 Chemistry Laboratory

Theoretical and supervised practical application of chemistry. Includes quality assurance, safety, toxicology, blood gases, urinalysis, and special chemistry procedures.

Medical Readiness

MRD 1300 Basic Medical Readiness

Relationship of human body systems to triage, treatment, and transportation of casualties.

MRD 1301 Advanced Medical Readiness

Under isolated field conditions, theory of medical concepts and problems, maintenance of medical supplies, assembly and use of medical equipment, administration and maintenance of drugs, theory of treatment, protocol and patient transportation, and communication in emergency situations.

MRD 1302 Field Medical Facility

Techniques, functions, and methods to assemble, disassemble, and maintain a field medical facility; includes stocking medical supplies and equipment, site selection and facility configuration, concept of operation, aeromedical evacuation, and principles of facility security.Missile Maintenance Technology

Missile Maintenance Technology

MSL 1202 Publications and Forms

Publications and forms related to missile systems and facilities maintenance. Technical information and document equipment failures for data collection purposes.

MSL 1203 Missile Electrical Principles

Introduction to principles of electricity related to missile weapons systems maintenance. Includes theory of electron flow; relationships of current, voltage, and resistance/impedance; component identification and operation; interpretation of schematic diagrams; function/operation of meters; and circuit measuring instruments.

MSL 1204 Hydraulic and Pneumatic Principles

Introduction to basic hydraulic and pneumatic systems; includes component identification, theory of operation, schematic diagram interpretation, and basic troubleshooting procedures and techniques. Also includes identification of associated aerospace hardware and selection and use of common handtools, torque wrenches, and special purpose tools and hardware.

MSL 1205 Handling Vehicles and Auxiliary Equipment

Knowledge of principles of operation and maintenance of missile-handling vehicles and auxiliary equipment. Includes operation of handlift trucks; hoist, crane, and winch units; trucks to include semitrailors/tractors and similar vehicles; portable heating and air-conditioning units; ventilation safety filtering units; hydraulic pressure charging units; and cable testing equipment. Also includes dispatching of equipment and inspection and maintenance of related facilities.

MSL 1206 Security and Access Systems

Basic study of function, operation, and maintenance of security and personnel access systems; includes surveillance and alarm systems, voice and radio systems, vault door-locking mechanism, combination locks, vibration detection systems, personnel access control, and associated electrical circuitry. Also includes electric, mechanical, and hydraulic operated vault doors up to 100 tons in size, cage-type elevators, hydraulic/electric actuator systems and support equipment, and associated test equipment.

MSL 1207 Suspension and Test Equipment

Function, operation, and maintenance of leak test equipment, purging equipment and systems, suspension systems and mechanisms, power and monitoring circuitry, installation and removal of safing pins and locking devices, and familiarization with ordnance handling procedures.

MSL 1208 Equipment Operation Laboratory

Practical experience in transportation, removal, replacement, installation, and alignment of missile equipment, components, and sections; includes operation, operational checkout, and operator maintenance procedures to include semitrailors and tractors, crane, winches, and hoists. Also includes use of test equipment to ensure correct installation of electric and hydraulic systems.

MSL 1211 Missile Familiarization

Knowledge of missile assembly and launch complex and basic principles of security, safety, deployment, dispatching, and professional responsibilities; includes basic concepts of corrosion control, preventive maintenance, and treatment.

MSL 1502 Missile Crew Procedures

Introduction to performance of missile crew duties. Includes operation of power supply, launch control checkout and monitoring, practical experience in communications, and evaluation of hazard-sensing and warning systems as well as alert support and emergencies and launch procedures.

MSL 2101 Launch Base Fundamentals

Duties and responsibilities of space launch base units and system test philosophy, launch management, and documentation. Includes safe handling of cryogenics, high-pressure gases, fuels, and oxidizers and storage, handling, and disposal of hazardous waste.

MSL 2102 Launch/Space Vehicles

Launch and space vehicle operations; includes airframes, payload fairings, propulsion, major systems, and components.

MSL 2201 Missile Handling and Inspection

Transition course in missile familiarization and procedures of missile receipt and inspection, installation, and removal and missile ordnance installation, inspection, and transportation; includes operation and inspection of missile ground support and test equipment.

MSL 2206 Missile Maintenance Laboratory

System familiarization and troubleshooting, manufacturer's maintenance manuals and technical data, removal/replacement of access panels for adjustment of mechanical subsystems, and replacement of components. Experience in electrical checkout of ordnance circuits and inspection/ maintenance of environmental and radio frequency interference shielding.

MSL 2207 Ground-Launched Cruise Missile Maintenance Dispersal

Maintenance dispersal exercises to include driver training, weapons system safety/nuclear surety, self-aid/buddy care, firearm qualification, communication and auxiliary equipment familiarization/ operation, and other common task training.

MSL 2208 Missile Systems Facility Management

Missile and space system facility personnel and resource management. Includes manpower training, supply, budgeting, depot level reparable program, and Air Force quality management.

Munitions

MUN 1201 Munitions Systems Maintenance

Munitions career field functions and familiarization with nuclear/nonnuclear munitions. Includes differentiation of component functions of nuclear/ conventional weapons, missiles, and ammunition with emphasis on control procedures, inspection, and explosive safety.

MUN 1202 Nuclear Weapons Systems

Nuclear weapons career field maintenance functions and familiarization with nuclear weapons systems; includes principles of nuclear weapons and publications, practicing nuclear standards, and application of nuclear security.

MUN 1203 Operation and Function of Nuclear Weapons

Operation and function of components of specific nuclear weapons including preparation for strike, disassembly, limited life-component exchanges, weapons buildup, inspections, and application of emergency procedures.

MUN 1205 Weapons Movement

Familiarization and operator maintenance on cargo vehicles, tow vehicles, ground power units, and general munitions trailers; includes initial/periodic inspections and lift vehicle operations.

MUN 1206 Munitions Inventory Procedures

Nuclear/conventional munitions supply system. Includes security, maintenance support, property accounting (automated and manual), files maintenance, and storage. Concepts and procedures for issue, turn-in, shipping, receiving, stock replenishment, inventory control, and supply discipline.

MUN 2201 Reentry Systems Maintenance

Advanced maintenance on specific space reentry systems. Includes function and operation of system overview, shroud operation, deployment module, reentry system final buildup, preparation/packaging for transport, and application of safety/security procedures.

MUN 2202 Reentry Vehicle Maintenance

Advanced operational theory and maintenance of reentry vehicles; includes alignment, adjustments, maintenance procedures, and troubleshooting analysis.

Nuclear Medicine Technology

NMT 1101 Nuclear Medicine

Principles of mathematics, chemistry, and physics as applied to field of nuclear medicine; preparation and uses of radiopharmaceuticals; radiation detection, effects, dose calculation, and safety; hematologic and radionuclide dilution procedures and protocol; techniques and procedures of gastrointestinal and organ concentration-excretion measurements; imaging techniques and procedures; and radioassay and radiation therapy procedures. Clinical aspect includes operating radionuclide imaging and detection devices and assisting medical professionals in preparing and administering radiopharmaceuticals and organizing and administering radionuclide imaging services.

Nursing

NUR 1101 Urology

Anatomy, medical terminology, and care and handling of urology patients. Prepares technicians to assist with management of urology clinics and assist physician in treatment of patients with urologic conditions or injuries.

NUR 1102 Electroneurodiagnostics

Neuroanatomy and neurophysiology of the human body as it relates to neurology; concepts of basic electricity; neurological disorders and how they affect neurodiagnosis; instrumentation and troubleshooting of electroencephalogram and evoked potential average; interpretation of basic wave patterns, normal variants, artifacts, and abnormal patterns and waveforms; and clinical guidelines used in electroneurodiagnosis. Includes introduction to nerve conduction, electromyography, video monitoring, telemetry, and polysomnography.

NUR 1103 Otolaryngology

Functions and responsibilities of clinical and surgical assistant to an otolaryngologist. Includes audio evaluations; maintenance and care of specialized otolaryngolic instruments and equipment; diagnosis and treatment of common ear, nose, and throat disorders; and pre- and postoperative patient care. Clinical practice with emphasis on procedures and administrative management.

NUR 1104 Orthopedics

Anatomy, medical terminology, and care and handling of orthopedic patients. Assisting with management of orthopedic clinics, minor surgery, fabrication and modification of casts, and treatment of patients with orthopedic conditions or injuries.

NUR 1304 Fundamentals of Patient Care

Human anatomy/physiology, medical terminology, interpersonal relations and human needs, patient needs, basic nursing techniques, and cardiopulmonary resuscitation.

NUR 1306 Introduction to Emergency Patient Care

Emergency medical procedures, injury assessment, mechanical aids to respiration, transportation of the sick and injured, and aeromedical evacuation.

NUR 1315 Mental Health Nursing

Personality development, adjustment mechanisms and therapy, psychoses and neuroses, chemotherapy, psychotherapy, and milieu therapy.

NUR 1316 Applied Mental Health Nursing Principles

Planning and administering care and communicating/interacting with mentally ill patients.

NUR 1317 Patient Care Fundamentals

Introduction to nursing philosophy and patient care procedures. Emphasis on chemistry, biology, human anatomy, physiology, and growth and development as related to nursing.

NUR 1318 Basic Nursing

Infection control; patient movement, safety, comfort, and hygiene; specimen collection; nutrition and elimination; vital signs; and pre- and postoperative care.

NUR 1319 Intermediate Nursing

Medications and fluid therapies; basic wound care; cardiorespiratory procedures; skeletal/immobility procedures; obstetric/neonatal/pediatric care; eye, ear, nose, and throat care; patient care planning; and basic cardiac life-support procedures.

NUR 1324 Introduction to Operating Room Technology

Anatomy and physiology, medical terminology, safety, surgical supplies and equipment, anesthesia, pre- and postoperative patient care, and transportation/positioning of surgical patient.

NUR 1325 Operating Room Technology

Microbiological basis for sterilization, asepsis, and disinfection of operating room and scrubbing, gowning, and gloving.

NUR 1326 Operating Room Practicum

Practicum in scrub and circulator duties, preparation of surgical patient, and professional ethics.

NUR 1328 Introduction to Clinical Practicum

Introduction to hospital nursing care. Includes patient sensitivity, safety, security, medical readiness, plans, documents, and patient care.

NUR 1329 Medical Unit Practicum

Medical unit experience and procedures. Includes initial screening, routine physical examinations, housekeeping, hygiene, wheelchair transportation, and meal selection/distribution.

NUR 1330 Surgical Unit Practicum

Surgical unit experience and procedures. Includes pre- and postoperative instructions, dressing changes, intravenous care, and body waste assistance.

NUR 1331 Obstetrical Unit Practicum

Obstetrical unit experience and procedures. Includes patient assistance in labor and delivery, fetal heart monitoring, infant identification, delivery room preparation, nursery care, and postpartum procedures.

NUR 1333 Fundamentals of Mental Health

Factors of mental health disorders and theories of modern psychological development. Includes identification and recognition of childhood, adolescent, and other mental health disorders.

NUR 1334 Mental Health Evaluations

Principles and techniques of interviewing, documentation of initial mental health screening, social histories, and administration and scaling of mental health tests.

NUR 1335 Mental Health Interventions

Techniques for monitoring and documenting crisis and stress, management of combat/disaster casualties, and counseling techniques for individuals and families.

NUR 1336 Mental Health Administration

Introduction to Air Force mental health programs and basic administrative functions. Includes family advocacy, humanitarian reassignments and deferments, and personnel reliability programs.

NUR 1337 Mental Health Clinical Experience

Techniques of caring for alcohol rehabilitation center patients and mental health in- and outpatients.

NUR 1338 Operating Room Nursing Practicum

Clinical experience in scrub and circulating technician duties in orthopedic, general, and obstetric/gynecologic surgery.

NUR 1339 Fundamentals of Central Sterile Supply

Practicum in operation of equipment used in central sterile supply.

NUR 1340 Introduction to Substance Abuse Counseling

Programs, policies, and administrative procedures likely to be encountered when counseling substance abusers. Specific areas of concern are substance abuse identification, drug testing, prevention and intervention, and cultural awareness. Special emphasis placed on basic theory and skills needed to provide for clients.

NUR 1341 Introduction to Mental Health Services

Mental health procedures and documentation, psychological testing methods, emergency life-support procedures, crisis management, and psychopharmacology. Role-playing exercises demonstrating ability to appropriately handle client scenarios likely to be encountered in mental health services profession.

NUR 1342 Allergy Immunology

Vaccination procedures; methods of properly administering intradermal, subcutaneous, and intramuscular injections; pollen counting; allergen identification; composition of various vaccines; mechanisms of anaphylaxis and shock; and pharmacology of various drug groups.

NUR 2315 Aerospace Physiological Principles and Survival Techniques

Effects of hypoxia, hyperventilation, stress, and changes in barometric pressure on the human body; use of oxygen; altitude indoctrination; and survival techniques.

NUR 2316 Aerospace Nursing

Effects of flight-induced psychological changes, diseases, and injuries on patients; in-flight nursing care; care of patients in aircraft emergencies; and organization and operation of aeromedical evacuation system.

NUR 2322 Medical Readiness for Medical Service Technician Manager

Roles/responsibilities of medical technician manager in dealing with shock patient; biological, chemical, and nuclear casualty; combat stress victim; emergency airway procedures; and mass casualty triage.

NUR 2327 Infection Control and Epidemiology

Skills needed to develop, manage, and evaluate an infection control program based on Joint Commission on Accreditation of Healthcare Organizations standards, Center for Disease Control guidelines, and Air Force procedures.

NUR 2328 Battlefield Nursing

Triage, resuscitation with stabilization, trauma life support, and psychosocial needs of patient and caregiver.

NUR 2329 Nursing Staff Development

Planning, organizing, implementing, and evaluating nursing service staff development programs. Includes needs assessment, instructional program design and methodology, and correlation with Joint Commission on Accreditation of Healthcare Organizations and American Nurse Association.

NUR 2331 Nursing Management

Development of supervisory and communicative skills needed to manage medical personnel and resources. Includes medical supply system, staff development, legal considerations, safety programs, and professional and patient relations.

NUR 2332 Nursing Clinical Skills

Practical nursing instruction in critical clinical skills of infection control, suturing lacerations, drawing blood gases, skeletal traction, and assisting with complex patient procedures. Includes identification of cardiac arrhythmia and auscultatory breath sounds, selected orthopedic procedures, and medical calculations.

NUR 2333 Trauma Nursing

Critical emergency techniques required to treat severe life-threatening injuries. Includes initial assessment, triage, resuscitation with stabilization, secondary evaluation, definitive care, trauma life support, and psychosocial needs of patient and caregiver.

NUR 2334 Operating Room Administration

Focuses on human and fiscal management of surgical environment. Includes time management, supervision, and resource management. Emphasis on staff development including professional and patient relationships, quality, and medical readiness.

NUR 2335 Mental Health Interventions

Mental health intervention for psychiatry, psychology, family advocacy, and substance abuse prevention. Includes certification process for substance abuse counselors; practical application in treatment planning, development, and implementation; and documentation of patient care.

NUR 2340 Aerospace Medicine Administration

Directing and controlling fiscal and medical human resources uniquely related to aerospace medicine.

Occupational Therapy

OCC 1101 Occupational Therapy

Anatomy, kinesiology, and psychology, and their relationship to human performance; physical and mental clinical conditions; and techniques and application of craft activities. Includes planning and implementing therapeutic activity programs directed toward functional restoration of patients with physical and/or psychosocial dysfunction.

Orthotic Prosthesis Devices

OPD 1301 Introduction to Orthotics

Medical ethics and terminology, emergency medical care, history of orthotics, professional and patient relationships, principles of life support, administrative procedures, and selected orthotic nomenclature.

OPD 1302 Anatomy, Physiology, and Kinesiology of Orthoses

Principles of body systems/functions and mechanics of upper/lower extremities, spine, and pelvis.

OPD 1303 Orthotic Devices

Principles and identification of orthotic devices used on upper/lower extremities, spine, and pelvis; evaluation of patient requirements; and selection of orthotic devices.

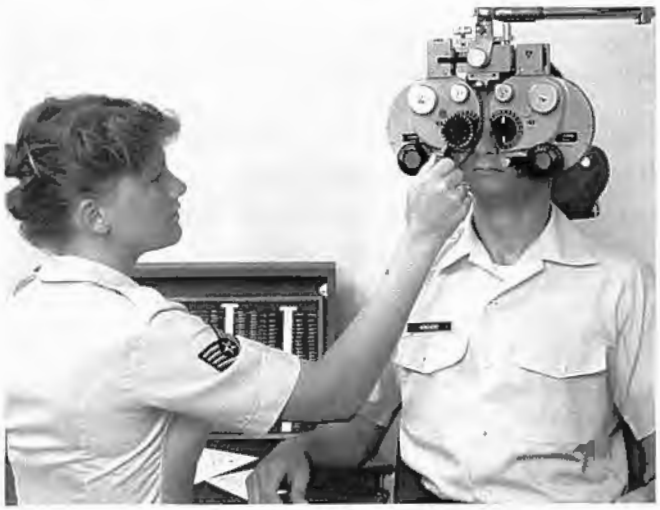
OPD 1304 Orthotic Tools and Fabrication

Introduction and practicum in use of handtools and shop machines used in assembling orthotic appliances.

OPD 1305 Orthotic Methods and Materials

Principles and tools used in orthotic laboratory; interpreting prescriptions; performing tracing, measuring, and casting procedures; design and fabrication of appliances from measurements, patterns, and positive casts; preparation of patient and fitting of devices; and adjustments and repairs.

Optometric Technology



OPT 1301 Introduction to Basic Optics

Basic geometrical and ophthalmic optics.

OPT 1302 Visual Acuity and Correction

Anatomy and physiology of visual system; eye as an optical instrument; visual acuity measurement; and spectacle selection, ordering, repair, and verification procedures.

OPT 1303 Assisting the Optometrist

Applications of tonometry, visual fields, and eye safety measures, and fitting of contact lenses.

OPT 1304 Vision Classification

Military visual standards and exams, depth perception, phoria, accommodation, near point of convergence, and color vision testing.

OPT 1305 Management and Practicum

Maintenance of publication listings, procurement of supplies, accident prevention, and vision surveys of patients under direction of staff optometrists.

Pavements

PAV 1507 Rigid Pavements

Tasks associated with construction and maintenance of rigid pavements.

PAV 1508 Flexible Pavements

Tasks associated with construction and maintenance of flexible pavements.

PAV 1509 Bomb Damage Repairs and Aircraft Shelters

Rapid runway repair; includes construction of security fencing and aircraft shelters.

PAV 2502 Concrete and Bituminous Pavement

Advanced construction of concrete and bituminous pavements to include drainage, grading, materials, identification of defects, and repairs.

Personnel

PER 1104 Personnel Management

Personnel administration to include resource management, human relations, counseling, general personnel supervision, and office supervision.

PER 1107 Personal Affairs Functions

Air Force Aid Society, Family Services, survivor benefits (including Government insurance and Social Security entitlements), commercial life insurance, military benefits, casualty reporting, awards and decorations; includes practice in counseling and briefing techniques appropriate to personal affairs offices. Overview of duties and responsibilities associated with mortuary affairs including benefits available to next of kin, care and disposition of remains, escort and transportation of remains, military honors

(i.e., graveside ceremonies and presentation of the flag) and summary courts officer duties.

PER 1110 Personnel Support for Contingency Operations

Concepts of deployment of personnel in contingency or exercise situation emphasizing duties and responsibilities in support of area commander at a deployed site. Includes concepts, predeployment planning, operation of microcomputers, field condition procedures, and redeployment.

PER 1111 Sales Fundamentals

Principles of merchandise advertising; includes knowing value of good community relations, use of publicity materials, selection of sales techniques, sales record keeping, and customer screening.

PER 1114 Personnel Functions

Manning control, classification, training, promotions, performance evaluations, reenlistments, separations, and records management. Emphasis on use of personnel data system in each section.

PER 1119 Introduction to Personnel Management

Basic management and administrative functions; includes selection, training, placement, classification, evaluation, reassignment, promotion, separation of personnel, pay procedures, performance evaluations, and scheduling/conducting meetings.

PER 2103 Personnel Data Systems

Principles and functions of techniques and methods of entering data into and retrieving data from personnel data system; includes data maintenance procedures and methods, uses of retrieved data, and computer output products.

PER 2108 Manpower Management

Manpower organization; includes measurement methods, development of manning tables, management advisory studies, authorization routines, and manpower reports.

PER 2112 Unit Personnel Administration

Management of unit personnel, procedures for ensuring compliance with standards, procedures for protocol, written correspondence, enforcement of directives, personnel management computer products, assignment of special duties, unauthorized absences, and handling of complaints and inquiries. Includes line-of-duty determinations, dependent care responsibilities, and functional relationships between units and personnel office and principles and procedures for monitoring commanders call; Privacy Act; responding to security forces reports; and handling private property, unit property, or damage to Government property.

PER 2113 Quality Force Management

Principles and procedures for achieving and maintaining a quality work force. Administration of policies associated with dormitory management, individual financial responsibility, professional military education, retention programs, weight control and physical fitness, promotion and demotion actions, administering of reprimands and admonitions, unfavorable information files and control rosters, and administrative separation of personnel.

PER 2121 Organizational Evaluation and Development

Methodologies for evaluating and improving effectiveness of organizations; includes familiarization of functional chronology, review and analysis of work performance processes, feasibility studies and planning, standards development, cost analysis and comparison, training requirements, and productivity enhancement.

PER 2612 Resource Management

Principles of resource management to include policy and procedures regarding orientation and guidance of newcomers to work force; counseling referrals to various agencies; and purpose of morale, welfare, and recreation programs. Includes policy and procedures for control of drug and alcohol abuse, maintenance of discipline using prevention-correction punishment method, and relationships shared with senior key personnel.

Pharmacology

PHA 1306 Fundamentals of Pharmacy

Pharmaceutical inorganic and organic chemistry, administrative operations of hospital pharmacy, conversion of weights and measures, and calculation of doses using ratio, proportion, and metric apothecary/ avoirdupois systems.

PHA 1307 Introductory Pharmacology

Principles of pharmacology, human anatomy, and physiology. Studies of drug abuse, toxicology, and pharmaceutical and medicinal agents. Role play in using prescriptions to dispense in a model pharmacy.

PHA 1308 Pharmaceutical Preparations and Manufacture

Properties, preparation, and incompatibilities of various pharmaceutical substances; pharmaceutical compounding techniques in laboratory; reduction and enlargement of formulas; specific gravity; percentage preparations; concentration and dilution; allegation; and temperature conversion.

PHA 1309 Pharmacy Practicum

Inpatient and outpatient pharmaceutical procedures. Includes computerized information systems, sterile and nonsterile compounding, dispensing of medication, and logistical procedures.

PHA 2101 Pharmacy Administration

Pharmacy administration, management, and logistics. Includes pharmaceutical calculations and dispensing procedures, controlled substance management, drug therapy, pharmacy practice standards, inventory control, sterile product management, training programs, and quality improvement.

Physical Education

PHE 1000 Physical Education

Physical fitness using drills, calisthenics, and running. Introduction to Air Force aerobics program and first-aid procedures including severe bleeding, shock, and stoppage of breathing.

PHE 1800 Physical Conditioning

Calisthenics and running to condition muscle and body organs (heart and lungs). Includes coordination, stamina, and overall fitness for extensive field exercises.

PHE 1801 Physical Conditioning and First Aid

Body conditioning through exercise, running, walking, and negotiation of a confidence course. Includes first aid, heat disorders, life-saving steps, and respiratory and circulatory emergencies.

Photography

PHO 1102 Basic Still Photography

Theory and application of photographic fundamentals, chemistry, optics, sensitized materials, light sources; exposing and processing black-and-white films; printing black-and-white negatives; camera operations for standard and reproduction photography; portraiture; exposing and processing color reversal film; color slide reproduction; exposing, processing, and printing color negatives; sensitometric procedures; and electronic imaging techniques.

PHO 1103 Photographic Processing, Maintenance, and Quality Control

Operation and maintenance procedures of Versamat film processor and related equipment; establishing and maintaining a quality control program for the processor; overviews of sensitometry and densitometry; chemical replenishment; and logarithms. Practical exercises in sensitometric curve analysis; negative duplication; processor startup, breakdown, repair, cleaning and shutdown; construction and use of control and time/gamma charts; use of pH meter, continuous contact printers; titling, and analysis. Emphasis on applicable safety precautions and practices.

PHO 1104 Basic Journalism

Communication techniques (printed, oral, graphic, radio, and television) in support of internal and external public affairs and community relations programs. Preparation of news releases, articles, photographs, radio programs, and other public affairs material for public dissemination; conducting community relations; collecting, evaluating, and preparing materials for internal information; and participating in publication process of newspapers and other internal media

PHO 1408 Fundamentals of Photography

Characteristics of sensitized materials, camera familiarization, appropriate procedures for setting proper film exposure, processing exposed film, print finishing, handling of negatives, principles of photographic optics, composition, filters, and lighting.

PHO 1409 Advanced Principles of Photography

Laboratory principles and procedures for photocopying, spotting, enlarging, printing of copy negatives, and use of chemistry for various emulsions.

PHO 1412 Color Photography

Principles of color printing and processing; includes exposing and processing of negatives, reversal emulsions, and duplicating slides. Analysis of finishing techniques.

PHO 1416 Printing and Duplicating

Operation of continuous contact printers, multiple generation duplication, projection printing, automatic dodging printers, image evaluation, and production of mosaic.

PHO 1451 Continuous Processing

Analysis of quality of continuous processing methods; aerial photography and processor systems; continuous processor cleaning, startup, certification, and shutdown procedures; use of equipment to sensitometrically certify processor and mission film; and monitoring processor during actual operation.

PHO 2701 Projection and Processing Equipment

Repair of motion picture projectors, processors, densitometers, and sensitometers; includes operational checks and adjustments.

PHO 2720 Printer Maintenance Laboratory

Operational checkout and repair of photographic printers; includes test equipment and required handtools.

PHO 2723 Professional Still Camera Maintenance

Advanced alignment, adjustment, maintenance, troubleshooting analysis, and operation of professional still cameras and flash systems.

PHO 2727 Film Titler Maintenance

Advanced operational theory and maintenance of film titler systems. Includes alignment, adjustment, maintenance procedures, and troubleshooting analysis.

PHO 2728 Photographic Quality Control Equipment

Advanced operational theory and maintenance of densitometers and sensitometer. Includes troubleshooting, analysis, maintenance, alignment and adjustment of equipment.

PHO 2729 Still Picture Projector Maintenance

Alignment, adjustment, maintenance, troubleshooting analysis, and operation of still picture projectors.

Applied Physics

PHY 1422 Applied Technical Physics

Physics survey; includes basic principles, atomic structure, quantitative processes, interactions, transformations, principle of radiation, detectors, and measurement techniques.

Plumbing

PLB 1501 Introduction to Plumbing

Fundamental principles of plumbing systems. Includes project planning, technical publications, maintenance of tools and equipment, structural openings, plumbing terminology, engineering drawings, and sewer systems.

PLB 1504 Fixtures and Appurtenances

Installation of bathtubs, showers, water closets, lavatories, and urinals; winterization of piping; and inspection and maintenance of water supply and waste systems. Includes material recovery and restoration.

PLB 1505 Utility Equipment

Maintenance of utility equipment. Includes piping, fire hydrants, sprinkler, natural gas, fire-suppression systems and components, and backflow prevention.

PLB 1507 Water and Waste Distribution Systems

Waste, water supply, and building distribution systems. Includes fire-suppression, deluge, sound suppression, hazardous waste water, and installation of water heaters. Also includes safe work practices; steel pipe and copper tubing assembly; corrosion identification/control; and application of fraud, waste, and abuse information.

PLB 2501 Maintenance of Natural Gas Distribution Systems

Advanced installation/maintenance of natural gas distribution systems including inspections/maintenance of gas mains, service lines, and gas pressure regulators.

PLB 2502 Backflow Prevention Devices

Theory, operation, maintenance, and testing of plumbing backflow prevention devices to include records and logs of actions taken.

PLB 2503 Fire-Suppression System Maintenance

Advanced testing, inspecting, maintaining, and repairing of fire-suppression systems (excluding electrical); includes inspection and operational checks, principles of operation, and troubleshooting and repair of fire sprinkler and other fire-suppression systems.

Physical Therapy

PTH 1305 Introduction to Physical Therapy

Legal/ethical responsibilities, medical terminology, and physiological theories/processes that apply to working with the diseased and injured.

PTH 1306 Introductory Anatomy and Physiology

Gross anatomy and physiology emphasizing structure and function of cell and respiratory, cardiovascular, lymphatic, renal, integumentary, skeletal, and muscular systems.

PTH 1308 Physical Therapy Procedures and Modalities

Thermotherapy, hydrotherapy, cryotherapy, electrotherapy, and light therapy in simulated clinical laboratory setting.

PTH 1309 Physical Therapy Clinical Arts

Selected physical therapy treatment procedures and modalities in clinical practicum and administration/communication.

PTH 1310 Functional Anatomy, Pathophysiology, and Therapeutic Procedures

Basic concepts and principles of therapeutic exercise. Indepth functional anatomy of axial skeleton and upper/lower extremities as they relate to disease and treatment approaches.

Physiological Training

PTR 1301 Introduction to Aerospace Physiology

Principles of basic laws of atmosphere and gas as they apply to pressure chamber operations and procedures. Introduction to medical terminology, medical computer systems, decompression sickness, pressure chamber effects, and administrative duties. Includes publications and forms management, filing, and scheduling.

PTR 1302 Respiratory and Circulatory Physiology

Physiological impact of ascent, acceleration, spatial disorientation, and compression changes and recognition of body heat imbalance, hypoxia, shock, and other low-pressure chamber reactions.

PTR 1303 Life-Support Equipment Systems

Operation and maintenance of systems used to sustain aircrew members in flight oxygen storage system, breathing apparatus, pressure demand regulators and masks, ejection seats, parachutes, helmets, pressure suits, and survival equipment. Participation in low-pressure chamber flights.

PTR 2350 Hyperbaric Physiology and Therapy

Nitrogen narcosis, oxygen toxicity, air embolism, carbon-monoxide poisoning, gas gangrene, and mechanical effects of compression and decompression. Application of treatment tables and therapy.

PTR 2351 High-Pressure Chamber Operations

Compressor operation and maintenance; control panels; air storage and breathing gas systems; system inspection, maintenance, and repair; and crew duties during practice dives to different ocean depths.

PTR 2352 Aerospace Physiology Management

Management of an aerospace physiology unit. Includes information management system, symptoms and treatment of decompression sickness, and career progression.

Nondestructive Inspection and Quality Control

QCI 1503 Radiography and Radiographic Equipment

Radiographic nondestructive inspection; includes principles of x-ray generation, radiation safety, x-ray equipment, and film-processing equipment.

QCI 1509 Fundamentals of Nondestructive Inspection

Theory and practice of nondestructive inspection methods; includes basic metallurgy, development of inspection techniques, maintenance management, equipment authorization, technical publications, identification of aerospace construction features, and application of occupational and health standards.

QCI 1510 Optical, Liquid Penetrant, and Magnetic Particle Inspection

Fundamental principles of optical, liquid penetrant, and magnetic particle inspection methods; includes operation of equipment, interpretation of indicators, performance of inspections, and development of inspection techniques.

QCI 1511 Ultrasonic Inspection Fundamentals

Principles of ultrasonic inspection; includes operation and operator maintenance of equipment, knowledge of ultrasonic standards, inspection of parts, and interpretation of indicators.

QCI 1512 Eddy Current and Bond Testing Inspection Methods

Principles of eddy current and bond testing; includes types of equipment, inspection standards, inspection of parts and equipment, and interpretation of inspection indicators.

QCI 2101 Advanced Nondestructive Inspection Procedures

Advanced techniques in nondestructive inspection. Development of appropriate nondestructive inspection procedures for aerospace-related components. Includes evaluation of oil samples and recommended action based on spectrometer analysis; process control procedures; interpretation of indications for dye penetrant; and magnetic particle, ultrasonic, radiograph, phase-amplitude, and bond testing on metallic and composite materials.

QCI 2202 Quality Assurance

Advanced quality assurance procedures used to detect and analyze maintenance management deficiencies, determine causes, and recommend corrective actions; includes comprehensive interpretation of standard publication and technical manual systems, personnel evaluations, inspection categories, management evaluations, deficiency analysis, oral and written communications, and activity inspections.

QCI 2513 Spectrometric Oil Analysis Equipment

Operation and maintenance of atomic emission spectrometer and atomic absorption spectrophotometer.

Radiologic Technology

RAD 1301 Introduction to Radiologic Technology

Radiologic technology and its role in delivery of health care. Includes health care delivery systems, hospital and radiology department organization, professional development, accreditation and credentialing, basic radiation protection, professional ethics, medical terminology and communication, methods of patient care, radiobiology, and computer applications in radiology department.

RAD 1302 Introduction to Radiographic Physics

Production and characteristics of radiation, matter, energy, Ohm's law, and basic x-ray circuits. Methods of rectification; x-ray detection and measurement; construction of x-ray tubes; use of tube rating charts, and effects of kVp, mA, distance, and collimation on patients.

RAD 1305 Introduction to Radiographic Positioning

Osteology and arthrology of upper and lower extremities, abdomen, thorax, vertebral column, and skull. Includes related standards and special radiographic projections using radiographic phantoms.

RAD 1307 Radiographic Anatomy and Physiology

Structure and functions of cells and integumentary, muscular, reproductive, endocrine, respiratory, cardiovascular, lymphatic, venous, digestive, biliary, urinary, skeletal, muscle, and central nervous systems.

RAD 1308 Imaging Equipment and Film Processing

Operation and characteristics of diagnostic imaging equipment and procedures for processing radiographic film. Includes radiographic equipment; image intensified fluoroscopy; various imaging equipment, imaging noise recording media; techniques, characteristics, handling, and storage of film; intensifying screens; automatic processing; silver recovery; and film artifacts.

RAD 2301 Radiography Clinical Education

Clinical environment practicum in a training hospital, radiographic exposure principles and systems, preparation of technique charts, standardization of automatic film-processing systems, control of secondary/scattered radiation, radiation protection, department administration, and review of radiographic anatomy.

RAD 2302 Radiography Clinical Practicum

Exposure techniques and radiographic positioning to improve radiographic film quality; factors in reducing patient exposure to ionizing radiation; review of special radiographic techniques; and introduction to emergency resuscitation, vital signs, and parenteral administration.

RAD 2303 Advanced Special Radiographic Procedures

Radiographic equipment used for special procedures; review of radiographic examinations that require negative or positive contrast media; infection control; and surgical radiographic, mobile radiographic, and fluoroscopic procedures.

RAD 2304 Radiography Internship

Standard radiographic procedures accomplished under supervision of qualified radiologic technologists. Assisting radiologist with barium contrast studies, interventional studies, and nonstandard radiographic procedures.

RAD 2306 Diagnostic Ultrasound

Diagnostic ultrasound principles and equipment. Includes abdominal and pelvic sonography and obstetrical applications.

RAD 2307 Ultrasonic Scanning

Procedures and application of obstetrical, pelvic, abdominal, thyroid, breast, testicular, and superficial structure scans.

RAD 2311 Management of Diagnostic Imaging Services

Diagnostic imaging services workload accounting, budgeting, occupational safety and health standards, and manpower applications. Focus on professional ethics, continuing education, total quality management, and team building.

Recreation

REC 1101 Recreation Services Management

Policies pertaining to management of recreation services, facilities, and recreation resources. Includes employee administration; determining workload requirements; writing position descriptions, performance ratings, and operating instructions; implementing hiring practices, employee motivation techniques, and safety standards; managing sales/merchandising, publicity, materials, equipment, and supplies; monitoring insurance programs; developing facility projects; and preparing reports.

REC 1102 Fitness and Health

Methods used in measuring physical fitness, determining nutrition requirements, evaluating human physiology, analyzing exercise physiology, and managing health resources.

REC 1103 Morale, Welfare, and Recreation (MWR) Management

MWR management with emphasis on employee administration, procurement of resources/facilities, and organization of MWR activities.

REC 2101 Recreational Business Operations Management

Principles and techniques in recreational business management. Includes management and operation of restaurants, bars, lounges, rental equipment, and craft and recreational centers.

REC 2102 Advanced Moral, Welfare, and Recreation (MWR) Management

MWR management with emphasis on employee administration, procurement of resources and facilities, and organization of activities.

Radio and Television Broadcasting

RTB 1101 Film/Video Lighting

Concepts and application of principles of lighting to various systems. Skills developed in both studio and remote location through lecture and application with primary emphasis on video production.

RTB 1102 Film/Video Editing

Concepts and principles of post-production editing. Includes film and video-editing techniques, equipment,

progression, and sequencing with primary emphasis on video production.

RTB 1104 Visual Information Production

Basic motion media techniques; recording of controlled and uncontrolled actions in field and studio environments; basic audio recording, audio- and video-production operations; and videotape editing under field and studio conditions.

RTB 1400 Introduction to Television Production

Various aspects of production; includes equipment use, direction techniques, control room responsibilities, floor management, color and black-and-white lighting techniques, studio operation, special effects, telecine theory, script analysis, and camera operation.

RTB 1801 Audio Mixing and Production

Basic audio theory. Includes use of microphones and tape recorders; techniques for splicing, editing, duplicating, storing, and handling equipment/material; and user maintenance of audio equipment.

RTB 1802 TV Studio Operation

Principles for television production; includes personnel functions, control room responsibilities, set construction, camera operations, video switching, makeup techniques, fundamentals of color theory, telecine operations, TV lighting, and teleprompter operations.

RTB 1803 TV Production

Advanced special effects and video-editing techniques; includes planning and producing TV productions, single and multiple concepts, dramatization techniques, and final product analysis.

RTB 1805 Electronic Field Production (EFP)

Setup and operation of EFP equipment under controlled and uncontrolled conditions; includes body braces and tripods, handheld operations, lighting requirements, pictorial continuity; operator maintenance; and practice with EFP video-editing systems.

Safety

SAF 1802 Missile, Explosives, and Nuclear Safety

Safety standards for handling, storing, transporting, and operating conventional and nuclear munitions and missiles.

SAF 1803 Accident Investigation

Accident investigation, reporting, and analysis with emphasis on trend analysis, statistical displays, report preparation, accident investigation, and system validation.

SAF 1808 Nuclear, Biological, and Chemical Safety

Physical properties, physiological effects, and safety measures concerning nuclear, biological, chemical, and other dangerous materials. First aid for chemical agent accidents and operational procedures and techniques for nuclear, biological, and chemical detection equipment; decontamination and protective equipment; individual and collective protection; radiac instruments; and nuclear, biological, and chemical research programs.

SAF 1811 Safety Engineering

Safety techniques and program requirements concerning electrical problems, high-pressure liquids and gases, explosives, chemical safety, environmental health, and portable power handtool hazards. Protective equipment and procedures for machine guarding, hazard identification, safety color coding, and use of industrial shop safety surveys. Includes practical exercises in shop layout and resolving problems in storage, construction, and flight-line safety.

SAF 1812 Safety Management I

Basic philosophy of accident prevention; includes safety education and training reference materials and safety plans and programs.

SAF 2101 Flight Safety Management

Flight safety management and airfield safety operations. Includes history of flight safety; mishap

classification and prevention; hazard abatement; and inspection, evaluation, and reporting programs.

SAF 2604 Accident Prevention Management

Philosophy of weapons accident prevention, safety, and transportation with emphasis on inspection, classification, and mishap investigation and reporting.

SAF 2805 Safety Management II

Methods used in education and training relating to safety and accident prevention to include development and maintenance of related administrative material and implementation of safety plans and programs.

SAF 2807 Advanced Safety Management

Safety standards pertaining to operation, transportation, and disposal of conventional and nuclear munitions and missiles; emphasis on inspection preparation and reporting as well as mishap investigation and reporting.

SAF 2809 Weapons Safety Program Management

Application of mishap investigation and safety inspection programs and procedures. Storage, flight-line handling, and transportation of weapons. Procedures for site planning, management of explosive ordnance disposal, and related waivers and deviations.

SAF 2810 Conventional Munitions

Safety problems relating to handling nonnuclear munitions; identification of general military explosives, flares and launchers, general ammunition, rockets and warheads, bombs and components, cluster munitions, fuses, training munitions, chemical agents and munitions, propellant actuated devices, and guided missiles

Sanitation

SAN 1506 Vegetation Management

Identification of terrestrial weeds and characteristics of ornamental and turf pests, plant biology, and pbysiology; classification of herbicides and aquatic pests; application of pesticides; and herbicide use problems.

SAN 1507 Pest Management

Application of integrated pest management program and performance of chemical control procedures. Includes medical and economic impact; introduction to entomology; and identification of household, structural, vertebrate, venomous, disease vectoring, and stored product pests.

SAN 1808 Environmental Support Equipment

General environmental support equipment, corrosion control procedures, use of hand and special tools, operation and maintenance of specific water and wastewater treatment support equipment, and pump maintenance.

SAN 2802 Water Analysis and Treatment Laboratory

Analysis of basic chemistry as it pertains to water/wastewater treatment, water testing procedures, and treatment of water for industrial use.

SAN 2803 Water Treatment Calculations and Equipment Laboratory

Operation and servicing procedures for anion and cation exchangers, monobed and dual-bed demineralizers, and resin-type ion exchangers. Procedures for treatment of closed-recirculating water systems.

SAN 2819 Environmental Support Contingency Training

Calculation of water quantities, operation and maintenance of Eralator and reverse osmosis water purification units, installation and maintenance of field water distribution systems, and field testing of water.

SAN 2820 Waterplant Systems

Advanced operation, treatment, and testing of water and wastewater plants and systems. Includes mathematics; chemistry; biology; drinking water standards, characteristics, and impurities; laboratory analysis; swimming pools; ion exchange; electro-dialysis; osmosis; system components; treat ment and support equipment; pollution control; and records, reports, and safety.

SAN 2821 Field Water Purification Systems

Advanced principles of operation for field water purification and distribution systems. Includes unit setup, startup, and operation; maintenance and service requirements of unit, pumps, latrines, and showers; and layout, shutdown, and storage.

Special Duty/Reporting Identifier Internship

SDI 3000 Special Duty Internship-Apprentice

Demonstrated knowledge and job proficiency (minimum 8 months) at apprentice level with rank of airman (E-2) or higher in career field represented by special duty and reporting identifiers.

SDI 5000 Special Duty Identifier- Journeyman

Demonstrated knowledge and job proficiency (minimum 8 months) at journeyman level with rank of airman (E-2) or higher in career field represented by special duty and reporting identifier.

SDI 7000 Special Duty Identifier-Craftsman

Demonstrated knowledge and job proficiency (minimum 12 months) at craftsman/supervisor level with rank of staff sergeant (E-5) or higher or career field represented by special duty and reporting identifiers.

SDI 9000 Special Duty Identifier-Superintendent

Demonstrated knowledge and job proficiency (minimum 16 months) at supervisor/manager level with rank of master sergeant (E-7) or higher and completion of USAF Senior Noncommissioned Officer Academy in career field represented by special duty and reporting identifiers.

Security

SEC 1801 Marksmanship Laboratory

Qualification in automatic rifles, machineguns, and grenade launchers. Includes nomenclature, capabilities, and characteristics of specific weapons; operator care, cleaning, and maintenance procedures; application of marksmanship fundamentals; weapons safety practices; analysis of use-of-force policies, clearing procedures, and functional checks; employment of traversing and elevation devices; and ammunition types and uses.

SEC 1802 Security Operations and Duties

Normal and emergency security operations required in protection of Air Force physical, information, and personnel resources. Includes legal aspects and procedures for apprehension of suspects and search and seizure of persons, vehicles, and buildings; security reporting and alerting system and associated communications equipment; area sentry; missile security; mobile patrol; convoy escort duties; types and uses of tactical teams; response procedures for civil emergencies, aircraft crashes, natural disaster scenes, and duress alarms; and preparation of incident reports and forms.

SEC 1803 Security Police Tactics

Analysis and application of individual and small unit tactics used to counteract ground attacks and attempted penetrations directed at physical resources. Includes application of individual and team movement techniques, alarm and security response team deployment, basic fire and maneuver, antihijacking procedures, response to hostage situations, target recognition and identification, execution of fire control orders, control/use of key terrain, and deployment of convoy escorts.

SEC 1804 Fundamentals of Ground Combat Skills

Analysis of airbase defense concepts and principles with instruction in subjects such as fire control and distribution measures, prisoner-of-war processing, early warning devices, land navigation, camouflage, and threats against resources. Includes application of tactical communications, associated support equipment, and field training disciplines.

SEC 1805 Special Weapons and Tactics

Application of special weapons including nomenclature, capabilities, and characteristics of slap flares, handgrenades, claymore mines, and antitank weapons; employment of individual and team concepts

in tactical situations; patrol techniques in a combative environment; and principles of urban survivability.

SEC 1806 Introduction to Security

Introduction to fundamental concepts of security operations required in protection of Air Force physical and personnel resources. Includes instruction in basic duties and responsibilities of security specialists; types and uses of tactical and mobile patrol teams; security reporting; alarm systems; physical security safeguards; building and area search procedures; and introduction to Security Police Automated System.

SEC 1854 Physical Security Concepts and Procedures

Analysis of concepts and procedures for implementing physical security programs. Includes physical barriers; alarm and lighting systems, entry control procedures; locks and locking devices; establishment of restricted and controlled areas; and sentry and mobile patrol posting and nuclear security requirements.

SEC 2803 Technical Security Functions

Application of concepts and procedures required to perform and supervise technical security functions. Includes disaster and hostage situation response options; tactical employment procedures; and supervision of base and installation security systems, resource protection, and military working dog programs.

SEC 2850 Intrusion Detection Equipment Operator

Analysis of characteristics, capabilities, limitations, and vulnerabilities of associated sensor subsystems and small permanent communication and display segment equipment. Emphasis on technical orders, system operation, and control of response forces.

SEC 2851 Closed-Circuit Television Operator

Analysis of characteristics, capabilities, limitations, and vulnerabilities of perimeter surveillance, and system closed-circuit television equipment. Emphasis on application of troubleshooting, system operation, and television monitoring to prevent unauthorized entry into controlled areas.

SEC 2853 Organization of Base Defense Forces

Organization and management of installation security forces. Includes evaluation of base threat analysis, preparation of security response options, and practical exercises in deployment of security forces in response to various hostile threat scenarios.

SEC 2855 Support Weapons Qualification

Mortars, recoilless rifles, heavy machineguns, and/or grenade launchers. Nomenclature, characteristics, and capabilities of specific weapons systems; operator care, cleaning, and maintenance; weapons safety; tactical employment; forward observation; fire-direction center operations (mortar courses only); ammunition types and uses; practical exercises involving crew drills for gunners, assistant gunners, and ammunition bearers; and live firing qualification.

SEC 2856 Ground Defense Leadership/ Management

Analysis and application of logistical and tactical planning for employment of security forces units engaged in ground defense operations for US installations located in hostile areas. Includes concepts, principles, and organization for distributed area defense with emphasis on leadership of combat elements, patrol planning procedures, and integration of defense forces.

SEC 2857 Tactical Marksmanship Laboratory

Employment of fire team, squad, and flight weapons in tactical situations with emphasis on types and classes

of fire and methods of engagement for personnel and materiel targets.

SEC 2858 Advanced Industrial Security Techniques

Application of specialized counterintelligence measures that enable special agent to perform technical surveillance countermeasure surveys. Extensive physical security requirements and investigative, electronic, construction, and related skills.

SEC 2859 Alarm System Vulnerability Inspections

Common types of alarm systems, their components, and typical vulnerabilities.

Social Actions

SOC 1208 Applied Counseling Techniques

Counseling interviews; includes transactional analysis, group counseling, crisis intervention, telephone counseling, awareness of basic human needs, value clarification techniques, and practice counseling sessions.

SOC 1501 Introduction to Social Actions

Fundamentals of social actions; includes structure, duties, and responsibilities of conducting a social actions program. Psychology of prejudice and personal growth, professional development, personality theory, lecture methods, group facilitation, drug and alcohol pharmacology, mental health terminology, history of drug and alcohol abuse, etiology and progressive characteristics of alcoholism, cross-cultural challenges, and awareness. Policies and procedures for a dynamic social actions program.

SOC 1502 Rehabilitation Management Program

Introduction to fundamental principles of rehabilitation management program. Topics include Privacy Act and case files, guided discussion methods, personnel dispositions and data systems, rehabilitation regimens, group facilitation, drug rehabilitation, supervisor confrontation models, and individual counseling.

SOC 2001 Social Actions Office Management

Development of team management, staff training programs, and media presentation as applied to the social actions office and its programs. Includes report preparation and staffing, program management, interaction with legal counsel, quality control of cases, identification of social trends and issues, and program marketing techniques.

SOC 2004 Substance Abuse Case Presentation

The 12-core counselor functions of National Certification Reciprocity Consortium and their correlation to Air Force substance abuse counselor. Written case presentation with oral defense before an evaluation board.

SOC 2005 Social Actions Manager Seminar

Office administration, documentation requirements, team and resource management concepts, assistance visits, referral resources, education and counseling, equal opportunity and treatment, and substance abuse programs.

Solar Observation

SOO 2501 Solar Theory and Related Principles

Advanced solar theory as applied to solar observation. Includes explanation of structure, characteristics, and features of sun; optics, spectroscopy, and Solar Observing Optical Network telescope system; computer application and operating principles; solar observations; and classification of solar data.

SOO 2502 Solar Observing Optical Network (SOON) Operations

Advanced operating principles for SOON system; includes application of integrated telescopic, spectroscopic, photographic, and computer capabilities to analyze and encode solar observations.

Surveying

SUR 1501 Fundamentals of Surveying

Distance and direction measurements, horizontal control, traverse computation, and transit adjustment.

Survival and Rescue

SVR 1301 Land and Water Survival Techniques

Survival techniques and equipment necessary for protecting aircrew technicians, patients, and passengers against perils inherent in entering a land or water environment after ditching or crash landing.

SVR 1501 General Principles of Survival

Survival techniques for a temperate environment. Includes procurement of plant and animal food, food preparation and preservation, preparation and use of water, signaling and communications, campsite selection, shelter construction, firecraft, and burden carrying. Classroom and field location instruction.

SVR 1801 Special Survival Techniques

Survival techniques in arctic, coastal, open seas, tropical, mountain, and desert environments. Includes identifying and determining survival conditions, personal protection, sustenance, environmental medical techniques, signaling and communications, recovery and egress procedures, and shelter craft and firecraft unique to special environments. Classroom and field location instruction.

SVR 1802 Wilderness Living

Basic craft techniques for establishing and maintaining camps in a variety of wilderness environments. Includes backpacking; camouflage; and ropes, knots, and lashings used in camp construction.

SVR 1803 Map and Compass

Map reading and use of compass for navigation in wilderness areas; includes position determination, travel preparation, use of natural aids to navigation, route selection, and application of travel techniques. Classroom and field location instruction.

SVR 1804 Mountain Travel

Travel techniques required in mountainous terrain; includes mountain climbing and patient evacuation equipment; mountaineering techniques; navigation principles; establishment of trail camps; trip preparation; shelter and campsite selection and construction; emergency bivouac; and water and food procurement, preparation, and preservation. Classroom, outdoor tower, and mountainous field location instruction.

SVR 1805 Psychology of Environmental Stress

Stresses encountered in prisoner-of-war environments. Includes resistance to exploitation; international agreements relative to captivity and camp organization; and application of escape-and-evasion techniques. Communist history and theory, interrogation and indoctrination procedures, and group resistance in captivity.

SVR 1806 Search-and-Rescue Operations

Signaling and communications; guiding and directing recovery and rescue operations; coordinating activities with civilian and military agencies; techniques of management; operations; and tactics employed in air-ground search and rescue. Includes pickup devices, egress from fixed- and rotary-wing aircraft, pyrotechniques, litter and patient handling, and coordination of activities with other agencies. Classroom and field location instruction using actual equipment.

SVR 1807 Geographic Life Zones

Ethnic and environmental characteristics and resources available for survival in each major life zone; includes arctic, open sea, tropic, coastal, and desert environments. Classroom and field location instruction.

SVR 1808 Environmental Health

Sanitation and personal hygiene under field conditions; emphasis on personal care, cleanliness, and disposition of waste under field conditions using sanitary and ecological methods.

SVR 1810 Fundamentals of Parachuting with Scuba Equipment

Practical use of parachutes and scuba gear; minimum of eight jumps to include day, night, tree, rough terrain, and water jumps in full scuba gear.

SVR 1817 Aircraft Familiarization

Familiarization with a variety of fixed- and rotary-wing aircraft used in rescue operations; includes aircraft nomenclature, duties and procedures, weapons systems, and flight operations. Classroom, training simulator, and actual aircraft instruction.

SVR 1818 Pararescue Indoctrination

Pararescue techniques; includes medical terminology, anatomy, treatment of temperature-related injuries, medical kits, mountain indoctrination, and diving physics.

SVR 1819 Evasion and Recovery

Principles and practices of evasion and recovery. Includes use of clothing and equipment; procurement of food and water; application of methods of signaling; evasive traveling; provision of fire, shelter, medicine, and hygiene; and responsibilities during a search-and-rescue operation.

SVR 1821 Parachute Water Survival

Survival procedures after parachute entry into water; includes parachute and rafting procedures, hazards and medical aspects of aquatic survival, sustenance and survival living, and responsibilities during helicopter search-and-rescue attempts.

SVR 1822 Resistance Training Instructor Orientation

Principles, procedures, instructional techniques, and theories of conducting wartime Code of Conduct training. Includes methods for instructing resistance, psychological aspects of prisoner-of-war resistance for instructors and students, and history and utility of Code of Conduct training.

SVR 2801 Advanced Survival Techniques

Adaptation of survival-and-evasion principles, procedures, and techniques necessary for survival in extreme environmental conditions including barren arctic, barren desert, jungle, and open ocean environments.

Transportation

TRN 1601 Passenger Routing

Travel requirements, modes of transportation, and baggage allowances: includes functions of automated passenger reservation system, commercial carrier publications, passenger routing, and preparation of travel itineraries.

TRN 1602 Movement of Household Goods

Mileage guides and rate tariffs for cost determination of consolidated and single-lot shipments. Includes requirements for selection of carriers and principles of packing and crating contracts, carrier responsibilities, temporary and nontemporary storage, and procedures for tracing shipments.

TRN 1604 Air Passenger Management

Flight schedules and publications, aircraft identification, preparation of air passenger documents, passenger reservations/scheduling, and transportation funding procedures.

TRN 1605 Air Passenger Processing and Services

Processing and manifesting air passengers and baggage, operation of passenger and baggage handling equipment, terminal announcements, passenger handling techniques, and good customer relations.

TRN 1608 Aircraft Loading Vehicle Operation

Principles, techniques, and methods of operating cargo-loading vehicles; includes planning and selecting aircraft loads, palletization of cargo, aircraft loading, and cargo tiedown.

TRN 1609 Air Transportation, Weight, and Balance

Preparation of transportation documents/reports and methods/techniques of weight-and-balance computations. Mathematical formulas, balance computers, weight charts, and aircraft weight records for hazardous/nonhazardous cargo including passengers.

TRN 1610 Aircraft Load Planning

Palletized/nonpalletized cargo planning with special consideration to weight, bulk, and properties; includes preinspection of aircraft loading equipment, loading, and restraining cargo for flights.

TRN 1614 Motor Vehicle Fleet Administration

Organization, manpower, and public law in motor vehicle fleet administration and operation; includes managerial decisions for lease or purchase of vehicles, contingency pooling, and accident prevention.

TRN 1617 C-17 Loadmaster Qualification

Overview of C-17 cargo-handling system and passenger/aeromedical handling procedures. Includes flight operations, mission preparation, and special handling procedures.

TRN 1618 Surface Transportation of Dangerous Materials

Regulations for military traffic management and terminal service for rail, motor vehicle, and water transportation; includes special problems related to movement of dangerous materials.

TRN 1619 Cargo Preparation

Application of packing/preservation principles to general, special, and hazardous cargo storage and shipment.

TRN 1620 Airlift of Dangerous Materials

Inspection, certification, and safety supervision in transporting cargo; includes discrepancy reporting, compatibility planning, and special handling requirements.

TRN 1622 Cargo Processing and Documentation

Techniques, principles, and methods of processing air cargo including special and dangerous cargo and mail.

TRN 1631 Traffic Management

Administrative management of freight, traffic, personal property, and passengers; includes movement of materiel, transportation and storage of personal property, passenger movement, and automatic data processing.

TRN 1638 Aircraft Systems Familiarization and Operations/C-5 Loadmaster

C-5 auxiliary power unit operation, hydraulic and kneeling systems, and forward and aft door operations; includes preoperation inspection, trouble-isolation techniques, operational checks, operating limitations, and use of synthetic trainers.

TRN 1640 Cargo Aircraft Operations

Ground operations, preflight, in-flight, and postflight duties of aircraft loadmaster; includes positioning aircraft, determining load arrangement, aircraft preparation, preflight and in-flight briefings of passengers, aircraft preparation, and postflight inspection of aircraft.

TRN 1641 Loadmaster Tactical Delivery/C-130 Aircraft

Tactical delivery of equipment/personnel by aircraft crewmembers; includes assembly/inspection of cargo load and emergency procedures.

TRN 1642 Vehicle Operator Course

Fundamental principles of vehicle operating procedures unique to special purpose vehicles. Includes unusual environments; special configurations applicable to use of these vehicles; and safety procedures pertaining to trailer towing, convoying, and off-road uses.

TRN 1644 Shipment Planning

Procedures for handling and transporting cargo economically and effectively; includes military standard transportation and movement procedures, consolidation of shipments, and routing of freight shipments.

TRN 1648 Air Passenger and Cargo Management

Transportation responsibilities, resources, and management of military airlift system. Special responsibilities of each transportation subdivision, safety, types of aircraft, airlift systems, military air terminals, and manning and resources for operation. Capability of military airlift system to respond in war and peacetime.

TRN 2602 Aircraft Cargo Loading

Principles, techniques, and methods of cargo load planning. Includes loading/offloading; use of cargo loading system; cargo tiedown requirements for general, vehicular, and special cargo; and weight-and-balance computations.

TRN 2604 Cargo Terminal Operations

Airfreight transportation procedures. Includes use of cargo controls with application to documentation, mail, dangerous and special cargo; load planning of palletized and nonpalletized cargo aboard aircraft; and techniques of weight-and-balance computations.

TRN 2605 Air Terminal Operation Center

Analysis of terminal operations control including load ramp control, dispatch, cargo inventory, commercial contract administration, terminating cargo/passenger procedures, and disposition of flight reports/records.

TRN 2606 C-141 Loadmaster Airdrop

C-14 loadmaster airdrop procedures. Includes preparation of equipment; capacities; and preflight, simulator, and actual flying training.

TRN 2608 Transportation Management

Management of Department of Defense transportation system, military aerial port operations, and military airlift transportation cycle; includes identification of user requirements, effects of using data automation, personnel, and equipment in management of aerial ports.

TRN 2609 Airlift Logistics

Maintenance and supply support of airlift logistics; includes techniques for effective logistics planning, manpower and equipment utilization, fuels management, and mobility planning.

TRN 2611 Airlift/Terminal Operations and Management

Principles of logistics mission and role of contingency airlift in support of materiel and personnel movement; includes various types of airlift operations, aerial port organizational structure, and managerial support of daily activities.

TRN 2612 Advanced Traffic Management

Movement of cargo and passengers using modern traffic management applications; includes resolving case problems, identifying organizational structure, planning, and scheduling.

TRN 2614 Vehicle Management and Administration

Advanced vehicle management techniques. Includes directives and policies, laws, work center supervision, vehicle use boards, control functions, and management reports.

TRN 2615 Transportation Field Research

Department of Defense transportation staff agencies and commercial transportation centers. Includes field trips that expose students to high levels of management and planning, containerized shipping activities, military facilities, aerial and water ports, household goods, and motor and rail carriers.

TRN 2616 Advanced Transportation Planning

Analysis of materiel distribution system, location of commercial and military transportation/logistics systems, and facilities and transportation management.

TRN 2618 Mobile/Strategic Aerial Operations

Mobile or strategic aerial port operations during wartime contingencies, deployment, responsibilities, mobility work centers, plans systems, joint inspections, and concentrated aircraft load planning.

TRN 2620 Mobility Management

Management of mobility operations; including planning process, system development, combat readiness, and acquisition and use of human/materiel resources.

TRN 2621 Motor Vehicle Fleet Management

Organization, manpower, and public law in motor vehicle fleet management and operation; includes managerial decisions for lease or purchase of vehicles, contingency planning, fleet analysis, and safety/accident prevention.

TRN 2622 Materiel Movement

Principles for planning, managing, and transporting Department of Defense materiel economically and effectively. Includes policies and procedures for preparation, routing, and documentation; reporting systems; and Government regulations controlling materiel movement.

TRN 2623 Passenger Management

Policy and entitlements for movement of passengers. Includes travel requirements, modes of transportation, baggage allowances, passenger routing, use of commercial carrier publications, and policies for use and control of travel documents.

TRN 2624 Management of Household Goods

Policies and procedures for movement of personal property. Includes entitlements; counseling of personnel/dependents; Department of Defense policy; management and selection of carriers; packing, storage, and tracking of household goods; contract management; and quality control responsibilities.

TRN 2626 C-17 Loadmaster Airdrop

Loadmaster airdrop qualification in C-17 aircraft. Includes aerial delivery of airborne personnel, transportation of heavy equipment, low-altitude parachute extraction, and container delivery system.

TRN 2702 Airlift Operations Planning

Development of individual and joint operations plans. Includes interservice operations, gross airlift capabilities, war planning, identification, and correction of shortfalls in transportation and/or materiel, mobility operations, and enhancement and funding of airlift operations.

Television Systems

TVS 1702 Television Equipment Maintenance

Application of electronic principles to maintenance of television equipment; includes circuit analysis, alignment, performance tests, and troubleshooting procedures.

TVS 1703 Video-Switching and Distribution Systems

Theory of closed-circuit video switching and distribution, external synchronizer generation, and pulse distribution amplification; includes practice in diagnosing equipment malfunctions, alignment, and repair.

TVS 1720 Cockpit TV Sensor System Maintenance

Circuit analysis, operational checks, system alignment, and troubleshooting using specialized tools and test equipment.

TVS 1730 Basic Television Equipment Maintenance

Maintenance of receivers, monitors, video-tape recorders, cameras, and audio systems. Includes fundamentals of television communications, operational maintenance of studio transmissions, and computer-embedded control systems.

TVS 1740 Basic Imagery System Maintenance

Description, operation, and maintenance of light tables, minilabs, electromechanical cameras, electronic imaging centers, and still digital cameras. Includes photographic fundamentals and processing and printing negative film.

Vehicle Maintenance

VEM 1101 Mechanic Apprentice Qualification Course

Fundamentals of inspecting, troubleshooting, servicing, and repairing vehicles and mounted equipment. Includes internal combustion engines (gas/diesel); power train components; brakes, electrical, steering, and suspension systems; using tools, test equipment, and manufacturer's specifications; and safety procedures.

VEM 1102 Computer Control System Fundamentals

Principles of operation and troubleshooting and repair of malfunctions associated with vehicle computer control systems. Includes tools, portable testers, manufacturer's specifications, and safety procedures.

VEM 1103 Vehicle Body Mechanic

Repair, replacement, and refinishing of body panels, fenders, frames, and accessories using manufacturer's specifications and service manuals. Includes gas and electric welding; application of protective coatings and paints; and repair and replacement of radiators, fuel tanks, and glass by welding, cutting, and fitting.

VEM 1524 Specialized Support Vehicles

Fundamental maintenance of fire-fighting, refueling, and other special purpose vehicles. Includes hydraulic, pneumatic, and electrical systems; tools; test equipment; publications; safety; and troubleshooting, adjustment, and repair of associated system components.

VEM 1530 Overview of Vehicle Maintenance

Familiarization with tools and procedures used in vehicle maintenance. Includes safety and materiel control principles; use of tools, test equipment, and publications; inspection of vehicles; and maintenance policies and procedures.

VEM 2501 Electromechanical Circuits and Systems

Automotive test equipment to inspect, service, test, adjust, and troubleshoot engine starting, ignition, and charging circuits.

VEM 2502 Electronic Diagnosis and Engine Analysis

Universal diagnostic equipment; includes chassis dynamometers, ignition scopes, and portable testers to analyze engine operation.

VEM 2505 Vehicle Test Equipment

Use of test equipment necessary to troubleshoot various engine components. Includes oscilloscope; timing light; dwell meter; exhaust gas analyzer; hydrometer; growler; cooling system analyzer; generator bench; load testers; and special equipment for testing diodes, voltage regulators, and distributors.

VEM 2508 Advanced Special Support Vehicles

Maintenance of fire-fighting, refueling, and other special purpose vehicles. Includes troubleshooting, disassembly, reassembly, and replacement of hydraulic, pneumatic, and electrical systems; use of tools, test equipment, and publications; and safety procedures.

VEM 2509 Advanced Automotive Maintenance

Maintenance principles using tools, portable testers, publications, and safety procedures to inspect, troubleshoot, and repair automotive systems. Includes gas/diesel engines, power trains, and replacement of inoperative vehicle system components.

Welding

WEL 1501 Oxyacetylene Welding

Introduction to oxyacetylene welding. Includes operation and maintenance of welding equipment; identification of beads, lap joints, and tee joints of carbon steel; position welding; cutting ferrous metals; silver and lead soldering; brazing steel and gray cast iron; fusion welding of ferrous castings; and forging metals.

WEL 1502 Metallic Arc Welding

Basic metallic arc welding. Includes operation and maintenance of equipment; selection of electrodes; building up flat surfaces, fillet welds, and butt joints; and interpreting drawings and symbols.

WEL 1503 Inert Gas Shielded Welding

Introduction to welding of edge, butt, and tee joints of heat and corrosion resistant ferrous, aluminum, magnesium, and titanium alloys.

WEL 1512 Introduction to Metals Processing

Use/care of handtools and shop equipment; includes interpretation of technical publications, inspection and maintenance systems, shop drawings, and weld specifications.

ACRONYMS

AETC	Air Education and Training Command
AFRC	Air Force Reserve Command
AFSC	Air Force specialty code
ACE	aerospace ground equipment
AC&W	aircraft control and warning
ANG	Air National Guard
APD	Acquisition Professional Development
ASCP	American Society of Clinical Pathologists
ASVAB	Armed Services Vocational Aptitude Battery
ATC	Air Training Command
AU	Air University
AWACS	airborne warning and control systems
BOV	Board of Visitors
CAD	computer-aided design
CBET	Certified Biomedical Equipment Technician
CCAF	Community College of the Air Force
CRL	Command and Telemetry Command Reference Loop
GER	general education requirement
CLEP	College-Level Examination Program
DANTES	Defense Activity for Non-Traditional Education Support
EFP	electronic field production
ELINT	electronic intelligence
EMT	emergency medical technician
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
ICC	International Certification Commission
IRIG	Intermediate Range Instrumentation Group
IVD	interactive videodisc
LMMS	leadership, management, and military science
MWR	morale, welfare, and recreation
NCO	noncommissoned officer
OIC	Occupational Instructor Certification
OJT	on-the-job training
RF	radio frequency
RI	reporting identifier
SACS	Southern Association of Colleges and Schools
SATCOM	satellite sommunications
SDI	specialty duty identifier
SOON	Solar Observing Optical Network
TACAN	tactical air navigation
VFR	visual flight rules

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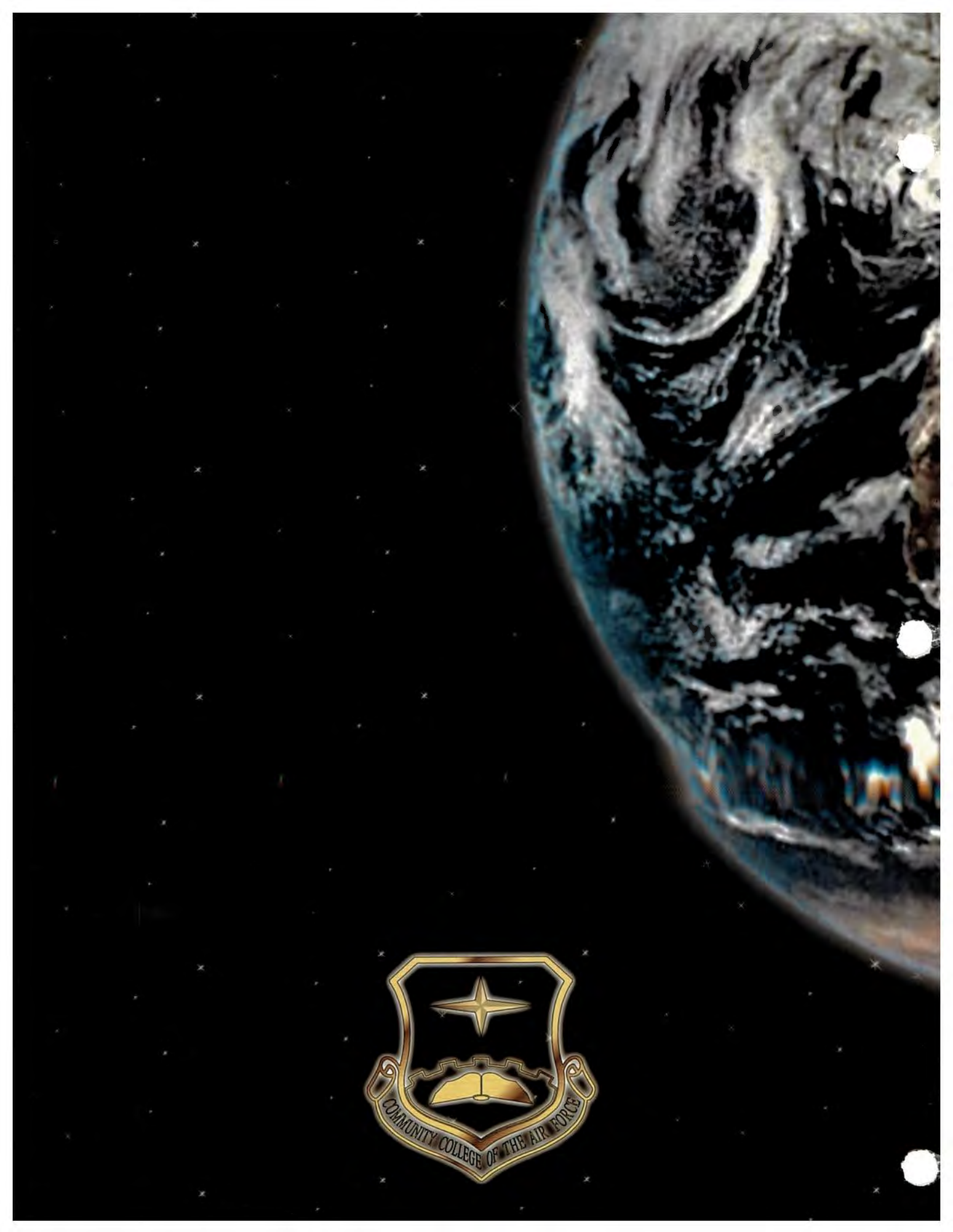
Memberships

The Community College of the Air Force holds memberships in the following organizations:

- Alabama Association of Collegiate Registrars
- American Association of Collegiate Registrars and Admissions Officers
- American Association of Community and Junior Colleges
- American Technical Education Association
- Aviation Technician Education Council
- National Commission for Cooperative Education
- National Council for Marketing and Public Relations
- National Council for Occupational Education
- National University Continuing Education Association
- Southern Association of Colleges and Schools
- Southern Association of Collegiate Registrars and Records
- Southern Association of Community, Junior, and Technical Colleges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