

Air University

Community College of the Air Force



The Airman's College
We educate Airmen for life.

2011-2013 General Catalog
Number 19

The Community College of the Air Force, Maxwell AFB-Gunter Annex, 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 through Air University by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree.

The statements set forth in this catalog outline the current rules, regulations and policies of the Community College of the Air Force and are for informational purposes only. They should not be construed as the basis of a contract between the student and the college. While the provisions of this catalog will normally be applied as stated, the college reserves the right to change any provision listed in this catalog. It is the responsibility of each student to read and understand the provisions of this catalog.

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This catalog is available on-line at
[**www.au.af.mil/au/ccaf/**](http://www.au.af.mil/au/ccaf/)

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CCAF Homepage ... www.au.af.mil/au/ccaf/

Office	Symbol	Extension
Commandant	CC	5150
Commandant's Secretary	CCA	5150
Vice Commandant	CV	5152
Superintendent	CCS	5154
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MESSAGE FROM THE COMMANDANT ...

Welcome to the Community College of the Air Force! Our college is a federally-chartered degree-granting institution that serves the United States Air Force's enlisted total force. We partner with more than 100 affiliated Air Force schools, 82 Education Services Offices located worldwide, and more than 1,500 civilian academic institutions to serve more than 323,000 active, guard, and reserve enlisted personnel, making CCAF the world's largest community college system.

We strive to meet the demands of the Air Force's increasingly expeditionary environment and at the same time help Airmen achieve their educational goals by capitalizing on job-related training and education as part of flexible degree completion programs.

On the following pages you'll find information about our degree programs, our professional credentialing programs, and our regional accreditation. So whether you're a prospective or current student, an education counselor, a recruiter, or a commander, we've designed this catalog to provide valuable information about higher education opportunities with CCAF.

Lt Col Timothy W. Albrecht



MESSAGE FROM THE VICE COMMANDANT ...

The Community College of the Air Force is dedicated to the professional growth of enlisted Airmen in the 21st century Air Force. We have prepared Airmen since our inception in 1972 while adjusting to stay abreast of our dynamic military mission and educationally at the fore-front of technology-focused colleges. Presently, our expeditionary mission-set coupled with rapidly advancing technological capabilities demand an educational institution that delivers prepared Airmen much earlier in their career. We are confident that our students are well prepared to serve in today's Air Force and equipped to achieve in the civilian or military sectors as their lives transition.



CMSgt James Pepin

GENERAL INFORMATION



GENERAL INFORMATION ...

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 programs is the Community College of the Air Force (CCAF). The college is one of several federally chartered degree-granting institutions; however, it is the only 2-year institution exclusively serving enlisted personnel. The college awards the associate in applied science degree after a student successfully completes a degree program designed for an Air Force specialty.

CCAF Mission

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.

Core Values

The Air Force core values are:

Integrity First
Service Before Self
Excellence in All We Do

CCAF Vision for the future is to become:

The community college of choice, providing a path to higher learning for those with a calling to serve.

Accreditation

Air University (AU) is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS/COC) (1866 Southern Lane, Decatur, Georgia 30033-4097; telephone number 404-679-4501) to award associate and master's degrees. Air University achieved regional accreditation in June 2004, retroactive to the beginning of the 2004 calendar year. *Community College of the Air Force (CCAF)* is now a part of Air University. The Community College of the Air Force was separately accredited by SACS/COC from 1980-2004.

History

The "Community College of the Air Force" concept evolved in the early 1970s as a means of gaining recognition for Air Force training. Led by General George B. Simler, commander of Air Training Command (ATC), Air Force visionaries recognized the need to enhance the skills of noncommissioned officers 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, General John D. Ryan, Air Force Chief of Staff,

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approved the establishment of the Community College of the Air Force. The Secretary of the Air Force approved the activation plan on 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 accredited civilian institutions of higher education and management education from Air Force or civilian sources.

The college mailed its first official transcript on 9 November 1972 and issued its first credential, the Career Education Certificate, on 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 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 (USOE), 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 before the USOE. Success of the effort can mainly be attributed to the testimony given in USOE hearings by Lieutenant General John Roberts, Chief Master Sergeant of the Air Force Thomas Barnes, Dr. Jerome Lysaught (chairman of the CCAF Advisory Committee) and Colonel Lyle Kaapke. The college awarded its first associate in applied science degrees 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 Southern Association of Colleges and Schools Commission on Colleges (SACS/COC). After CCAF underwent a rigorous self-study and met accreditation standards, the Commission on Colleges accredited the college on 12 December 1980 to award the associate degree.

During this accreditation process, the administrative offices relocated to their present site at Maxwell AFB, Alabama, effective 1 April 1979. The SACS Commission on Colleges reaffirmed CCAF's accreditation on 9 December 1986.

On 1 July 1993 the Community College of the Air Force realigned under Air University, which became the educational component of the redesignated Air Education and Training Command. However, the commander of Air Education and Training Command (AETC) remained the degree-granting authority for the college until 28 October 2004. On that date, degree-granting authority changed to the Air University Commander when President Bush signed the Fiscal Year 2005 National Defense Authorization Act.

The college again underwent an extensive self-study and visits from SACS reaffirmation teams during 1993-1996. Subsequently, on 25 June 1997 the Southern Association of Colleges and Schools reaffirmed CCAF's accreditation until the year 2006. The college participated in the Air University effort to gain regional accreditation by the SACS Commission on Colleges. On 25 June 2004, SACS notified Air University that their application for regional accreditation was approved, retroactive to 1 January 2004. From 2007-2009, CCAF participated in Air University's accreditation reaffirmation effort through SACS/COC. On 8 December 2009 SACS announced the reaffirmation of Air University's accreditation for a 10-year period. CCAF is now accredited through Air University by the SACS Commission on Colleges until 2019.

Over the years the college has grown both in numbers and recognition. With more than 323,000 registered students, the college is the largest multicampus community college in the world. Its affiliated schools are located in 37 states, and 9 foreign locations. About 6,000 CCAF faculty members provide quality instruction for the personal and professional development of enlisted personnel. More than one million transcripts have been issued in the last 10 years, and in 2008-2009 CCAF students earned 1.61 million hours of college credit. Since issuing its first degree in 1977, the college has awarded more than 362,000 associate in applied science degrees.

The System

The Air University (AU) Board of Visitors (BOV) is chartered to provide independent advice and recommendations on matters pertaining to the educational, doctrinal, and research policies and activities of Air University.

The AU BOV Undergraduate Education Subcommittee reviews the AU colleges and related units responsible for degree applicable course and education programs, and makes recommendations to the entire board on actions believed necessary to strengthen AU's undergraduate education offerings and programs.

Administrators, instructors, classrooms, laboratories, counselors and students are located throughout the world. What is often perceived as nontraditional about the college is its organization and administration that provide instruction at numerous locations because of the geographic dispersion of the students pursuing their Air Force occupations. Civilian collegiate institutions provide the course work to satisfy the general education requirement (GER) of the degree programs and also provide course work to satisfy technical education, and leadership, management and military studies (LMMS) requirements not completed at CCAF schools. Although this broad geographical separation is unusual, the college is organized into a single, highly effective educational system.

Administrative Center



**Ryan Hall, CCAF Administrative Center
Maxwell-Gunter AFB, Alabama**

The administrative staff, located at Maxwell-Gunter 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 Community College of the Air Force was located at Randolph AFB, Texas, during 1 April 1972-15 January 1977; at Lackland AFB, Texas, during 16 January 1977-31 March 1979; at Maxwell AFB, Alabama, during 1 April 1979 – 4 November 2008; at Maxwell-Gunter AFB, Alabama, since 5 November 2008.

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Commandant

The CCAF commandant—chief executive officer with command authority—accomplishes the CCAF mission. The administrative staff translates system schools' curricula into semester-hour credit, develops course descriptors, designs and manages degree programs, maintains records of student achievement and progress toward degree completion, ensures system schools maintain standards required for accreditation, distributes official catalogs and other publications, and provides guidance to the worldwide network of counselors. The following have served as CCAF commanders/commandants:

Col John L. Phipps	1 April 1972
Col Lyle D. Kaapke	1 September 1975
Col Lyle E. Darrow	9 June 1980
Lt Col William E. Flinn, Jr.	16 August 1982
Col Rodney V. Cox, Jr.	19 October 1982
Col Russell A. Gregory	24 May 1988
Lt Col James L. Antenen.....	2 April 1992
Col Paul A. Reid	19 June 1992
Col Tamzy J. House.....	3 July 1996
Col James M. McBride	4 March 1999
Lt Col Jeffery K. Little.....	15 December 2001
Col Eric A. Ash.....	29 April 2002
Col Thomas D. Klincar	3 June 2005
Lt Col Raymond W. Staats.....	27 July 2007
Lt Col Timothy W. Albrecht.....	8 June 2009

Affiliated Schools

Air Force schools that provide technical and leadership, management and military studies 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 both distance learning and traditional learning environments. 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. Education services offices are composed of professional educational administrators, guidance counselors, academic advisors, education technicians/specialists 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 civilian collegiate institutions to arrange for course offerings needed to satisfy CCAF degree requirements.

Education services personnel also administer the College-Level Examination Program (CLEP), Defense Activity for Non-Traditional Education Support (DANTES) Subject Standardized Tests and Excelsior College Examinations.

CCAF advisors and training technicians coordinate education services for ANG and AFRC personnel. The point of contact for ANG and AFRC affairs is CCAF/DEAC, 100 South Turner Boulevard, Maxwell-Gunter AFB, Alabama 36114-3011; (334) 649-5021 or DSN 749-5021.

Air University Board of Visitors

The board, under the provisions of the Federal Advisory Committee Act (FACA) of 1972, as amended, shall provide the Secretary of the Air Force, through the Commander, Air University and Commander, Air Education and Training Command, independent advice and recommendations on matters pertaining to the educational, doctrinal, and research policies and activities of Air University. The Secretary of the Air Force or designated representative, on behalf of the Secretary of Defense, may act upon the board's advice and recommendations.

The board shall be composed of not more than thirty-five members, who are eminent authorities in the field of air power, defense, management, leadership, and academia. Board members appointed by the Secretary of Defense, who are not federal officers or employees, shall serve as special government employees under the authority of 5 U.S.C. § 3109. Members normally serve annual renewable terms up to a maximum of nine years.

The board meets at least twice a year, in the spring and the fall, at Maxwell AFB, Alabama. The board presents a written report with its advice and recommendations to the Air University commander and provides an annual outbrief to the Secretary of the Air Force and to the US Air Force Chief of Staff. Meeting minutes, reports, or other documents pertaining to board meetings may be accessed at the GSA FACA Database (<http://fido.gov/facadatabase>).

The Advisory Bodies

In addition to the Air University (AU) Board of Visitors, the college has three other advisory bodies. Advisory body members are selected from the CCAF system.

Affiliated Schools Advisory Panel

The panel provides a forum for addressing issues of mutual concern to both the Community College of the Air Force and the affiliated schools. The panel meets at least annually to review and recommend actions concerning CCAF affiliated school policies, administrative procedures and affiliation requirements; and encourages participation in the CCAF system. The panel consists of representatives from technical and specialized training, enlisted professional military education, command-sponsored schools, AFRC, ANG and Headquarters AETC staff. The panel serves the best interests of CCAF students and protects the CCAF system by ensuring schools support affiliation requirements.

Education Services Advisory Panel

The panel is comprised of the CCAF dean of academic affairs; education services advisor, Headquarters USAF and major command personnel; base-level education services personnel; and ANG and AFRC components. It provides a forum for addressing issues of mutual concern to both CCAF and the education services community; its primary focus is on the student body when making recommendations. The panel advises the CCAF commandant on issues of concern to students, education services and AFRC and ANG training personnel; reviews CCAF academic policies and administrative procedures that affect off-campus education centers; and advises the CCAF commandant on marketing methods that will enhance participation in the college.

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Policy Council

Academic policies are developed by the Policy Council and endorsed by the AU Board of Visitors. The Policy Council is composed of representatives from all elements of the CCAF system. Chaired by the CCAF 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 commandant 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 CCAF/DE, 100 South Turner Boulevard, Maxwell-Gunter AFB, Alabama 36114-3011.

The Policies

Entrance Requirements

Before enlisting in the Air Force, an individual completes the Armed Services Vocational Aptitude Battery (ASVAB) and meets the standards in Air Force Recruiting Service Instruction 36-2001, *Recruiting Procedures for the Air Force*. Composite scores of the ASVAB indicate academic and career field aptitude. These scores help match the individual's aptitudes and abilities with Air Force career areas during initial assignment to a career field. The Air Force uses these scores as an indicator of the student's potential to make satisfactory progress in a career-related degree program.

Admission & Registration

When assigned to an Air Force career field, active duty, ANG and AFRC enlisted members are admitted to the college and registered in the degree program designed for their Air Force specialty. This status does not change until the college receives formal academic notice or receives an official transcript showing completion of civilian college course work or national tests applicable to their degree program from an accredited institution. Once a civilian college course or national test is recorded, the student is identified as a participant.

An individual with an Air Force reporting identifier and/or special duty identifier not in the DEGREE PROGRAMS section may register in programs related to his or her second or other Air Force specialty code (AFSC) reflected on the report on individual personnel (RIP).

Degree Time Limit

Registration in all degree programs, except Instructor of Technology and Military Science (ITMS), is limited to 6 years from date of registration. A student who is pursuing a first degree and does not complete it in the allotted time will automatically be moved to the primary occupational specialty degree program in the most current catalog. A student who is pursuing a subsequent CCAF degree will be disenrolled at the end of the allotted time. A student desiring registration in another subsequent degree program may do so by submitting a request through the education services office or ANG/AFRC CCAF advisor.

A student enrolled in the ITMS degree program has 2 years from the registration date to complete requirements. A student who does not complete the degree in the allotted time will be disenrolled. Any student wishing to re-enroll may follow the procedures outlined above provided the student is still performing duty as a CCAF instructor and meets all other requirements for registration.

Subsequent Degree

An Airman may register in a subsequent degree program in his or her primary, secondary, tertiary or fourth AFSC (not duty/control) provided the Airman has not been awarded a degree in a program designed

for that AFSC. A student registered in a subsequent degree program must earn and apply a minimum of 24 semester hours of unique (different) technical credit—at least 12 semester hours must be CCAF credit.

Grading Policy

Academic performance is determined and reported by using a pass or fail system. A student successfully completing a course is 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 attainment of desired learning outcomes. Course completion requirements, including grading standards, are provided to the student at the beginning of each course.

Transfer Credit

The college accepts “in transfer” courses that meet the criteria in the DEGREE PROGRAMS section. Credit earned at accredited colleges and universities may be accepted in transfer. Courses completed at foreign institutions are considered on an individual basis when submitted with a course-by-course evaluation from a National Association of Credential Evaluation Services or American Association of Collegiate Registrars and Admissions Officers member.

The General Education Mobile (GEM) program connects CCAF students with online general education courses offered by regionally accredited colleges and universities. The Air University (AU) Associate-to-Baccalaureate Cooperative (ABC) program connects CCAF graduates with 4-year degree programs. The AU-ABC program includes postsecondary schools with regional accreditation and national accreditation through the Distance Education and Training Council.

Department of Defense & Other Service Schools

If the Department of Defense (DoD) and other service schools are accredited and issue a transcript, the college will consider accepting the credit in transfer. See the *Guide to the Evaluation of Educational Experiences in the Armed Services* (American Council on Education Guide) for credit information on other DoD courses that may apply to a CCAF degree.

Many Air Force enlisted members attend Army, Navy and/or Department of Defense initial skills technical training courses instead of Air Force technical training courses. The college does not award resident credit for these courses since these schools are not part of the CCAF system. However, the college awards proficiency (P) credit to Air Force enlisted members who complete these courses and demonstrate apprentice-level competency. Proficiency credit is applied to a student’s program after attaining the journeyman, five skill-level.

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, College Board, Excelsior College and the Defense Language Proficiency Test.

Professional Credential

The term “*Credential*” refers to professional certification, licensure or registry. Degree, technical and/or program elective, requirements may be satisfied by credit awarded for specific national professional credentials. A student holding a degree-relevant national professional credential should contact the credentialing agency to request that official written verification be sent to Credentialing Programs,

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CCAF/DEAL, 100 South Turner Boulevard, Maxwell-Gunter AFB, Alabama 36114-3011. Additional information concerning professional credentials is available on pages 91-102.

Degree Program & Catalog Change

The college encourages a student to complete the program of initial registration; however, the student may request a change to another program when eligible. The associate dean of academic programs authorizes degree program changes. A student may also elect to move from the catalog of registration to the current catalog. In either case, the student is obligated to abide by all policies and program requirements of the catalog current on the date of the change.

Advanced Standing

A student attains advanced standing (registration status code 2 or 5) after completing 45 semester hours of degree-applicable course work and applying civilian course or test credit. At this point, a CCAF advisor/training technician should provide special guidance to complete degree requirements.

Waiver Process

A student desiring a waiver of academic policy and/or degree program requirements contacts the education services office or the ANG/AFRC CCAF advisor for guidance on how to submit a waiver request to the dean of academic affairs. Waivers are considered only if approval of the waiver will make the student a degree candidate. The dean of academic affairs is the final authority for exceptions and waivers of academic policy.

Candidacy Status & Graduation

The student's CCAF advisor/training technician recommends candidacy status and notifies the student of candidacy status. After a student meets all requirements, the college notifies the student's current education services office, or nominating training or education service office of degree completion. All degree requirements must be satisfied before separation, retirement or commissioning and a student must have been enrolled in a degree program before that date. A student has six years from retirement, separation or commissioning to file for graduation. The college has two graduating classes each year—April and October. Diplomas are mailed to the education services offices about 1 week before graduation.

“No Fault” Exception

Ordinarily, to participate and graduate, a student must possess the required Air Force specialty code (AFSC). There is an exception when a student's AFSC is removed from their record because of mandatory retraining, career field consolidations or transition of a career field. To qualify for this exception:

- ◆ Conditions or circumstances must be beyond the student's control.
- ◆ Student must be pursuing a degree in that AFSC at the time of loss.
- ◆ The “no fault” exception request must be submitted to the CCAF administrative center within 1 year of removal of specialty code.
- ◆ Degree requirements must be completed within 1 year.
- ◆ All degree requirements must be completed before separation, retirement or commissioning.

The “no fault” exception request must clearly explain conditions and/or circumstances that led to the removal of the specialty code. Acceptable documents include:

- ◆ Official Air Force Form 2096, Classification/On-The-Job Training Action, showing AFSC was once held and date subsequently removed.

- ◆ Medical documents—physician’s memo or diagnosis, stating the exact disqualifying medical reasons—or a memo from the student’s commander explaining why disqualified or removed from the specialty code.
- ◆ Memo from the student, explaining the situation and requesting consideration of “no fault” exception.

Mail the “no fault” exception request to CCAF/DEA, 100 South Turner Boulevard, Maxwell-Gunter AFB, Alabama 36114-3011.

Washback Policy

Every effort is made to ensure the student successfully completes CCAF courses by carefully designed teaching and learning activities, appropriate assessment and evaluation processes, and personal assistance. If all avenues are exhausted and academic achievement continues below acceptable limits, the student may, under some circumstances, repeat a portion or the entire course—this is called a *washback*. A washback is reported to the registrar as a course graduate only after successfully completing the entire course. A student can withdraw from CCAF courses after obtaining permission from the affiliated school commander or designated representative.

Degree Program Withdrawal

An admitted and registered student who has separated, retired or commissioned shall be withdrawn. Since participating in a degree program is voluntary, a student may formally request withdrawal from the degree program in which the student is registered. To request withdrawal from a degree program, the student must contact their local base education services office or ANG/AFRC CCAF advisor.

The Educational Documents

To initiate a record update, students must contact the education services office or ANG/AFRC CCAF advisor. To progress in a CCAF degree program, students must submit educational documentation reflecting course completion. The issuing institution or agency must mail these documents directly to: CCAF/DESS, 100 South Turner Boulevard, Maxwell-Gunter AFB, Alabama 36114-3011.

Appropriate documents may include:

- ◆ Official transcript of applicable course work completed at accredited postsecondary institutions.
- ◆ Official transcript from the Educational Testing Service reflecting CLEP or DANTES tests taken at a certified DANTES testing site.
- ◆ Foreign transcript with an external course-by-course evaluation from a National Association of Credential Evaluation Services member. A foreign transcript must be in English or accompanied by an English translation from the evaluation service.
- ◆ Request for Verification of Course Completion of an affiliated school course that was not added to the academic record.
- ◆ Official verification of issued professional credentials.
- ◆ Official verification of successfully completing a course conducted by or for US Government agencies for which the American Council on Education recommends credit.

Fraudulent Documents

The Enrollment Management and Academic Programs Divisions ensure the authenticity of each document. All fraudulent documents are given to the Registrar for appropriate action that can include disenrollment and/or legal action. A student disenrolled for fraud will have his or her transcript annotated with “student was disenrolled for submitting fraudulent documents.”

Document Process

When documents arrive at the administrative center, and upon credits being posted to student records, program managers assess progress toward degree requirements.

Document Update

The college updates student records from educational documents submitted on behalf of the student. A student should not update records more than once a year unless applying for an Air Force commission, before separation or retirement, or when it may result in degree completion.

Information Release

A student may release information pertaining to his or her educational record to a third party by completing and submitting a release letter (with an original signature) to the college’s registrar. The student needs to state what information can be provided and to whom the information can be released. The Federal Family Educational Rights and Privacy Act of 1974, 5 United States Code 301, 10 United States Code 8013 and Executive Order 9397 dictates the policy regarding 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.

Transcript Request

Transcripts are mailed out within two business days of request. There are five options for requesting a transcript; option four is the *only* option for overnight delivery.

1. Students may order their transcripts through our Web site at: <http://www.au.af.mil/au/ccaf/transcripts.asp>
2. Students can order a transcript by visiting the Air Force education services office. CCAF advisors/training technicians can request transcripts electronically for students via the CCAF Web Progress Report. To ensure compliance with the provisions of the Family Educational Rights and Privacy Act, CCAF advisors must verify the identity of each student prior to submitting transcript requests.
3. Students can order their own transcripts from any military computer that has an “af.mil” domain through the on-line Air Force Virtual Education Center Web site, via the Air Force Portal. To ensure compliance with the provisions of the Family Educational Rights and Privacy Act, students can only order transcripts for themselves.
4. Students and prior students have a transcript ordering option through Credentials Inc. that allows them to order transcripts via telephone or online from virtually anywhere in the world. Requests made using this service will be expedited on a next business day basis once the transaction has been completed (some transactions may require a faxed or mailed signature from the student for the order to be finalized). The online system is available 24 hours per day. It offers additional services such as being able send up to five transcripts to separate locations in a single transaction; additionally, students have an overnight shipping option. Operator assistance is available from 0700 to 1900 CST. The system has the ability to check the

status of the order online or students can opt to receive an e-mail or fax notification for receipt of the order, any problems with the order, and final completion of the order. Credentials Inc. charges a handling fee starting at \$2.00 that will be assessed based on the number of transcripts ordered and delivery method. Users must have a valid credit card and e-mail or fax in order to use this service. Students can reach Credentials Inc. on the Web at <https://www.credentials-inc.com/tplus/?ALUMTRO012308> or by phone at 1-847-716-3005 to order a transcript or to receive further information.

5. Students can submit a written request that includes full name or former name if appropriate, social security account number, and the address of the location the transcript is to be sent. A legal signature is the legal authorization for us to release a transcript. Mailing time can be as long as 14 days.

Send a written transcript request to:
 CCAF/DESS
 100 South Turner Blvd
 Maxwell-Gunter AFB AL 36114-3011

*Note: "The appearance of hyperlinks does not constitute endorsement by the U.S. Air Force of this Web site or the information, products, or services contained therein. The U.S. Air Force does not exercise any editorial control over the information you may find at these locations. Such links are provided consistent with the stated purpose for this U.S. Air Force Web site."

The Student

As a military member, the student abides by the *Uniform Code of Military Justice*. An Airman is briefed on the code upon initial entrance into active duty and periodically thereafter. A copy of this code is also available in the legal office on each Air Force installation. Additionally, a student must follow the standards of behavior established by the affiliated schools.

Feedback

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

A student can offer feedback through a number of avenues. Some ways include classroom feedback; follow-up surveys by the schools, the college, the student leaders at each affiliated school; and the formal waiver review process. There are affiliated school representatives who also address student interests on the Policy Council, Affiliated Schools Advisory Panel and Education Services Advisory Panel.

A student may also provide feedback to the administrative center by visiting the CCAF homepage at www.au.af.mil/au/ccaf/ and using the e-mail link or through the Air Force Virtual Education Center at <https://afvec.langley.af.mil>.

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 activities in which a student may participate.

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

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

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

Family Support Center. Services include but 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.

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

Hobby Shops. Facilities, equipment and instructors are available for those interested in automobile repair and maintenance, woodworking, ceramics, leatherwork, engraving, painting, electrical repair and photography.

Library. Reference books, journals, newspapers, recordings and tapes, and on-line services are available to support students.

Life Skills Center. Services include, but are not limited to, family advocacy, mental health and alcohol/drug abuse prevention and treatment on an inpatient, outpatient and group basis.

Community Center. Activities include table games, music listening, dancing, television viewing, tours, concerts, discussion groups, etc.

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

Theater. Current films are normally shown daily.

DEGREE PROGRAMS



DEGREE PROGRAMS ...

This section contains the degree program requirements of the Community College of the Air Force. Degree programs are developed by Air Force technical experts and civilian or military consultants and reviewed by the Dean of Academic Affairs, Commandant, Policy Council and Board of Visitors. The programs are designed to provide students with knowledge, skills and theoretical background for enhanced performance as technicians and noncommissioned officers.

THE ASSOCIATE IN APPLIED SCIENCE DEGREE

The associate in applied science degree is offered in the following broad career areas:

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

Degree Completion Requirements

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

The associate in applied science degree consists of a minimum of 64 semester hours (SH). Degree plan requirements are distributed as follows:

	Semester Hours
Technical Education	24
Leadership, Management & 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

* Note: The Paralegal degree requires 18 SH hours of general education (addition of a 3 SH general education elective) and 12 SH of program elective.

Leadership, management and military studies; physical education; general education; and program elective requirements are standard for all programs. Exceptions may be required to satisfy certification or other programmatic recognition.

A student must hold the journeyman (5) level in the appropriate AFSC at time of program completion.

Attaining the journeyman level is waived for a student in occupational specialties that do not have journeyman levels (3N2X1, 3S1X1, 7S0X1, 3S3X1).

Residency Requirement (16 semester hours)

A student must have a minimum of 16 SHs of resident CCAF credit applied to his or her degree program to graduate. The 16 SH residency requirement is only satisfied by credit earned for coursework completed in an affiliated school or through internship credit awarded for progression in an Air Force occupational specialty. Note: Physical education credit awarded for basic military training is not resident credit.

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 the technical core area with the remaining 12 applied from either the technical core or the technical elective areas. Refer to individual academic degree programs for specific technical education requirements. A student can check with the CCAF advisor/training technician 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 or course are approved by the Academic Programs Division. Office symbols and DSN telephone numbers are listed on the Program Codes table starting on page 19.

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, distance learning, or issued professional credentials.

The following are the criteria to apply courses accepted in transfer to the technical education requirement:

- ◆ 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 be collegiate course work relevant to the technical requirement.
- ◆ Must have been completed with the equivalent of a "C" grade or better.
- ◆ Must not be developmental, preparatory, remedial, refresher or review.
- ◆ 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 apply toward fulfilling specific technical elective requirements in selected degree programs.

Algebra-Based Physics. 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 and 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 and nuclear structure. Operational and

mathematical analyses (differential and integral calculus) are stressed. Co-requisite 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. Desktop computer use; mainframe computer concepts; word processing techniques; database and spreadsheet strategies; program skills development in Ada, Basic, FORTRAN, etc; virus prevention and 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. Includes cell or sub cellular 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 and molecular structure.

General Psychology. Introduction to the major areas of psychology. Normally includes history of psychology, factors in development of the individual, human capacities and 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 and deviance, groups and 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,

DEGREE PROGRAMS

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.

Technical Math. Normally includes study of applied mathematics that relates to problem solving and applications in a related technology. The level of difficulty must be equal to or higher than college algebra, trigonometry or calculus.

Trigonometry. Normally includes study of analytical trigonometry and applications to include trigonometric functions, solution of triangles and trigonometric form of complex numbers.

Leadership, Management & Military Studies Requirement (6 semester hours)

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

The following are the criteria to apply civilian courses to the LMMS requirement:

- ◆ 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 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* courses are Small Business Management, Managerial Accounting, Financial Management, Labor and 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 be developmental, preparatory, remedial, refresher or review.
- ◆ Must not duplicate or significantly overlap another course or test applied to the degree program.

Physical Education Requirement (4 semester hours)

Completing basic military training satisfies the 4-semester-hour physical education requirement. Civilian courses do not apply to this requirement.

General Education Requirement (15 semester hours)

The general education requirement is satisfied by applying courses accepted in transfer or by testing credit. The following are the criteria to apply courses to the general education requirement:

- ◆ 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 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 be developmental, preparatory, remedial, refresher or review.
- ◆ 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 Communication3

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

Written Communication.....3

English composition. Applicable communication courses must satisfy the delivering institution's writing and composition requirement for graduation. Business communication and technical writing courses are not acceptable. Higher-level writing and 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. Not acceptable courses include: accounting; business, consumer, technical, or computer mathematics; beginning or elementary algebra; statistics (taught outside the mathematics department); history of mathematics; and mathematics for elementary and secondary teachers. 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 or draw an art form and sign language courses are not acceptable.

General Education Goal and Learning Outcomes

The goal of the CCAF General Education requirement is to stimulate critical, innovative thinking and intellectual curiosity by providing graduates the foundational skills, knowledge and attitudes expected of informed and responsible citizens. Graduates will integrate, synthesize and apply knowledge in written and oral communication, mathematics, the social sciences and humanities.

Upon completion of this program students will be able to:

1. Write with clarity and precision for diverse audiences and understand and interpret the written expression of others.
2. Organize and deliver oral presentations to persuade, debate, argue or inform in a clear, concise and logical manner.
3. Understand and apply fundamental mathematical concepts and reasoning in problem solving.
4. Appreciate and value human diversity, individual differences, societies and the many expressions of culture.
5. Apply critical thinking skills as versatile problem solvers with enhanced mental agility and adaptability.

DEGREE PROGRAMS

Note: Degree-specific program goals and learning outcomes can be found in the Web version of the CCAF General Catalog at <http://www.au.af.mil/au/ccaf/> under the Degree Programs section.

Program Elective Requirement (15 semester hours)

The following will satisfy the program elective requirement:

- ◆ 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 and sophomore courses that satisfy the delivering institution's natural science requirement for graduation. Such courses as science for elementary and secondary teachers, health, nutrition, and hygiene are not acceptable.
- ◆ Foreign language credit earned at the Defense Language Institute.
- ◆ A maximum of 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to the program of enrollment.

THE DEGREE PROGRAMS BY AFSC/SDI/RI

The tables on the following pages indicate degree program eligibility for Air Force occupational specialties, including Air Force Specialty Codes (AFSC), Reporting Identifiers (RI) and Special Duty Identifiers (SDI). An individual at the superintendent or chief enlisted manager level or an individual with an SDI or RI not listed below may register in CCAF programs related to the second, third or fourth (not duty/control) Air Force occupational specialty code.

AFSC	Program Title	Program	Flight	DSN	Page
1A0X1	Aviation Operations	4VCB	DEAT	5050	35
1A1X1	Aviation Operations	4VCB	DEAT	5050	35
1A2X1	Aviation Operations	4VCB	DEAT	5050	35
1A3X1	Information Systems Technology	0IYY	DEAT	5050	60
1A4X1	Air & Space Operations Technology	4VAS	DEAT	5050	27
1A6X1	Aviation Operations	4VCB	DEAT	5050	35
1A7X1	Aviation Operations	4VCB	DEAT	5050	35
1A8XX	Intelligence Studies and Technology	9INZ	DEAS	5030	62
1C0X2	Aviation Management	1AVY	DEAT	5050	34
1C1X1	Air Traffic Operations and Management	2IAA	DEAT	5050	28
1C2X1	Air Traffic Operations and Management	2IAA	DEAT	5050	28
1C3X1	Emergency Management	9IMY	DEAS	5030	51
1C4X1	Information Systems Technology	0IYY	DEAT	5050	60
1C5X1	Air & Space Operations Technology	4VAS	DEAT	5050	27
1C6X1	Air & Space Operations Technology	4VAS	DEAT	5050	27
1C7X1	Aviation Management	1AVY	DEAT	5050	34
1NXXX	Intelligence Studies and Technology	9INZ	DEAS	5030	62
1P0X1	Aircrew Safety Systems Technology	4VAT	DEAT	5050	31
1S0X1	Safety	9IYY	DEAT	5050	83
1T0X1	Survival Instructor	2IBS	DEAT	5050	87
1T2X1	Personnel Recovery	7GDP	DEAT	5050	77
1U0X1	Air & Space Operations Technology	4VAS	DEAT	5050	27
1W0X1	Weather Technology	8FYY	DEAT	5050	90
1W0X2	Weather Technology	8FYY	DEAT	5050	90
2A0X1	Avionic Systems Technology	4VHS	DEAT	5050	36
2A3X1	Avionic Systems Technology	4VHS	DEAT	5050	36
2A3X2	Avionic Systems Technology	4VHS	DEAT	5050	36
2A3X3	Aviation Maintenance Technology	4VAD	DEAT	5050	33
2A5X1	Aviation Maintenance Technology	4VAD	DEAT	5050	33
2A5X2	Aviation Maintenance Technology	4VAD	DEAT	5050	33

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AFSC	Program Title	Code	Flight	DSN	Page
2A5X3	Avionic Systems Technology	4VHS	DEAT	5050	36
2A6X1	Aviation Maintenance Technology	4VAD	DEAT	5050	33
2A6X2	Aerospace Ground Equipment Technology	4VAB	DEAT	5050	24
2A6X3	Aviation Maintenance Technology	4VAD	DEAT	5050	33
2A6X4	Aviation Maintenance Technology	4VAD	DEAT	5050	33
2A6X5	Aviation Maintenance Technology	4VAD	DEAT	5050	33
2A6X6	Aviation Maintenance Technology	4VAD	DEAT	5050	33
2A7X1	Metals Technology	4VLB	DEAT	5050	68
2A7X2	Nondestructive Testing Technology	4VXR	DEAT	5050	73
2A7X3	Aircraft Structural Maintenance Technology	4VAN	DEAT	5050	30
2A7X5	Aircraft Structural Maintenance Technology	4VAN	DEAT	5050	30
2F0X1	Logistics	1AMY	DEAS	5030	63
2G0X1	Logistics	1AMY	DEAS	5030	63
2M0X1	Electronic Systems Technology	4VHP	DEAT	5050	50
2M0X2	Missile & Space Systems Maintenance	4VAK	DEAT	5050	69
2M0X3	Mechanical & Electrical Technology	4VGA	DEAS	5030	65
2P0X1	Electronic Systems Technology	4VHP	DEAT	5050	50
2RXXX	Maintenance Production Management	4VJG	DEAS	5030	64
2S0X1	Logistics	1AMY	DEAS	5030	63
2T0X1	Transportation	1ATY	DEAS	5030	88
2T1X1	Transportation	1ATY	DEAS	5030	88
2T2X1	Transportation	1ATY	DEAS	5030	88
2T3X1	Vehicle Maintenance	4VKC	DEAS	5030	68
2T3X2	Vehicle Maintenance	4VKC	DEAS	5030	68
2T3X7	Maintenance Production Management	4VJG	DEAS	5030	64
2W0X1	Munitions Systems Technology	4VRA	DEAT	5050	71
2W1X1	Aircraft Armament Systems Technology	4VRY	DEAT	5050	29
2W2X1	Munitions Systems Technology	4VRA	DEAT	5050	71
3D0X1	Information Management	1AUY	DEAS	5030	59
3D0X2	Information Systems Technology	0IYY	DEAT	5050	60
3D0X3	Information Systems Technology	0IYY	DEAT	5050	60
3D0X4	Computer Science	0CYY	DEAT	5050	40
3D1X1	Information Systems Technology	0IYY	DEAT	5050	60
3D1X2	Electronic Systems Technology	4VHP	DEAT	5050	50
3D1X3	Electronic Systems Technology	4VHP	DEAT	5050	50
3D1X4	Information Systems Technology	0IYY	DEAT	5050	60

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AFSC	Program Title	Program	Flight	DSN	Page
3D1X5	Electronic Systems Technology	4VHP	DEAT	5050	50
3D1X6	Electronic Systems Technology	4VHP	DEAT	5050	50
3D1X7	Electronic Systems Technology	4VHP	DEAT	5050	50
3E0X1	Mechanical & Electrical Technology	4VGA	DEAS	5030	65
3E0X2	Mechanical & Electrical Technology	4VGA	DEAS	5030	65
3E1X1	Mechanical & Electrical Technology	4VGA	DEAS	5030	65
3E2X1	Construction Technology	4VEB	DEAS	5030	41
3E3X1	Construction Technology	4VEB	DEAS	5030	41
3E4X1	Mechanical & Electrical Technology	4VGA	DEAS	5030	65
3E4X3	Entomology	3ALC	DEAS	5030	52
3E5X1	Construction Technology	4VEB	DEAS	5030	41
3E6X1	Maintenance Production Management	4VJG	DEAS	5030	64
3E7X1	Fire Science	9IFY	DEAS	5030	55
3E8X1	Explosive Ordnance Disposal	4VRC	DEAS	5030	53
3E9X1	Emergency Management	9IMY	DEAS	5030	51
3H0X1	Aerospace Historian	9DHK	DEAS	5030	25
3M0X1	Restaurant, Hotel & Fitness Management	1FRS	DEAS	5030	82
3N0X1	Public Affairs	2FDE	DEAS	5030	80
3N0X2	Public Affairs	2FDE	DEAS	5030	80
3N0X4	Multimedia Production Services	2IAJ	DEAS	5030	70
3N1X1	Music	2CHB	DEAS	5030	72
3N2X1	Music	2CHB	DEAS	5030	72
3P0X1	Criminal Justice	9IJY	DEAS	5030	43
3S0X1	Human Resource Management	1AOY	DEAS	5030	58
3S1X1	Social Services	9IKY	DEAS	5030	85
3S2X1	Education & Training Management	2BAC	DEAS	5030	49
3S3X1	Human Resource Management	1AOY	DEAS	5030	58
4A0X1	Health Care Management	7GCY	DEAS	5030	56
4A1X1	Logistics	1AMY	DEAS	5030	63
4A2X1	Biomedical Equipment Technology	7GAA	DEAS	5030	38
4B0X1	Bioenvironmental Engineering Technology	7GAM	DEAS	5030	37
4C0X1	Mental Health Services	7GAP	DEAS	5030	67
4D0X1	Dietetics & Nutrition	7GAD	DEAS	5030	48
4E0X1	Public Health Technology	7ECY	DEAS	5030	81
4H0X1	Cardiopulmonary Laboratory Technology	7GDA	DEAS	5030	39
4J0X2	Physical Therapist Assistant	7GAI	DEAS	5030	79
4J0X2A	Allied Health Sciences	7GAL	DEAS	5030	32
4M0X1	Aerospace Physiology Technology	7GAN	DEAS	5030	26

DEGREE PROGRAMS

AFSC	Program Title	Code	Flight	DSN	Page
4N0X1	Allied Health Sciences	7GAL	DEAS	5030	32
4N1X1	Surgical Services Technology	7GEA	DEAS	5030	86
4P0X1	Pharmacy Technology	7GAH	DEAS	5030	78
4R0X1	Diagnostic Imaging Technology	7GDH	DEAS	5030	46
4R0X1A	Nuclear Medicine Technology	7ABJ	DEAS	5030	74
4R0X1B	Diagnostic Medical Sonography	7GDK	DEAS	5030	47
4R0X1C	Diagnostic Imaging Technology	7GDH	DEAS	5030	46
4T0X1	Medical Laboratory Technology	7GAF	DEAS	5030	66
4T0X2	Histologic Technology	7GAE	DEAS	5030	57
4V0X1	Ophthalmic Technician	7GDI	DEAS	5030	75
4Y0X1	Dental Assisting	7GBC	DEAS	5030	44
4Y0X2	Dental Laboratory Technology	7GBB	DEAS	5030	45
5J0X1	Paralegal	1CAM	DEAS	5030	76
5R0X1	Social Services	9IKY	DEAS	5030	85
6C0X1	Contracts Management	1CAO	DEAS	5030	42
6F0X1	Financial Management	9GEC	DEAS	5030	54
7S0X1	Criminal Justice	9IJY	DEAS	5030	43
8A200	Restaurant, Hotel & Fitness Management	1FRS	DEAS	5030	82
8B100	Education & Training Management	2BAC	DEAS	5030	49
8C000	Social Services	9IKY	DEAS	5030	85
8D000	Intelligence Studies and Technology	9INZ	DEAS	5030	62
8F000	Human Resource Management	1AOY	DEAS	5030	58
8M000	Information Management	1AUY	DEAS	5030	59
8P100	Information Management	1AUY	DEAS	5030	59
8RXXX	Human Resource Management	1AOY	DEAS	5030	58
9L000	Intelligence Studies and Technology	9INZ	DEAS	5030	62
9S100	Scientific Analysis Technology	4VES	DEAT	5050	84

THE DEGREE PROGRAMS BY PROGRAM CODE

Code	Program Title	Pg	Code	Program Title	Pg
0CYY	Computer Science Technology	40	4VRY	Aircraft Armament Sys Technology	29
0IYY	Information Sys Technology	60	4VXR	Nondestructive Testing Technology	73
1AMY	Logistics	63	7ABJ	Nuclear Medicine Technology	74
1AOY	Human Resource Management	58	7ECY	Public Health Technology	81
1ATY	Transportation	88	7GAA	Biomedical Equipment Technology	38
1AUY	Information Management	59	7GAD	Dietetics & Nutrition	48
1AVY	Aviation Management	34	7GAE	Histologic Technology	67
1CAM	Paralegal	76	7GAF	Medical Laboratory Technology	66
1CAO	Contracts Management	42	7GAH	Pharmacy Technology	78
1FRS	Restaurant, Hotel & Fitness Management	82	7GAI	Physical Therapist Assistant	79
2BAC	Education & Training Management	49	7GAL	Allied Health Sciences	32
2CHB	Music	72	7GAM	Bioenvironmental Engineering Tech	37
2FDE	Public Affairs	80	7GAN	Aerospace Physiology Technology	26
2IAA	Air Traffic Operations & Management	28	7GAP	Mental Health Services	67
2IAJ	Multimedia Production Services	70	7GBB	Dental Laboratory Technology	45
2IBB	Instructor of Technology & Military Sci	61	7GBC	Dental Assisting	44
2IBS	Survival Instructor	87	7GCV	Health Care Management	56
3ALC	Entomology	52	7GDA	Cardiopulmonary Laboratory Technology	39
4VAB	Aerospace Ground Equip Technology	24	7GDH	Diagnostic Imaging Technology	46
4VAD	Aviation Maintenance Technology	33	7GDI	Ophthalmic Technician	75
4VAK	Missile & Space Systems Maintenance	69	7GDK	Diagnostic Medical Sonography	47
4VAN	Aircraft Structural Maint Technology	30	7GDP	Personnel Recovery	77
4VAS	Air & Space Operations Technology	27	7GEA	Surgical Services Technology	86
4VAT	Aircrew Safety Sys Technology	31	8FYY	Weather Technology	90
4VCB	Aviation Operations	35	9DHK	Aerospace Historian	25
4VEB	Construction Technology	41	9GEC	Financial Management	54
4VES	Scientific Analysis Technology	84	3ALC	Entomology	52
4VGA	Mechanical & Electrical Technology	65	9IFY	Fire Science	55
4VHP	Electronic Systems Technology	50	9IYY	Safety	83
4VHS	Avionic Systems Technology	36	9IJY	Criminal Justice	43
4VJG	Maintenance Production Management	64	9IKY	Social Services	85
4VKC	Vehicle Maintenance	89	9IMY	Emergency Management	51
4VLB	Metals Technology	68	9INZ	Intelligence Studies & Technology	62
4VRA	Munitions Systems Technology	71			
4VRC	Explosive Ordnance Disposal	53			

DEGREE PROGRAMS

AEROSPACE GROUND EQUIPMENT TECHNOLOGY (4VAB)

Occupational Specialty 2A6X2

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Aerospace Ground Equipment Maintenance	24
CCAF Internship	18

Technical Electives

Maximum Semester Hours

Advanced Aerospace Ground Equipment	
Maintenance	12
Air-Conditioning & Refrigeration	3
Computer Science	6
Corrosion Control	3
Diesel Engine Maintenance	6
Electricity/Electronics	6
General Chemistry/Algebra-Based Physics	4
Hazardous Materials	3
Hydraulic/Pneumatic Power	3
Industrial Safety	3
Maintenance Management	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

AEROSPACE HISTORIAN (9DHK)

Occupational Specialty 3H0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Advanced Writing.....	9
Aerospace Science	9
Archival Management	3
CCAF Internship.....	18
Interviewing.....	3
Research Methodology	3
Unit Historian Development.....	9

Technical Electives	Maximum Semester Hours
Computer Science.....	6
Copyreading & Editing.....	3
Human Communication.....	6
Leadership & Management.....	3
Logic.....	3
Managerial Communications.....	3
Military Science.....	3
Philosophy	3
Political Science.....	6
Statistics.....	3
United States History.....	9

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

AEROSPACE PHYSIOLOGY TECHNOLOGY (7GAN)

Occupational Specialty 4M0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Aerospace Anatomy & Physiology Fundamentals	3
Aircrew Flight Equipment	6
CCAF Internship	18
Clinical Research	3
Hyperbaric Chamber Operations & Maintenance.....	6
Instructional Methodology.....	6
Introduction to Aerospace Physiology.....	6
Physiological Training Management.....	12
Respiratory & Circulatory Physiology	3
Survival Training.....	6

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Emergency Medicine.....	3
General Biology.....	4
General Chemistry.....	8
Guidance & Counseling.....	3
Human Anatomy & Physiology.....	4
Medical Readiness.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science.....	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities.....	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**AIR & SPACE OPERATIONS TECHNOLOGY
(4VAS)**

Occupational Specialty 1A4X1, 1C5X1, 1C6X1, 1U0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Aerospace Control & Warning Systems	24
Air Weapons Control Operations.....	18
CCAF Internship.....	18
Computer Networking	6
Radio Communications	6
Space Systems Operations	24

Technical Electives	Maximum Semester Hours
Astronautics	3
Astronomy	3
Aviation/Flight Safety	3
Basic Electronics Theory/Applications.....	6
Computer Science.....	6
Management Information Systems	3
Programming Languages	6
Solid-State Theory/Applications.....	3
Space Propulsion	3
Survival Training	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

AIR TRAFFIC OPERATIONS & MANAGEMENT (2IAA)

Occupational Specialty 1C1X1, 1C2X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Aeronautical Laws and Regulations/Legislation	6
Air Navigational Aids.....	3
Air Traffic Control Principles.....	15
Air Transportation Principles	3
Airport Management.....	3
CCAF Internship	18
Control Tower Operations	15
Hostile Environment Techniques	3
Radar Approach Control.....	15
Tactical Air Command and Control.....	24

Technical Electives *Maximum Semester Hours*

Advanced Flight Operations	9
Aviation/Flight Safety	3
Basic Electronics Theory/Applications	3
Basic Flight Operations	3
Climatology/Meteorology	3
Computer Science.....	6
FAA Private/Commercial Pilot Certification.....	3
FCC General Radiotelephone Operator's License.....	9
Technical Writing.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

AIRCRAFT ARMAMENT SYSTEMS TECHNOLOGY (4VRY)

Occupational Specialty 2W1X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Aircraft Armament Systems	24
CCAF Internship.....	18

Technical Electives *Maximum Semester Hours*

Advanced Aircraft Armament Systems	12
Aircraft Maintenance Systems	3
Computer Science.....	6
Corrosion Control	3
Electricity/Electronics.....	6
Engineering Graphics/Computer Aided Drafting	3
Heavy Equipment Operation/Maintenance.....	3
Hydraulic/Pneumatic Power	3
General Chemistry/Algebra-Based Physics	4
Industrial Safety.....	3
Maintenance Management.....	3
Materials & Processes.....	3
Weapons Safety	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication..... 3

Speech

Written Communication..... 3

English composition

Mathematics 3

Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics

Social Science 3

Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology

Humanities 3

Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

AIRCRAFT STRUCTURAL MAINTENANCE TECHNOLOGY (4VAN)

Occupational Specialty 2A7X3, 2A7X5

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Aircraft Structural Maintenance	24
CCAF Internship	18
FAA Airframe/Powerplant Certification	24
Low Observable Technologies	9

Technical Electives *Maximum Semester Hours*

Advanced Aircraft Structural Repair	12
Aircraft Aerodynamics	3
Aircraft Composites & Bonded Structures	6
Computer Science.....	6
Corrosion Control	6
Engineering Graphics/Blue Print/Technical Drawing ...	3
General Chemistry/Algebra-Based Physics	3
Hazardous Materials	3
Industrial Safety.....	3
Maintenance Management.....	6
Materials & Processes	3
Quality Assurance.....	3
SpaceTEC Aerospace Technician Certification.....	6
Technical Mathematics.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**AIRCREW SAFETY SYSTEMS TECHNOLOGY
(4VAT)**

Occupational Specialty 1P0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Aircrew Safety Systems Principles & Procedures	24
CCAF Internship.....	18
Fabrication & Parachute Maintenance.....	24
General Principles of Survival.....	3
Survival Equipment Inspection & Maintenance	9

Technical Electives	Maximum Semester Hours
Advanced Survival Skills/Parachuting	12
Chemical Defense/Decontamination	3
Computer Science.....	6
Emergency Equipment.....	3
FAA Parachute Rigger Certification.....	6
Hazardous Materials	3
Industrial Safety.....	6
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

ALLIED HEALTH SCIENCES (7GAL)

Occupational Specialty 4J0X2A, 4N0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
Emergency Medicine	12
Human Anatomy & Physiology	8
Kinesiology	12
Medical Assisting	24
Nursing	24
Occupational Therapy	24
Orthotics	24

Technical Electives *Maximum Semester Hours*

Computer Science	6
General Biology	8
General Chemistry	8
General Psychology	3
Medical Readiness	3
Medical Terminology	3
Pharmacology	3
Survival Training	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The National Registry of Emergency Medical Technicians accredits the Aerospace Medical Services apprentice course. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

AVIATION MAINTENANCE TECHNOLOGY (4VAD)

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

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Aircraft Electrical/Environmental Systems	24
Aircraft Fuel Systems	24
Aircraft Hydraulic Systems	24
Aircraft Maintenance	24
Aircraft Propulsion Systems	24
Aircrew Egress Systems	24
CCAF Internship.....	18
FAA Airframe/Powerplant Certification	24
Helicopter Maintenance.....	24

Technical Electives *Maximum Semester Hours*

Advanced Aircraft Accessory Systems Maintenance .	12
Advanced Aircraft Maintenance	12
Advanced Aircraft Propulsion Maintenance.....	12
Aircraft Aerodynamics	3
Aircraft Weight & Balance	3
Airframe Repair	6
Aviation Safety	3
Avionic Systems Theory/Maintenance	3
Computer Science.....	6
Corrosion Control	6
Electricity/Electronics.....	6
Engineering Graphics/Computer Aided Drafting	3
General Chemistry/Algebra-Based Physics	4
Hazardous Materials/Industrial Safety.....	3
Materials & Processes.....	3
Nondestructive Inspection	3
Quality Assurance.....	3
SpaceTEC Aerospace Technician Certification.....	6
Technical Mathematics	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

AVIATION MANAGEMENT (1AVY)

Occupational Specialty 1C0X2, 1C7X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Aeronautical Laws & Regulations/Legislation.....	6
Air Navigational Aids.....	3
Airport Management.....	12
Aviation/Flight Safety	3
CCAF Internship	18
Data Information Systems	6
Data Information Systems Management.....	3
Resource Management	12
Statistics.....	6

Technical Electives *Maximum Semester Hours*

Advanced Flight Operations	9
Air Traffic Control Principles.....	6
Air Transportation Principles	3
Basic Flight Operations	3
Climatology/Meteorology	3
Computer Science.....	6
FAA Aircraft Dispatcher Certification	10
FAA Private/Commercial Pilot Certification.....	6
FCC General Radiotelephone Operator's License.....	9
Principles of Accounting	6
Technical Writing	3
Typing/Keyboarding.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science.....	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**AVIATION OPERATIONS
(4VCB)**

Occupational Specialty 1A0X1, 1A1X1, 1A2X1, 1A6X1, 1A7X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Aerial Gunner Principles/Procedures.....	24
Air Transportation Principles.....	6
Aircraft Loadmaster Principles/Procedures	24
Aviation/Flight Safety	6
CCAF Internship.....	18
FAA Flight Engineer Certification	18
Flight Attendant Principles/Procedures	12
Flight Engineer, Fixed Wing	24
Flight Engineer, Helicopter.....	24
Flight Rules & Regulations.....	3
In-flight Refueling Operations.....	24
Introduction to Aviation/Aeronautics	3
Survival Training	6

Technical Electives	Maximum Semester Hours
Advanced Flight Engineering	12
Aerodynamics	3
Aircraft Systems	6
Aircraft Weight & Balance	3
Aviation Law	6
Climatology/Meteorology.....	6
Computer Science.....	6
Electricity/Electronics.....	6
FAA Airframe & Powerplant Certification	6
FAA Private/Commercial Pilot's Certification.....	3
General Chemistry/Algebra-Based Physics.....	4
Human Factors in Aviation/Flight Physiology	3
Human Relations	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses **Semester Hours**

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

AVIONIC SYSTEMS TECHNOLOGY (4VHS)

Occupational Specialty 2A0X1, 2A3X1, 2A3X2, 2A5X3

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Avionic Systems Theory/Maintenance	24
CCAF Internship	18
National Center for Aerospace and Transportation Technologies Certification	12

Technical Electives	Maximum Semester Hours
Advanced Electronics	12
Algebra-Based Physics	4
Aviation/Flight Safety	3
Basic Electronics Theory/Applications	12
CAD/CAM or Technical Drawing/Drafting	3
Communication Systems Theory/Maintenance	12
Computer Science	6
Digital Techniques	6
Electronic Systems Theory/Maintenance	12
FAA Airframe/Powerplant Certification	12
FCC General Radiotelephone Operator's License	9
Industrial Safety	3
Microprocessor Electronic Theory	6
Quality Assurance	3
Radar Systems Theory/Maintenance	3
Soldering Techniques	3
Solid-State Theory/Applications	6
SpaceTEC Aerospace Technician Certification	6
Technical Writing	3
Trigonometry or higher-level Mathematics	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

BIOENVIRONMENTAL ENGINEERING TECHNOLOGY (7GAM)

Occupational Specialty 4B0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Bioenvironmental Protection	8
CCAF Internship.....	18
CCHEST Occupational Health & Safety Technologist Certification.....	12
Disaster Medicine	9
Introduction to Bioenvironmental Science	9
Occupational Environment	6
Radiation Health Physics	4
Waste Management	4
Water Systems Management	4

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
General Biology.....	8
General Chemistry	8
Hearing Conservation	4
Industrial Hygiene Measurements	6
Microbiology	8
Principles of Ecology.....	3
Radiological Hazards.....	4
Statistics.....	3
Survey of Nuclear Medicine Safety & Procedures	6

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or General education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

BIOMEDICAL EQUIPMENT TECHNOLOGY (7GAA)

Occupational Specialty 4A2X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Association for the Advancement of Medical

Instrumentation Certification	12
Biomedical Equipment Maintenance Management	12
CCAF Internship	18
Diagnostic Support Equipment Systems.....	12
Diagnostic Support Radiographic Systems.....	12
Physiological Monitoring Systems	9
Therapeutic Support Equipment Systems.....	12

Technical Electives *Maximum Semester Hours*

Basic Electronics Theory/Applications	6
Computer Science.....	6
Digital Techniques.....	6
Electronic Circuit Design/Analysis	6
Human Anatomy & Physiology.....	4
Management of Biomedical Equipment Programs	3
Medical Readiness	3
Medical Terminology	3
Microprocessor Technology	6

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**CARDIOPULMONARY LABORATORY
TECHNOLOGY (7GDA)**

Occupational Specialty 4H0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Advanced Cardiopulmonary Procedures	9
Cardiopulmonary Anatomy & Physiology	6
Cardiopulmonary Instrumentation	3
Cardiopulmonary Invasive/Noninvasive Diagnostic Procedures	12
Cardiovascular & Pulmonary Diagnostic Principles.....	8
CCAF Internship.....	18
Clinical Respiratory Therapy	8
Pulmonary Diagnostic Procedures	8
Respiratory Therapy	6

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Emergency Medicine	3
Medical Readiness	3
Medical Terminology	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The Commission on Accreditation for Respiratory Care and Commission on Accreditation of Allied Health Education Programs accredit the Cardiopulmonary Laboratory Apprentice courses (Phase I and II). See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

COMPUTER SCIENCE TECHNOLOGY (0CYY)

Occupational Specialty 3D0X4

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
CompTIA Certification.....	8
Computer Systems Architecture/Analysis /Design.....	12
Computer Systems Management	3
(ISC) ² Certification.....	4
Global Information Assurance Certification.....	6
Programming Languages	16

Technical Electives *Maximum Semester Hours*

College Algebra or higher-level Mathematics	3
Computer Science.....	6
Computer Systems Networking	6
Data Communications	3
Data Structures	3
Database Management.....	3
Discrete Math	3
Microsoft MCSE Certification	8
Physics.....	6
Software Design	3
Statistics.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**CONSTRUCTION TECHNOLOGY
(4VEB)**

Occupational Specialty 3E2X1, 3E3X1, 3E5X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Building Construction & Design	20
Carpentry/Cabinetry	12
CCAF Internship.....	18
College Algebra/Trigonometry	3
Computer Aided Drafting	3
Construction Inspection/Building Codes	9
Drafting/Engineering Drawing	6
Engineering Assistant	20
Engineering Operations and Management	3
Heavy Equipment Operations	20
Metals Fabrication/Characteristics.....	15
Pavement Construction.....	12
Project Management/Planning.....	4
Surveying.....	12
Welding	9

Technical Electives	Maximum Semester Hours
Blueprint Reading	3
Computer Science.....	6
Construction Material Estimating	3
General Physics	3
Hazardous Materials	3
Industrial/Construction Safety	3
Properties & Strength of Materials	6
Soils & Foundations	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

CONTRACTS MANAGEMENT (1CAO)

Occupational Specialty 6C0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

*Business Law	3
CCAF Internship	18
*Contract Administration/Management	12
*Contract Law	6
*Pricing & Negotiation.....	6
*Principles of Government Contracting	6
*Purchasing Principles	9

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Human Relations	3
*Introduction to Business	3
Labor Relations	3
Materiel Management.....	3
*Principles of Accounting	3
*Principles of Economics (Macro/Micro)	6
*Principles of Marketing	3
*Statistics.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

*Courses applicable to the 24-semester-hour business requirement for the Acquisition Professional Development (APD) Program. Also, may apply 8 SHs to the APD Program when 5-level career development course is completed and 2 SHs to the APD Program when resident Airman Leadership School, NCO Academy or USAF Senior NCO Academy is completed. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**CRIMINAL JUSTICE
(9IJY)**

Occupational Specialty 3P0X1, 7S0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion (Exception: Not required for 7S0X1).

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Internship.....	18
Criminal Investigations.....	16
Criminal Law	6
Fundamentals of Ground Combat Skills.....	12
Fundamentals of Law Enforcement	9
Introduction to Security	6
Physical Security Concepts.....	6
Police Administration & Supervision	6
Police Safety/Survival	6
Principles of Criminal Justice	6
Principles of Marksmanship	9
Special Weapons & Tactics	8
Weapons Maintenance.....	6

Technical Electives	Maximum Semester Hours
Antiterrorism	3
Computer Science.....	6
Constitutional Law.....	3
Corrections.....	6
Criminalistics/Forensic Science.....	3
Criminology.....	3
Deployment Operations	12
Emergency Medicine	4
General Psychology	3
General Sociology	3
Instructional Methodology.....	9
Juvenile Justice.....	3
Patrol Dog Operations	12
Police Community Relations	3
Technical Writing	3
Traffic Management/Investigation.....	6

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses **Semester Hours**

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

DENTAL ASSISTING (7GBC)

Occupational Specialty 4Y0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
Dental Clinical Phase & Procedures	16
Dental Sciences	12
Oral Radiology	6
Preventive Dentistry Science	8

Technical Electives *Maximum Semester Hours*

Advanced Dental Hygiene	9
Computer Science	6
Dental Administrative Procedures	6
Dental Assisting National Board Dental Assistant Certification	14
Emergency Medicine	3
General Biology	4
General Chemistry	4
General Psychology	3
Human Anatomy & Physiology	4
Medical Readiness	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The Commission on Dental Accreditation of the American Dental Association accredits the Dental Assistant Apprentice course. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**DENTAL LABORATORY TECHNOLOGY
(7GBB)**

Occupational Specialty 4Y0X2

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship.....	18
Complete Dentures	12
Construction of Removable Partial Dentures.....	12
Dental Ceramics.....	6
Dental Laboratory Fundamentals.....	6
Inlays, Crowns & Fixed Partial Dentures	9
NBC/DLT Certified Dental Technician Certification.....	12

Technical Electives *Maximum Semester Hours*

Advanced Removable Prosthodontics	8
Computer Science.....	6
Functional & Aesthetic-Fixed Prosthodontics	8
Medical Readiness	3
Porcelain & Metal Ceramic Restoration.....	8

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The Commission on Dental Accreditation of the American Dental Association accredits the Dental Laboratory Apprentice course. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

DIAGNOSTIC IMAGING TECHNOLOGY (7GDH)

Occupational Specialty 4R0X1, 4R0X1C

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

American Registry of Radiologic Technologists	
Certification	24
CCAF Internship	18
Diagnostic Imaging Anatomy & Physiology	6
Diagnostic Imaging Clinical Practicum	12
Diagnostic Imaging Physics	6
Diagnostic Imaging Positioning	6
Diagnostic Imaging Procedures	8
Diagnostic Imaging Technique & Darkroom	
Procedures	6
Introduction to Diagnostic Imaging Technology	6

Technical Electives *Maximum Semester Hours*

Advanced Diagnostic Imaging Procedures	12
Computer Science	6
Diagnostic Imaging Clinical Education/Internship	12
Medical Readiness	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The Joint Review Committee on Education in Radiologic Technology accredits the Diagnostic Imaging Apprentice course. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT)

**DIAGNOSTIC MEDICAL SONOGRAPHY
(7GDK)**

Occupational Specialty 4R0X1B

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

American Registry of Radiologic Technologists Certification.....	24
CCAF Internship.....	18
Clinical Sonography Practicum I.....	8
Clinical Sonography Practicum II.....	18
Diagnostic Sonography.....	6
Sonographic Scanning	10

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
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Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DIETETICS & NUTRITION (7GAD)

Occupational Specialty 4D0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
Diet Therapy	16
Dietary Manager/Food Protection Professional Certification	6
Dietetics	8
Dining Operations.....	6
Fitness & Health	6
Introduction to Food Preparation	9
Nutrition	9
Nutritional Medicine Administration.....	6
Subsistence Management	6

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Cooper Institute CPA Certification	3
Food Services	6
General Biology	4
General Chemistry	4
Human Anatomy & Physiology.....	4
Medical Readiness.....	3
Principles of Accounting	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**EDUCATION & TRAINING MANAGEMENT
(2BAC)**

Occupational Specialty 3S2X1, 8B100

Degree Requirements The journeyman (5) level must be held at the time of program completion. 8B100s must complete the Military Training Leader course to enroll in this program.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Administration of Education & Training Programs....	15
Business Communications	3
CCAF Internship.....	18
Classroom Management	3
Computer-Based Instruction	9
Educational Technology	3
Guidance & Counseling.....	6
Instructional Methodology.....	6
Instructional Systems Development	9
Office Management	3
Statistics.....	3
Technical Writing	3
Tests & Measurements	3

Technical Electives	Maximum Semester Hours
Computer Science.....	6
Curriculum Development	3
Educational/Developmental Psychology	3
General Psychology.....	3
General Sociology	3
Public Relations	3
Supervision of Instruction.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

ELECTRONIC SYSTEMS TECHNOLOGY (4VHP)

Occupational Specialty 2M0X1, 2P0X1, 3D1X2, 3D1X3, 3D1X5, 3D1X6, 3D1X7

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

American Society for Quality Certified Calibration Technician Certification	6
CCAF Internship	18
Communication Systems Theory/Maintenance	24
CompTIA Certification.....	8
Electronic Communication-Computer Systems Theory/Maintenance	24
Electronic Systems Theory/Maintenance	24
(ISC) ² Certification.....	4
Global Information Assurance Certification.....	6
Missile and Space Electronic Systems Theory/Maintenance	24
Precision Measurement Equipment Theory/Maintenance	24

Technical Electives *Maximum Semester Hours*

Advanced Electronics	12
Algebra-Based Physics	4
Basic Electronics Theory/Applications	12
College Algebra or higher-level Mathematics	3
Computer Science.....	6
Computer Systems Maintenance & Operations Principles.....	6
Digital Techniques.....	6
FCC General Radiotelephone Operator's License.....	9
High-Reliability Soldering.....	3
Industrial Safety.....	3
Microprocessor Electronic Theory	6
Microsoft MCSE Certification	8
Quality Assurance.....	3
Solid-State Theory/Applications	6
Technical Writing.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The Electronics Technicians Association International accredits the Comm Cables & Antenna Systems apprentice course and Fiber Optic Cable Installation course. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**EMERGENCY MANAGEMENT
(9IMY)**

Occupational Specialty 1C3X1, 3E9X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)
A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Internship.....	18
Command & Control Information Systems	15
Emergency Management	6
Emergency Operations/Response	9
Emergency Planning.....	6
Environmental Science	10
Federal Emergency Management Agency Independent Study Program	12
Hazardous Materials	6
Instructor Fundamentals	6
Radiological Fundamentals.....	3
Risk Assessment.....	3
Warfare Defense	12

Technical Electives	Maximum Semester Hours
Cartography/Map Reading.....	3
Civil Defense	3
Climatology/Meteorology.....	3
Computer Science.....	6
Emergency Information Systems.....	3
Exercise Design	3
General Chemistry	4
Industrial Safety/Hygiene	3
Inventory Management	3
Public Administration	3
Technical Writing	3
Tests & Measurements	3

Leadership, Management & Military Studies
(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or General education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

ENTOMOLOGY (3ALC)

Occupational Specialty 3E4X3

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Internship	18
Entomology/Pest Control	12
Environmental Awareness	6
Environmental Support	20

Technical Electives	Maximum Semester Hours
Botany/Plant Disease	6
Computer Science	6
Environmental Law/Compliance	3
General Chemistry/Biology	8
General Physics	4
Hazardous Materials	6
Hydrology	3
Industrial Safety	6
Microbiology	3
Pollution Prevention	3
Principles of Ecology	6
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

<i>Subjects/Courses</i>	<i>Semester Hours</i>
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

EXPLOSIVE ORDNANCE DISPOSAL (4VRC)

Occupational Specialty 3E8X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Algebra-Based Physics	8
CCAF Internship.....	18
Electricity/Electronics.....	9
Explosive Ordnance Disposal	24
General Chemistry	8
Hazardous Materials	6

Technical Electives *Maximum Semester Hours*

Accident Prevention.....	3
Basic Photography (Camera/Video Operations).....	3
Blueprint Reading/Schematic Diagrams.....	3
Computer Science.....	6
Emergency Medicine	3
Heavy Equipment Operations	3
Industrial Safety.....	3
Industrial X-ray/Nondestructive Inspection.....	3
Inventory Management	3
Investigative Techniques	3
Map & Compass Reading	3
Nuclear Science	4
Principles of Marksmanship	3
Statistics.....	3
Technical Mathematics	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication..... 3

Speech

Written Communication..... 3

English composition

Mathematics 3

Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics

Social Science 3

Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology

Humanities 3

Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion

Program Elective (15 semester hours) Courses applying to technical education, LMMS or General education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

FINANCIAL MANAGEMENT (9GEC)

Occupational Specialty 6F0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

American Society of Military Comptrollers Certified	
Defense Financial Manager Certification	6
Business Law	6
Business Mathematics	3
CCAF Internship	18
Financial Analysis	9
Financial Principles/Management	9
Government Financial Systems	6
Microcomputer Software Applications.....	6
Military Pay & Accounting	12
Principles of Accounting	6
Statistics.....	3
Travel Accounting	9

Technical Electives *Maximum Semester Hours*

Business Finance	3
Computer Science.....	6
International Finance	3
Leadership & Management.....	3
Managerial Communications.....	3
Money & Banking	6
Principles of Economics (Macro/Micro)	6
Principles of Marketing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**FIRE SCIENCE
(9IFY)**

Occupational Specialty 3E7X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Aerospace Vehicle Firefighting	9
CCAF Internship.....	18
Emergency Medicine	6
Fire Apparatus Operation.....	6
Fire Department Administration.....	3
Fire Service Rescue	9
Hazardous Materials	8
Introduction to Fire Science.....	6
Structural Firefighting	12

Technical Electives *Maximum Semester Hours*

Building Construction for Fire Protection	3
Computer Science.....	6
Fire Codes & Related Ordinances.....	3
Fire Command	3
Fire Hydraulics	3
Fire Instructor	3
Fire Prevention/Inspection	6
Fire Protection Systems	3
Fire/Arson Investigation	3
Firefighting Occupational Safety	3
General Chemistry	8
NREMT Emergency Medical Technician Certification	4
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The International Fire Service Accreditation Congress accredits fire protection apprenticeship, journeyman and craftsman courses. See the Professional Credentialing section for certification information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

HEALTH CARE MANAGEMENT (7GCY)

Occupational Specialty 4A0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
Health Care Management	24
Health Care Statistics.....	3
Medical Care Evaluation	9
Medical Expense & Performance Reporting	9
Medical Records Management	9
Medical Resource Management	9
Patient Administration	9
Principles of Supervision/Management	6
Registered Health Information Technician Certification	12

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Human Anatomy & Physiology.....	8
Human Resource Management.....	3
Leadership & Management.....	3
Legal Aspects of Health Care	3
Managerial Communications.....	3
Medical Coding	6
Medical Ethics	3
Medical Readiness.....	3
Medical Terminology	3
Medical Transcription.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**HISTOLOGIC TECHNOLOGY
(7GAE)**

Occupational Specialty 4T0X2

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Bacteriology.....	6
CCAF Internship.....	18
Clinical Chemistry	9
Clinical Microbiology.....	9
Hematology, Serology & Blood Banking.....	9
Histologic Practicum	24
Histologic Specimen/Slide Processing	3
Histologic Technician-American Society of Clinical Pathologists Certification	24
Histopathology Procedures	24

Technical Electives	Maximum Semester Hours
Computer Science.....	6
General Biology.....	8
General Chemistry	8
Human Anatomy & Physiology.....	4
Medical Readiness	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

HUMAN RESOURCE MANAGEMENT (1AOY)

Occupational Specialty 3S0X1, 3S3X1, 8F000, 8RXXX

Degree Requirements The journeyman (5) level must be held at the time of program completion. (Exception: not required for 3S3X1).

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	<i>Maximum Semester Hours</i>
CCAF Internship	18
Guidance & Counseling.....	3
Human Relations/Interpersonal Communications	3
Human Resource Management/Administration.....	15
Interviewing	3
Manpower/Quality Management	20
Organizational Behavior.....	3
Personnel Recruiting.....	15
Principles of Management	3
Principles of Marketing	3
Word Processing.....	3

Technical Electives *Maximum Semester Hours*

Business Ethics.....	3
Business Law.....	6
Business/Managerial Communications.....	6
Computer Science.....	6
General Psychology.....	3
Industrial Psychology	3
Introduction to Business	3
Labor Relations	3
Leadership & Management.....	3
Microcomputer Software Applications.....	6
Oral Communications.....	3
Principles of Accounting	6
Principles of Economics (Macro/Micro)	6
Statistics.....	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

<i>Subjects/Courses</i>	<i>Semester Hours</i>
Oral Communications	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

INFORMATION MANAGEMENT (1AUy)

Occupational Specialty 3D0X1, 8M000, 8P100

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Internship.....	18
CompTIA Certification.....	8
Global Information Assurance Certification.....	6
Information Security	6
Information Systems Administration.....	14
Information Systems Management	9
(ISC) ² Certification	4
Microcomputer Software Applications.....	9
Office Equipment.....	3
Postal Operations/Management	15
Records/Publications Management.....	6

Technical Electives	Maximum Semester Hours
Business/Managerial Communications.....	6
Computer Science.....	6
Database Design/Management	6
Desktop Publishing	6
Human Resource Management	3
Leadership & Management	3
Microsoft MCSE Certification.....	8
Principles of Accounting	6
Principles of Management	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/CoursesSemester Hours

Oral Communication..... 3
Speech

Written Communication..... 3
English composition

Mathematics..... 3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics

Social Science..... 3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology

Humanities..... 3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

INFORMATION SYSTEMS TECHNOLOGY (OIYY)

Occupational Specialty 1A3X1, 1C4X1, 3D0X2, 3D0X3, 3D1X1, 3D1X4

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Airborne Information Systems	24
Broadcast Information Systems/Management	15
CCAF Internship	18
Command & Control Information Systems	15
Communication Networking	24
Communications-Electronics Program Management ..	12
CompTIA Certification.....	8
Computer Security.....	6
Computer Systems Architecture/Analysis/Design.....	6
Data Information Systems/Management	20
Global Information Assurance Certification.....	6
(ISC) ² Certification.....	4
Telecommunications Administration/Industry Regulation.....	6
Telecommunications Technology.....	6

Technical Electives *Maximum Semester Hours*

Business Mathematics/Statistics	3
College Algebra or higher-level Mathematics	6
Computer Science.....	6
Data Communications	3
FCC General Radiotelephone Operator's License.....	9
Microsoft MCSE Certification	8
Principles of Accounting	3
Radio Communications	6
Survival Training.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science.....	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities.....	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses

applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

INSTRUCTOR OF TECHNOLOGY & MILITARY SCIENCE (2IBB)

Occupational Specialty This program is offered to Air Force and other service enlisted personnel who are assigned to CCAF affiliated schools teaching CCAF degree-applicable courses. Applicants must complete three semester hours of CCAF-approved instructor methodology coursework and hold their career-field-related CCAF degree or equivalent civilian college degree before registration.* Personnel holding the 1TOX1 AFSC are not eligible.

Degree Requirements The journeyman (5) level (or fully qualified equivalent) must be held at the time of program completion. Registrants must complete the program within two years from initial date of registration and have a documented 12- semester-hour (180 contact hours) CCAF Teaching Internship transcribed.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	<i>Maximum Semester Hours</i>
Adult/Vocational Education	3
CCAF Special Duty Internship	18
Curriculum Development	3
Educational Technology	3
Educational/Developmental Psychology	3
Foundations of Education	3
Guidance & Counseling	3
**Instructional Methodology	12
Instructional Systems Development	6
Learning Theories	3
Supervision of Instruction	3
**Teaching Internship	12
Tests & Measurements	3

Technical Electives	<i>Maximum Semester Hours</i>
Aircrew Instructor Flight Training	9
CCAF Internship	18
Computer Science	6
Computer-Based Instruction	9
***Related Specialty Training	6
Statistics	3
Technical Writing	3

Leadership, Management & Military Studies
(6 semester hours) Professional military education,

civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

<i>Subjects/Courses</i>	<i>Semester Hours</i>
Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

*Other Service Instructors and Airmen performing duty as qualified CCAF instructors in Professional Military Education (8T000) or Military Training (8B000) are exempt from the requirement to hold a career-field-related degree.

**A 12 SHs CCAF Teaching Internship and 3 SHs of CCAF-approved instructor methodology coursework are required to complete the core requirement.

***A maximum of 6 SHs of specialty training may be applied if related to the subject matter being taught. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

INTELLIGENCE STUDIES AND TECHNOLOGY (9INZ)

Occupational Specialty 1A8XX, 1NXXX, 8D000, 9L000

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Airborne Communications Systems	9
Broadcast Communications	24
CCAF Internship	18
Communications Analysis & Reporting	24
Cryptanalysis	12
Foreign Technical Language/Area Studies	18
Imagery Analysis	24
Introduction to Cartography	9
Photogrammetry	9

Technical Electives *Maximum Semester Hours*

Aerial Photography	6
Aeronautics	3
College Algebra or higher-level Mathematics	3
Communication System Operations	6
Computer Science	6
Intelligence Collection Management	6
International Studies	9
Interviewing	3
Principles of Communication	9
Principles of Electronics	6
Principles of Radar	6
Survival Training	4

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

LOGISTICS (1AMY)

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

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Internship.....	18
Contract Management.....	3
Cryogenic Operations	10
Distribution Management	12
Fuels Distribution	15
Inventory Management.....	12
Logistics Automated Systems.....	9
Logistics Management.....	12
Materiel Handling/Plant Layout	3
Materiel Management	12
Principles of Accounting	6
Principles of Economics	6
Principles of Purchasing	3
Production/Operations Management	3
Warehouse Storage & Operations.....	8
Technical Electives	Maximum Semester Hours
Business Ethics	3
Business Law	3
Business Mathematics/Statistics	3
Computer Science.....	6
Environmental Protection Procedures.....	3
General Chemistry	4
Hazardous Materials	3
Industrial Safety.....	3
Introduction to Business	3
Introduction to Petroleum Industry	3
Introduction to Transportation	3
Labor Relations.....	3
Leadership & Management.....	3
Managerial Communications	3
Medical Readiness	3
Principles of Marketing	6
Quality Assurance.....	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/CoursesSemester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

MAINTENANCE PRODUCTION MANAGEMENT (4VJG)

Occupational Specialty 2RXXX, 2T3X7, 3E6X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
Human Resource Management	3
Maintenance Management	3
Management Information Systems	12
National Association of Fleet Administrators Certification	6
Production Management	6
Scheduling & Production Control	15
Statistics	3
Systems Management	6
Vehicle Integrated Management Systems	9

Technical Electives *Maximum Semester Hours*

Computer Science	6
Environmental Compliance	3
Industrial Safety	3
Principles of Accounting	3
Quality Assurance	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**MECHANICAL & ELECTRICAL TECHNOLOGY
(4VGA)**

Occupational Specialty 2M0X3, 3E0X1, 3E0X2, 3E1X1, 3E4X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Internship.....	18
Electrical Power Production	20
Electrical Systems.....	20
Heating Systems	20
Liquid Fuel Systems	20
Refrigeration & Air-Conditioning	20
Utilities Systems	20
Waste Management	3

Technical Electives

Technical Electives	Maximum Semester Hours
Air Distribution & Filtering Systems.....	3
Alternate Heating & Cooling.....	3
Blueprint Reading/Schematic Diagrams.....	6
Building Codes & Ordinances	3
Computer Science.....	6
Control Systems/Maintenance	6
Electricity/Electronics.....	9
Engine Principles	3
Environmental Awareness	3
Environmental Compliance	3
Fire-Suppression Systems.....	6
General Chemistry	8
General Physics	4
Hazardous Materials	6
Industrial Management	3
Industrial Safety.....	3
Mechanics of Soils.....	3
Motor, Starter & Control Devices.....	6
Natural Gas Distribution.....	6
Quality Assurance.....	3
Technical Mathematics	3
Technical Physics	4
Technical Writing	3
Welding/Pipefitting.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses**Semester Hours**

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The DoD Environmental Protection Agency accredits the Missile and Space Facilities apprentice course. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

MEDICAL LABORATORY TECHNOLOGY (7GAF)

Occupational Specialty 4T0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

American Society for Clinical Pathology	
Certifications	24
CCAF Internship	18
Clinical Chemistry	12
Clinical Microbiology	9
Clinical Practicum	24
Hematology	12
Immunology/Bloodbanking/Serology	24

Technical Electives *Maximum Semester Hours*

Computer Science	6
General Biology	8
General Chemistry	8
Human Anatomy & Physiology	4
Medical Readiness	3
Organic/Inorganic Chemistry	8

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The National Accrediting Agency for Clinical Laboratory Sciences accredits the Medical Laboratory Apprentice course. See the Professional Credentialing section for information on credentialing and CCAF's Education Research Tool (CERT).

**MENTAL HEALTH SERVICES
(7GAP)**

Occupational Specialty 4C0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Abnormal Psychology	3
CCAF Internship.....	18
Drug & Alcohol Abuse.....	6
Drug & Alcohol Abuse Counselor Certification.....	12
Guidance & Counseling.....	9
Human Growth/Lifespan Development.....	6
Human Relations	3
Interpersonal Communications	3
Mental Health Care.....	24
Psychology of Adjustment.....	3

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Emergency Medicine	3
General Biology.....	4
General Chemistry	4
General Psychology	3
Human Anatomy & Physiology.....	4
Human Biology.....	4
Medical Readiness	3
Nursing (Mental Health related).....	6

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

METALS TECHNOLOGY (4VLB)

Occupational Specialty 2A7X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Advanced Machining.....	12
Aircraft Metals Technology.....	24
Brazing/Welding Techniques	9
CCAF Internship	18

Technical Electives	Maximum Semester Hours
Computer Numerical Control	6
Computer Science.....	6
Corrosion Control	3
Engineering Graphics/Computer Aided Drafting	6
FAA Airframe/Powerplant Certification	12
General Chemistry/Algebra-Based Physics.....	4
Hazardous Materials	3
Industrial Safety.....	3
Maintenance Management.....	3
Materials & Processes	3
Physical Testing of Materials	3
SpaceTEC Aerospace Technician Certification.....	6
Technical Mathematics.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

<i>Subjects/Courses</i>	<i>Semester Hours</i>
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**MISSILE & SPACE SYSTEMS MAINTENANCE
(4VAK)**

Occupational Specialty 2M0X2

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship.....	18
Missile Maintenance.....	24
SpaceTEC Aerospace Technician Certification.....	24

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Corrosion Control.....	3
Electricity/Electronics.....	6
Engineering Graphics/Computer Aided Drafting.....	3
Engineering Mechanics.....	3
General Chemistry/Algebra-Based Physics.....	4
Hazardous Materials.....	3
Heavy Equipment Operation/Maintenance.....	3
Hydraulic/Pneumatic Power.....	3
Industrial Safety.....	3
Maintenance Management.....	3
Materials & Processes.....	3
Nondestructive Inspection.....	3
Nuclear Weapons Systems Maintenance.....	3
Quality Assurance.....	3
Technical Writing.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science.....	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities.....	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

MULTIMEDIA PRODUCTION SERVICES (2IAJ)

Occupational Specialty 3N0X4

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Internship	18
Digital/Electronic Imaging	12
Graphic Arts	24
Media Production	20
Photography.....	24

Technical Electives

.....	Maximum Semester Hours
Advertising Art/Design.....	6
Animation	3
Color Science/Theory	6
Commercial Art	6
Computer Science.....	6
Desktop Publishing.....	3
Drawing	9
Illustration.....	6
Magazine Editing/Publishing.....	6
Typography.....	3
Visual Design	6

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**MUNITIONS SYSTEMS TECHNOLOGY
(4VRA)**

Occupational Specialty 2W0X1, 2W2X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)
A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Internship.....	18
Munitions Operations/Inventory Management	24
Munitions Systems.....	24
Nuclear Weapons Systems.....	24

Technical Electives	Maximum Semester Hours
Advanced Munitions Systems	12
Advanced Nuclear Weapons Systems	12
Computer Science.....	6
Corrosion Control	3
Electricity/Electronics.....	6
Engineering Graphics/Computer Aided Drafting	3
General Chemistry/Algebra-Based Physics	8
Hazardous Materials/Environmental Management.....	3
Heavy Equipment Operation/Maintenance.....	3
Hydraulic/Pneumatic Power.....	3
Industrial Safety.....	3
Maintenance Management.....	3
Principles of Accounting	6
Reactor Technology.....	3
Statistics.....	3
Weapons Safety	3

Leadership, Management & Military Studies
(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

MUSIC (2CHB)

Occupational Specialty 3N1X1, 3N2X1

Degree Requirements The journeyman (5) level must be held at the time of program completion (Exception: Not required for 3N2X1).

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Arranging & Instrumentation	6
Band.....	6
CCAF Internship	18
Chorus	6
Ensemble	6
Music History	6
Music Theory.....	6
Production & Stage Craft Arts.....	6

Technical Electives *Maximum Semester Hours*

Applied Music	6
Aural Perception.....	6
Computer Science.....	6
Dance.....	3
Electricity/Electronics	3
Electronic Music (Synthesizers)	3
Fundamentals of Conducting.....	3
Public Relations.....	3
Voice	6

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**NONDESTRUCTIVE TESTING
TECHNOLOGY (4VXR)**

Occupational Specialty 2A7X2

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

American Society for Nondestructive Testing (ASNT) Certification	12
CCAF Internship	18
Nondestructive Inspection	24

Technical Electives *Maximum Semester Hours*

Advanced Nondestructive Inspection Techniques	3
Computer Science	6
Corrosion Control	3
Engineering Graphics/Computer Aided Drafting	3
FAA Airframe/Powerplant Certification	6
General Chemistry/Algebra-Based Physics	4
Hazardous Materials	3
Industrial Safety	3
Maintenance Management	6
Materials & Processes.....	3
SpaceTEC Aerospace Technician Certification.....	6
Technical Mathematics	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

NUCLEAR MEDICINE TECHNOLOGY (7ABJ)

Occupational Specialty 4R0X1A

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

American Registry of Radiologic Technologists	
Nuclear Medicine Registry	24
Applied Nuclear Medicine Physics & Chemistry	9
CCAF Internship	18
Diagnostic Imaging, Clinical & Nonclinical	24
Nuclear Medicine Instrumentation	18
Radiation Safety & Procedures.....	14
Radiopharmaceuticals.....	8

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
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Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**OPHTHALMIC TECHNICIAN
(7GDI)**

Occupational Specialty 4V0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Assisting the Optometrist.....	8
Commission on Paraoptometric Certifications	8
General Psychology.....	3
*Human Anatomy & Physiology.....	4
Human Eye & the Visual System	6
Introduction to Operating Room Technology	8
Operating Room Practicum	8
Operating Room Technology.....	8
Optics.....	8
Spectacles & Contact Lenses.....	6
Vision Classification.....	6

Technical Electives *Maximum Semester Hours*

Algebra-Based Physics	4
Analytic Geometry.....	3
CCAF Internship.....	18
Computer Science.....	6
General Biology.....	4
General Chemistry	4
Medical Readiness	3
Office Management	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

*Must be completed as part of degree program. The Accreditation Council on Optometric Education accredits the Ophthalmic Apprentice course. Apprentice course graduates are eligible to take the Certified Paraoptometric Technician examination. See the Professional Credentialing section information credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

PARALEGAL (1CAM)

Occupational Specialty 5J0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours) A student must complete the Air Force paralegal apprentice and craftsman courses to satisfy the technical core requirement. Courses listed as Technical Electives may also be applied as program electives. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Civil Law	9
*Ethics	3
International Law	3
Legal Claims & Tort Administration	6
Legal Claims & Tort Investigation	3
Legal Research & Writing	9
Military Justice	6
Non-Judicial Punishment	3
Paralegal Internship	8
Pre/Post Trial Administration	6

Technical Electives	Maximum Semester Hours
Computer Science	6
Contract Law	3
Criminal Law	3
Criminal Procedures	3
Environmental Law	3
Estate Planning & Probate	3
Evidence	3
Family Law/Domestic Relations	3
Law Office Administration	3
Law Office Supervision & Training	3
Real Estate Law	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (18 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	
General Education Elective	3
A general education course selected from English composition, mathematics, social science, humanities, or natural science.	

Program Elective (12 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

*Must be completed as part of degree program; may be applied in technical core or humanities area or general education elective area.

This degree program is approved by the American Bar Association. See Professional Credentialing section for credentialing information and CCAF's Credentialing and Education Research Tool (CERT).

NOTE: Paralegals may not provide legal services directly to the public except as permitted by law.

PERSONNEL RECOVERY (7GDP)

Occupational Specialty 1T2X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Air Operations	12
CCAF Internship.....	18
Emergency Medicine	12
Evasion & Recovery	3
General Principles of Survival	12
Ground Operations.....	12
Mountain Travel/Rescue Techniques	9
Personnel Recovery Indoctrination.....	3
Psychology of Environmental Stress	3

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Human Anatomy & Physiology.....	4
Marksmanship	3
Parachuting/Scuba Diving	6
Physical Geography	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication..... 3

Speech

Written Communication..... 3

English composition

Mathematics 3

Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics

Social Science 3

Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology

Humanities 3

Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

PHARMACY TECHNOLOGY (7GAH)

Occupational Specialty 4P0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
Fundamentals of Pharmacy.....	8
Introductory Pharmacology	8
Pharmaceutical Calculations.....	3
Pharmaceutical Preparation & Manufacture	6
Pharmacy Technician Certification	17

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Emergency Medicine.....	3
General Biology.....	4
General Chemistry	8
Human Anatomy & Physiology.....	4
Medical Readiness.....	3
Organic Chemistry.....	8

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The American Society of Health-System Pharmacists accredits the Pharmacy Apprentice course. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**PHYSICAL THERAPIST ASSISTANT
(7GAI)**

Occupational Specialty 4J0X2

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours) A student must complete the Air Force physical medicine apprentice course and the physical therapy practicum to satisfy the technical core requirement. A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Functional Anatomy, Pathophysiology & Therapeutic Procedures.....	12
Human Anatomy & Physiology.....	8
Introduction to Physical Therapy.....	12
Physical Therapy Assistant Certification.....	12
Physical Therapy Clinical Arts.....	6
Physical Therapy Practicum.....	6
Physical Therapy Procedures & Modalities.....	6

Technical Electives *Maximum Semester Hours*

Advanced Physiology.....	3
Algebra-Based Physics.....	4
CCAF Internship.....	18
Computer Science.....	6
General Biology.....	4
General Chemistry.....	4
Kinesiology.....	8
Medical Readiness.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science.....	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities.....	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

The Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association accredits this degree program. CCAF graduates in this degree may sit for the Physical Therapy Assistant State License examination. Contact the Board for Physical Therapy of the state in which licensure is desired for exact details. See Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

PUBLIC AFFAIRS (2FDE)

Occupational Specialty 3N0X1, 3N0X2

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
Copyreading & Editing.....	3
Journalism.....	20
Mass Communication	20
Media Production	10
Photojournalism.....	3
Visual Information Production/Documentation.....	24

Technical Electives *Maximum Semester Hours*

Advertising	3
Broadcasting	6
Computer Science.....	6
Desktop Publishing.....	6
General Psychology.....	3
Graphic Arts	3
Interviewing.....	3
Mass Communication Law	3
Photography.....	3
Public Relations.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**PUBLIC HEALTH TECHNOLOGY
(7ECY)**

Occupational Specialty 4E0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship.....	18
Communicable Diseases.....	6
Epidemiology.....	8
Food Safety/Sanitation.....	6
Hearing Conservation	3
Medical Entomology	3
Medical Readiness	3
Occupational Health & Safety	9
Public Health	16
Zoonotic Diseases	3

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Ergonomics.....	3
General Biology.....	8
General Chemistry	8
General Physical Science.....	4
General Psychology	3
Microbiology	4
Statistics.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

RESTAURANT, HOTEL & FITNESS MANAGEMENT (1FRS)

Occupational Specialty 3M0X1, 8A200

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

American Culinary Federation Certified Chief.....	4
CCAF Internship	18
Contract Management.....	3
Culinary Institute of America Certification	6
Financial Management	3
Fitness & Health	6
Food & Beverage Preparation	12
Food Service Operations/Management.....	6
Food Service Sanitation & Safety.....	3
Front Office Management.....	3
Hospitality Administration	6
Human Anatomy & Physiology.....	4
International Food Service Executive Association Certification.....	6
Inventory Management.....	3
Mortuary Services.....	3
Nutrition	3
Principles of Accounting	6
Quantity Food Production.....	3
Recreation/Sports Management.....	3
Restaurant Operations/Management.....	9
Sports & Fitness Instruction	6
Starkey International Institute Certification.....	24

Technical Electives *Maximum Semester Hours*

Business Law	3
Business/Managerial Communications.....	6
Computer Science.....	6
Convention/Event Planning.....	4
Cooper Institute Certified Personal Trainer.....	3
Economics	3
Equipment Selection/Layout/Facility Design	3
Food Science	3
Human Relations/Customer Service.....	3
Human Resource Management.....	3
Introduction to Business	3
Leadership & Management.....	3

Occupational Safety	3
Principles of Marketing/Sales	3
Principles of Purchasing	3
Recreation Safety & First Aid.....	3
Services Automation.....	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**SAFETY
(9IYY)**

Occupational Specialty 1S0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Accident Prevention Management	18
Accident/Fire Investigation.....	12
AFOSH/OSHA Codes/Standards	12
Aviation/Flight Safety	12
CCAF Internship.....	18
Ground/Industrial Safety.....	24
Hazardous Materials	6
Hazardous Waste Management	6
Instructional Methodology.....	6
Safety Engineering.....	6

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Electricity/Electronics.....	3
Environmental Science	3
General Chemistry	8
Introduction to Public Administration	3
Oral Communications.....	3
Safety & Risk Analysis.....	3
Statistics.....	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

SCIENTIFIC ANALYSIS TECHNOLOGY (4VES)

Occupational Specialty 9S100

Degree Requirements A student in the 9S100 reporting identifier does not have skill levels; therefore, none are required for graduation.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Special Duty Internship	18
Geophysical Analysis	12
Satellite Analysis Systems	6
Scientific Lab Technology	12
Scientific Measurements	12

Technical Electives	Maximum Semester Hours
Advanced Electronics	6
Algebra-Based Physics	4
Basic Electronics Theory/Applications	6
College Algebra or higher-level Mathematics	3
Computer Science	6
Computer Systems Maintenance & Operations	
Principles	3
General Chemistry	4
Meteorology	6
Physical Science	4
Soldering Techniques	3
Solid-State Theory/Applications	6
Statistics	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**SOCIAL SERVICES
(9IKY)**

Occupational Specialty 3S1X1, 5R0X1, 8C000

Degree Requirements The journeyman (5) level must be held at the time of program completion (Exception: Not required for 3S1X1).

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
CCAF Internship.....	18
Chaplain Service Support	12
Cultural Diversity	6
Equal Opportunity Management.....	24
Ethnic Studies	6
Family Services Administration	6
Group Dynamics.....	3
Guidance & Counseling.....	6
Social Problems	3
Social Psychology.....	3
World Religions.....	3

Technical Electives	Maximum Semester Hours
Abnormal Psychology	3
Computer Science.....	6
General Psychology.....	3
General Sociology	3
Human Communication.....	3
Human Development & Learning.....	3
Instructional Methodology.....	3
Interviewing Techniques.....	3
Leadership & Management.....	3
Managerial Communications.....	3
Principles of Accounting	3
Social Work	3
Statistics.....	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

SURGICAL SERVICES TECHNOLOGY (7GEA)

Occupational Specialty 4N1X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
Fundamentals of Central Sterile Supply	8
Operating Room Practicum	16
Operating Room Technology	16
Surgical Nursing	12

Technical Electives *Maximum Semester Hours*

Computer Science.....	6
Emergency Medicine.....	3
General Biology.....	4
General Chemistry.....	4
General Psychology.....	3
Human Anatomy & Physiology.....	8
Medical Readiness.....	3
Medical Terminology	3
Nursing	6

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science.....	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities.....	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**SURVIVAL INSTRUCTOR
(2IBS)**

Occupational Specialty 1T0X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core	Maximum Semester Hours
Advanced Survival Techniques	24
CCAF Internship.....	18
Evasion & Recovery	9
Foundations of Education	3
General Principles of Survival.....	16
*Instructional Methodology.....	9
Instructional Systems Development	3
*Teaching Internship-SERE	12

Technical Electives **Maximum Semester Hours**

Audiovisual Media.....	3
Computer Science.....	6
Curriculum Development	3
Educational/Developmental Psychology	3
Emergency Medicine	6
Guidance & Counseling.....	3
International Terrorism.....	3
Land Navigation	3
Mountain Travel	3
NREMT Emergency Medical Technician Certification	4
Parachuting	3
Psychology of Environmental Stress	3
Resistance Training	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses	Semester Hours
Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

*A 12 SHs CCAF Teaching Internship-SERE and 3 SHs of CCAF-approved instructor methodology coursework are required to complete the core requirement. See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

TRANSPORTATION (1ATY)

Occupational Specialty 2T0X1, 2T1X1, 2T2X1

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Air Cargo Procedures	9
Air Transportation Principles	9
Business/Transportation Law	6
CCAF Internship	18
Freight Transportation	6
Hazardous Materials	6
Household Goods Movement	9
Introduction to Transportation	6
Motor Fleet Management & Safety	9
Passenger Routing/Movement	9
Traffic Management	15
Transportation Automated Systems.....	6
Vehicle Operations	12

Technical Electives *Maximum Semester Hours*

Business Mathematics/Statistics	3
Computer Science.....	6
Contract Management.....	3
Human Relations	3
Industrial Safety.....	3
Introduction to Aviation/Aeronautics	6
Introduction to Business	3
Introduction to Logistics.....	3
Physical Distribution	6
Principles of Accounting	3
Principles of Economics	6
Principles of Marketing	3
Quality Assurance.....	3
Warehouse Storage & Operations	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses Semester Hours

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics.....	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

**VEHICLE MAINTENANCE
(4VKC)**

Occupational Specialty 2T3X1, 2T3X2

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

Automotive Engine Computer Systems.....	3
Automotive Service Excellence Examination.....	16
CCAF Internship.....	18
Gas/Diesel Engine Principles.....	8
Introduction to Business	3
Maintenance Scheduling.....	3
Power Train Fundamentals	3
Radiator/Fuel Tank Repair.....	3
Specialized Support Vehicles	15
Suspension/Steering/Brake Systems.....	3
Vehicle Body Repair/Painting	8
Vehicle Electrical/Starting/Changing Systems	6
Vehicle Fuel/Emission Systems.....	3
Vehicle Glass, Upholstery/Trim & Hardware.....	6
Vehicle Heating/Air-Conditioning.....	3
Vehicle Integrated Management Systems.....	8
Welding	8

Technical Electives *Maximum Semester Hours*

Alternative Fuel/Electric-Powered Vehicle Systems	3
Computer Science.....	6
Engine Lubrication/Cooling Systems	3
Engine Overhaul	3
Environmental Compliance	3
Industrial Management	3
Industrial Safety.....	3
Quality Assurance.....	3
Technical Mathematics	3
Technical Writing	3

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication.....	3
Speech	
Written Communication.....	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

DEGREE PROGRAMS

WEATHER TECHNOLOGY (8FYY)

Occupational Specialty 1W0X1, 1W0X2

Degree Requirements The journeyman (5) level must be held at the time of program completion.

Technical Education (24 semester hours)

A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance. See page 14, Technical Education Requirement.

Technical Core *Maximum Semester Hours*

CCAF Internship	18
Climatology	6
Dynamic Meteorology	6
Operational Weather Forecasting	16
Physical Meteorology	18
Plotting Weather Maps & Charts	12
Satellite Meteorology	6
Synoptic Meteorology	12
Weather Instruments & Observation	18
Weather Prognosis Techniques	16
Weather Radar Interpretation	6
Weather Station Operation	12

Technical Electives *Maximum Semester Hours*

Algebra-Based Physics	4
Astronomy	3
Briefing Techniques	3
College Algebra or higher-level Mathematics	6
Computer Science	6
General Chemistry	4
Physical Geography	3
Technical Writing	3
Thermodynamics	3
Tropical Meteorology	6
Upper Air Measurement	6

Leadership, Management & Military Studies

(6 semester hours) Professional military education, civilian management courses accepted in transfer and/or by testing credit. See page 16.

Physical Education (4 semester hours)

General Education (15 semester hours) Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable courses starting on page 16.

Subjects/Courses *Semester Hours*

Oral Communication	3
Speech	
Written Communication	3
English composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement—if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

Program Elective (15 semester hours) Courses applying to technical education, LMMS or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute; maximum 9 SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

See the Professional Credentialing section for information on credentialing and CCAF's Credentialing and Education Research Tool (CERT).

PROFESSIONAL CREDENTIALING



PROFESSIONAL CREDENTIALING ...

Credentialing assists the professional development of our Airmen by broadening their knowledge and skills. Blending Air Force technical training and education with industry-based skill sets and professional credentialing processes benefits the Air Force by molding more diverse and qualified technicians to maintain critical and valuable national defense assets. Airmen benefit by being provided the education and credentials needed by highly technical Air Force career fields. Airmen will also possess highly valued skills needed by the industry when they transition from the Air Force. End result: the Air Force and industry benefit immensely by receiving highly trained, qualified, experienced and disciplined technicians – a valuable payback on investment. This section provides students with information concerning national professional credentialing opportunities related to their specific degree program and career field.

Some Air Force and civilian occupations have certain professional and technical standards. The process of meeting these standards and earning official recognition is referred to as **credentialing**. Governmental and private organizations set credentialing standards to ensure that individuals meet the standards for their profession. The term “**Credential**” refers to professional licensure or registry, or certification which documents an individual’s level of competency and achievement in a specific profession.

There are two primary types of credentialing: **Licensure** and **Certification**.

Licensure is a credential normally issued by federal, state or local governmental agencies. A license is issued to individuals to practice in a specific occupation (i.e., medical license for doctors). Licenses are typically mandatory for employment in selected fields and federal or state laws or regulations define the standards that individuals must meet to become licensed.

Certification is a credential normally issued by non-governmental agencies, associations, schools or industry-supported companies. A certification is issued to individuals who meet specific education, experience and qualification requirements. These requirements are generally established by professional associations, industry or product-related organizations. Certification is typically an optional credential; although some state licensure boards and some employers may require a specific certification(s).

Credentialing is important to the Air Force and our Airmen for several reasons:

- Helps develop a more diversely skilled workforce
- Broadens professional development of our Airmen
- Validates professional knowledge and skills gained through Air Force technical education and training
- Helps prepare our Airmen meet mission challenges of the future
- CCAF awards collegiate credit to Airmen who possess certain national professional credentials that satisfy applicable technical education and program elective requirements

PROFESSIONAL CREDENTIALING

- Some civilian colleges and universities award credit toward academic degrees
- Saves Air Force tuition assistance funds toward degree program completion
- Prepares Airmen for transition to civilian life
 - Federal, state or local law may require specific credentials to perform some jobs
 - Employers may require a specific credential(s) as a prerequisite for employment or pay higher salaries to credentialed employees
 - Credentials may improve promotion potential
 - Credentials demonstrate to employers that Airmen are on par with their civilian peers

Airmen should consider pursuing occupational-related credentials while serving in the Air Force to increase their Air Force occupational skills, broaden their professional development and be better prepared for transition.

Students interested in pursuing professional credentials should contact the credentialing agency for information on credentials, eligibility requirements and testing procedures. Graduates of CCAF degree programs or courses accredited by credentialing agencies should contact the credentialing agency for requirements and processes.

To support documentary evidence of training, skills and practical experience, students are highly encouraged to maintain records of all previous and current education, training and qualifications.

CCAF Credit

Students may earn CCAF collegiate credit for certain national professional credentials that are approved by CCAF to satisfy applicable technical education and program elective requirements.

To determine the professional credentials that can be used in a degree program, refer to the degree plans in this catalog. To obtain a listing of all national professional credentials that are approved by CCAF for award of credit, visit <http://www.au.af.mil/au/ccaf/certifications.asp>.

Contact your base education center for procedures to apply professional credentials to your CCAF academic record. Professional credentials must be validated.

CCAF CREDENTIALING AND EDUCATION RESEARCH TOOL (CERT)...

CERT is a valuable resource for enlisted Airmen. The purpose of CERT is to increase awareness of professional development opportunities applicable to Air Force occupational specialties.

CERT includes information related to specific AFSCs, such as:

- Career field description
- Civilian occupational equivalencies (US Department of Labor)
- CCAF degree program
- National professional credentials
- Credentialing agencies
- Credentialing exams offered by DANTES
- Professional organizations

For information concerning CCAF degree programs and national professional credentials that may be applicable to specific career fields, access CERT at <http://www.au.af.mil/au/ccaf/certifications.asp>.

The CCAF Credentialing Programs Flight is the focal point for professional credentials and programs offered by CCAF. For more information, contact CCAF/DEAL at DSN 749-5020 or (334) 649-5020; E-mail at ccaf.deal@maxwell.af.mil or ccaf.faa@maxwell.af.mil; or visit <http://www.au.af.mil/au/ccaf/certifications.asp>.

JOINT SERVICE AVIATION MAINTENANCE TECHNICIAN CERTIFICATION COUNCIL...



The Department of Defense (DoD) established the Joint Service Aviation Maintenance Technician Certification Council (JSAMTCC) to serve as the functional advisory body to each respective United States military service's aircraft maintenance division and the HQ Federal Aviation Administration (FAA).

The JSAMTCC is the military focal point for *FAA Aviation Mechanic - Airframe and Powerplant (A&P) Certification*. Other JSAMTCC responsibilities include: ensuring FAA's continued recognition of formal military aviation maintenance technical training and practical experience; maintaining DoD continuity with HQ FAA; managing and administering the joint-service A&P Certification Program; identifying and recommending qualified and eligible active duty, guard and reserve component personnel of the US Armed Forces to the FAA for the FAA Mechanic Certificate with Airframe and/or Powerplant ratings; and providing resources to assist technicians in meeting FAA eligibility requirements.

Resources provided in the Joint-service A&P Certification Program are designed to fill the gaps between military education, training and experience, and civil aviation industry standards.

The JSAMTCC also reviews aircraft maintenance technician training and practical experience from a FAA perspective, providing a unified assessment and recommendations to each military service and the FAA.

For more information concerning the JSAMTCC, visit <http://www.au.af.mil/au/ccaf/certifications.asp>.

AIR FORCE AIRFRAME AND POWERPLANT CERTIFICATION PROGRAM...



CCAF continuously strives to increase and broaden the skills, knowledge and experiences of enlisted Airmen. The Air Force Airframe and Powerplant (A&P) Certification Program is one such effort designed to enhance professional development and skills of aircraft maintenance technicians.

The Air Force A&P Certification Program is offered to active duty, guard and reserve enlisted Airmen in select aircraft maintenance AFSCs. The program directly supports the mission of CCAF in that FAA credentialed technicians help enhance combat readiness, contributes to recruiting, assists in retention of highly skilled technicians and supports the career transition of enlisted Airmen. Furthermore, the program helps develop a more well-rounded and diverse Air Force aircraft maintenance professional.

The Air Force A&P Certification Program was developed by the Department of Defense (DoD) to streamline and improve the *FAA Aviation Mechanic – A&P Certification* process for the military. The program provides aircraft maintenance technicians the opportunity to pursue *FAA Aviation Mechanic - A&P Certification* based on training, education and practical experience as specified in Title 14, Code of Federal Regulations (CFR), Part 65.77-*Certification: Airmen Other Than Flight Crew Members*; Subpart D - Mechanics. Completing the program requirements detailed in the Air Force A&P Certification Program Qualification Training Package (QTP) will fill gaps in training and experience, ensuring technicians meet CFR Part 65.77 eligibility requirements.

Upon successful completion of the Air Force A&P Certification Program, CCAF will issue a CG-G-EAE-4 Form, *Certificate of Eligibility* and FAA Form 8610-2, *Airman Certificate and/or Rating Application*. These documents are required for individuals to obtain authorization for FAA testing from the Flight Standards District Office (FSDO).

Students are encouraged to maintain copies of past and present Career Field Education and Training Plans (CFETP), training certificates and other pertinent job qualification and training records, both military and civilian.

The Air Force A&P Certification Program is managed and administered by the CCAF Credentialing Programs Flight. For more information, contact CCAF/DEAL at DSN 749-5020 or (334) 649-5020; E-mail at ccaf.faa@maxwell.af.mil; or visit <http://www.au.af.mil/au/ccaf/certifications.asp>.

PROFESSIONAL CREDENTIALING

FAA CERTIFICATION CREDIT

CCAF awards 30 semester hours for the *FAA Aviation Mechanic - A&P Certification* and 18 semester hours for the *FAA Aviation Mechanic - Airframe or Powerplant Certification*. This credit is awarded to students enrolled in a CCAF degree program which accepts certification credit toward the program's technical education requirement. Refer to the applicable degree program for the maximum semester hours that may be used to satisfy technical education requirements.

Students possessing FAA certification should contact the base education center for procedures to report certification to CCAF/DEAL.

OCCUPATIONAL INSTRUCTOR CERTIFICATION PROGRAM ...

CCAF offers the Occupational Instructor Certification (OIC) to qualified instructors teaching in CCAF affiliated schools. The purpose of the certification is to recognize the outstanding instructor education and training provided to prepare instructors to teach CCAF collegiate courses. The certification also formally acknowledges the instructor's teaching qualifications and experience. Qualified officer, enlisted, civilian and other service instructors are eligible for this certification.

The awarded OIC is recorded on the instructor's official CCAF academic record and CCAF transcript.

The OIC program is managed and administered by the CCAF Credentialing Programs Flight. For more information, contact CCAF/DEAL at DSN 749-5020 or (334) 649-5020; E-mail at ccaf.deal@maxwell.af.mil; or visit <http://www.au.af.mil/au/ccaf/certifications.asp>.

CIVILIAN TEACHER CERTIFICATION

VOCATIONAL INSTRUCTOR CERTIFICATION

Individuals interested in teaching at a vocational school or community college should contact the applicable state board of education to determine qualification and certification requirements. For more information, visit <http://www.ed.gov/about/contacts/state/index.html?src=ln>.

FLORIDA PROFESSIONAL EDUCATOR CERTIFICATION

Florida Statute 1012.56 allows CCAF instructors to meet some of Florida's K-12 certification requirements. The statute enables instructors to meet Florida's general knowledge, and professional preparation and teacher competence requirements if the individual:

- Taught fulltime for at least two semesters at an accredited college that awards at least an associate degree (CCAF);
- Submits Letter of Verification provided by CCAF;
- Holds at least a bachelor's degree; and
- Passes one of Florida's subject knowledge exams.

PROFESSIONAL CREDENTIALING

Contact the CCAF Credentialing Programs Flight to obtain a Letter of Verification. CCAF cannot provide a Letter of Verification for individuals have never been a CCAF instructor.

Florida Statute 1012.56 provides easier transition for CCAF instructors into a second career as a K-12 teacher in Florida. For more information, contact the Florida Troops to Teachers program manager at 1-888-358-7667 or (850) 245-5023 or e-mail TroopstoTeachers@fldoe.org.

TROOPS TO TEACHERS PROGRAM

The DANTES Troops-to-Teachers Program provides a Referral Assistance and Placement service to military personnel interested in beginning a second career as a teacher in public education. The DANTES Troops-to-Teachers office will help applicants identify teacher certification requirements, programs leading to certification, financial assistance and employment opportunities. Individuals considering teaching in the public education system upon retirement or separation should contact Troops-To-Teachers at DSN 922-1111 or (800) 231-6242; or visit http://www.dantes.doded.mil/dantes_web/troopstoteachers/index.asp.

INSTRUCTIONAL SYSTEMS DEVELOPMENT CERTIFICATION Program ...

CCAF offers the Instructional Systems Development (ISD) Certification for qualified individuals who develop and manage CCAF courses at CCAF affiliated schools. The purpose of the certification is to recognize the education, training and skills required for individuals to be qualified to develop and manage CCAF courses. The certification also recognizes the individual ISD qualifications and experience in planning, developing, implementing and managing instructional systems. Qualified officer, enlisted, civilian and other service curriculum writers/developers and managers are eligible for this certification.

The awarded ISD certification is recorded on the official CCAF academic record and CCAF transcript.

The ISD Certification Program is managed and administered by the CCAF Credentialing Programs Flight. For more information, contact CCAF/DEAL at DSN 749-5020 or (334) 649-5020; E-mail at ccaf.deal@maxwell.af.mil; or visit <http://www.au.af.mil/au/ccaf/certifications.asp>.

NATIONAL AEROSPACE TECHNICAL EDUCATION CENTER...



The National Aerospace Technical Education Center (SpaceTEC) is a National Science Foundation Center of Excellence for Aerospace Technical Education and is the focal point for providing aerospace related post-secondary technical education for aerospace technicians. SpaceTEC and its industry partners offer programs that prepare aerospace technicians to become Certified Aerospace Technicians. CCAF has been a long-standing partner of SpaceTEC.

The SpaceTEC initiative also includes industry-recognized Aerospace Technician Certification processes with specialized concentration areas. Air Force personnel in aerospace and aviation occupational specialties are eligible to pursue SpaceTEC Aerospace Technician Certification.

To achieve national certification status, candidates must meet minimum established prerequisites and successfully pass the computer-based knowledge exam and the oral and hands-on practical exams conducted by authorized SpaceTEC Examiners (STE's).

For more information, contact SpaceTEC at (321) 730-1020; or visit <http://www.spacetec.org> or <http://www.au.af.mil/au/ccaf/certifications.asp>.

NATIONAL CENTER FOR AEROSPACE & TRANSPORTATION TECHNOLOGIES...



The National Center for Aerospace & Transportation Technologies (NCATT) is a National Science Foundation's Center of Excellence for Aviation Technical Education and is the focal point for providing aviation technical education for avionics technicians. NCATT and its industry partners offer programs that prepare technicians to support today's advanced technology aircraft avionics systems. CCAF has been a long-standing partner of NCATT.

NCATT and its partners established industry-endorsed standards, technician certifications, and accreditation and recognition programs for educational and training providers.

NCATT offers certifications that are industry defined and designed to identify individuals as professionals through demonstrated knowledge, experience and commitment to the aviation/aerospace industry.

Air Force personnel in the aviation and aerospace occupational specialties are eligible to pursue NCATT Aircraft Electronics Technician (AET) certification, additional AET endorsements, and Foreign Object Elimination (FOE) certification.

NCATT Accredited Training Providers are technical schools/training centers that offer education/training programs that meet and/or exceed the NCATT standards. These providers have demonstrated a commitment to quality through an in-depth curriculum, facilities and faculty evaluation. CCAF gained NCATT accreditation in February 2010.

For more information, contact NCATT at (817) 515-7264; or visit www.ncatt.org or <http://www.au.af.mil/au/ccaf/certifications.asp>.

PROFESSIONAL CREDENTIALING

AFFILIATED SCHOOLS



AFFILIATED SCHOOLS ...

The affiliated schools of the Community College of the Air Force are responsible for developing, validating and delivering CCAF courses. Their courses are subject to increases and decreases in credit-hour value based on revisions and evaluations designed to meet the immediate needs of the Air Force. The credit hours for CCAF courses entered on the student transcript reflect the semester hour value of the courses when they were completed.

Becoming an affiliated school and part of the CCAF system is a voluntary process. Air Force schools interested in affiliating with the Community College of the Air Force should write CCAF/DECA, 100 South Turner Boulevard, Maxwell-Gunter AFB, Alabama 36114-3011; call 334-649-5069, DSN 749-5069; or Fax DSN 749-5105.

AFFILIATED SCHOOLS

97 Operations Group

Altus AFB, Oklahoma

Airman Leadership School

Altus AFB, Oklahoma

Airman Leadership School

Andersen AFB, Guam

Airman Leadership School

Andrews AFB, Maryland

Airman Leadership School

Aviano AB, Italy

Airman Leadership School

Barksdale AFB, Louisiana

AF Combat Munitions School

Beale AFB, California

Airman Leadership School

Beale AFB, California

USAF School of Aerospace Medicine

Brooks AFB, Texas

Airman Leadership School

Buckley AFB, Colorado

Airman Leadership School

Cannon AFB, New Mexico

Airman Leadership School

Charleston AFB, South Carolina

Airman Leadership School

Davis-Monthan AFB, Arizona

55 Electronic Combat Group

Davis-Monthan AFB, Arizona

94 Operations Group

Dobbins AFB, Georgia

Airman Leadership School

Dover AFB, Delaware

436 Training Squadron

Dyess AFB, Texas

Airman Leadership School

Dyess AFB, Texas

Airman Leadership School

Edwards AFB, California

Airman Leadership School

Eielson AFB, Alaska

Airman Leadership School

Eglin AFB, Florida

Airman Leadership School

Ellsworth AFB, South Dakota

Airman Leadership School, NCO Academy

Elmendorf AFB, Alaska

ICBM Center of Excellence School

F. E. Warren AFB, Wyoming

Airman Leadership School

F. E. Warren AFB, Wyoming

66 TRS Instructor Training Squadron

Fairchild AFB, Washington

Airman Leadership School

Fairchild AFB, Washington

USAF Expeditionary Center

Fort Dix, New Jersey

211 Engineering Installation Squadron (ANG)

Fort Indiantown Gap, Pennsylvania

Airman Leadership School

Fort Meade, Maryland

882 Training Group

Fort Sam Houston, Texas

AF Office of Special Investigations

Glynco, Georgia

Airman Leadership School

Goodfellow AFB, Texas

17 Training Group

Goodfellow AFB, Texas

Airman Leadership School

Grand Forks AFB, North Dakota

Airman Leadership School

Hanscom AFB, Massachusetts

Airman Leadership School, NCO Academy

Hickam AFB, Hawaii

Airman Leadership School

Hill AFB, Utah

ACC Logistics Support

Hill AFB, Utah

Airman Leadership School

Holloman AFB, New Mexico

39 Information Operations Squadron

Hurlburt Field, Florida

505 Training Squadron

Hurlburt AFB, Florida

AF Special Operations Training Center

Hurlburt AFB, Florida

Airman Leadership School

Hurlburt Field, Florida

USAF Special Operations School

Hurlburt AFB, Florida

Airman Leadership School

Incirlik AB, Turkey

18 Logistics Readiness Squadron

Kadena AB, Okinawa, Japan

Airman Leadership School, NCO Academy

Kadena AB, Okinawa, Japan

NCO Academy

Kapaun AS, Germany

81 Training Group

Keesler AFB, Mississippi

85 Engineering Installation Squadron

Keesler AFB, Mississippi

Airman Leadership School

Keesler AFB, Mississippi

58 Operations Group Special Operations Command

Kirtland AFB, New Mexico

Airman Leadership School

Kirtland AFB, New Mexico

37 Training Group

Lackland AFB, Texas

356 Airlift Squadron

Lackland AFB, Texas

Airman Leadership School

Lackland AFB, Texas

Airman Leadership School

Lajes Field, Portugal

Airman Leadership School

Langley AFB, Virginia

189 Airlift Wing

Little Rock AFB, Arkansas

314 Operations Group

Little Rock AFB, Arkansas

Airman Leadership School

Little Rock AFB, Arkansas

Airman Leadership School

Luke AFB, Arizona

Airman Leadership School

MacDill AFB, Florida

Airman Leadership School

Malmstrom AFB, Montana

AF JAG School

Maxwell AFB, Alabama

Airman Leadership School

Maxwell AFB, Alabama

Ira C. Eaker Center for Enlisted Professional Development

Maxwell AFB, Alabama

Barnes Center for Enlisted Professional Military Education

Maxwell AFB-Gunter Annex, Alabama

Airman Leadership School

McChord AFB, Washington

Airman Leadership School

McConnell AFB, Kansas

I. G. Brown Professional Military Education Center

McGhee Tyson ANGB, Tennessee

AFFILIATED SCHOOLS

305 Operations Group

McGuire AFB, New Jersey

Airman Leadership School

McGuire AFB, New Jersey

Airman Leadership School

Minot AFB, North Dakota

Airman Leadership School

Misawa AB, Japan

Airman Leadership School

Moody AFB, Georgia

Airman Leadership School

Mountain Home AFB, Idaho

105 Airlift Squadron

Nashville ANGB, Tennessee

Airman Leadership School

Nellis AFB, Nevada

Airman Leadership School

Offutt AFB, Nebraska

Airman Leadership School

Patrick AFB, Florida

Airman Leadership School

Peterson AFB, Colorado

107 Air Control Squadron

Phoenix ANGB, Arizona

Airman Leadership School

Pope AFB, North Carolina

Airman Leadership School

RAF Feltwell, United Kingdom

Airman Leadership School

Ramstein AB, Germany

558 Flying Training Squadron

Randolph AFB, Texas

Airman Leadership School

Randolph AFB, Texas

Airman Leadership School

Robins AFB, Georgia

Airman Leadership School

Scott AFB, Illinois

Airman Leadership School

Seymour Johnson AFB, North Carolina

Airman Leadership School

Shaw AFB, South Carolina

82 Training Wing

Sheppard AFB, Texas

Airman Leadership School

Spangdahlem AB, Germany

52 Logistics Readiness Squadron

Spangdahlem AB, Germany

552 Operation Group

Tinker AFB, Oklahoma

Airman Leadership School

Tinker AFB, Oklahoma

60 Operations Group

Travis AFB, California

Airman Leadership School

Travis AFB, California

Airman Leadership School

Tyndall AFB, Florida

381 Training Group

Vandenberg AFB, California

Airman Leadership School

Vandenberg AFB, California

Airman Leadership School

Whiteman AFB, Missouri

Airman Leadership School

Wright-Patterson AFB, Ohio

Airman Leadership School

Yokota AB, Japan

COURSE DESCRIPTIONS



COURSE DESCRIPTIONS ...

This section contains the codes and descriptions of the Community College of the Air Force courses that are segments of Air Force-conducted courses. Courses are identified by seven-character codes; for example, AAS1204. 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. Air University-delivered courses are identified with a four letter course area designation and three digit specific course number. The course descriptions in this section are arranged alphabetically and then numerically with the evaluated alphabetic code.

Community College of the Air Force courses are subject to changes of credit-hour value. 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. Direct your questions regarding courses not listed in this catalog to CCAF/DEA, 100 South Turner Boulevard, Maxwell-Gunter AFB, Alabama 36114-3011. Or call (334) 649-5014 or DSN 749-5014; or fax (334) 649-5101 or DSN 749-5101.

COURSE DESCRIPTIONS

The Code Index

AAS	Aircraft Armament Systems	LEG	Legal Service
ACL	Aircrew Life Support	LMM	Leadership, Management & Military Studies
ACT	Aircrew Technology	LOG	Logistics
ADM	Administration	MAC	Machinist
AFM	Airfield Management	MAP	Mapping
AGE	Aerospace Ground Equipment	MAT	Mathematics
AMT	Aircraft Maintenance Technology	MEA	Measurements
AST	Astronautics	MEC	Mechanical Maintenance
ATC	Air Traffic Control	MED	Medical Assistant
AVI	Avionics	MET	Meteorology
BEE	Bioenvironmental Engineering	MGT	Management & Supervision
BET	Biomedical Equipment Technology	MIL	Military Science
CIV	Civil Engineering	MKS	Marksmanship
CLT	Cardiopulmonary Laboratory Technology	MLT	Medical Laboratory Technology
CLTR	Cultural Studies (Air University)	MPH	Military Public Health
CMR	Computer Maintenance & Repair	MRD	Medical Readiness
COM	Communications	MSL	Missile Maintenance Technology
CON	Contracts	MUN	Munitions
COR	Corrosion Control	NDT	Nondestructive Testing
DAS	Dental Specialist	NMT	Nuclear Medicine Technology
DLT	Dental Laboratory Technology	NUR	Nursing
DMS	Diagnostic Medical Sonography	OCC	Occupational Therapy
DPO	Disaster Preparedness	OLT	Otolaryngology Technology
EDP	Data Systems	OPD	Orthotic Prosthesis Devices
EDT	Education & Training	OPT	Optometric Technology
EEO	Electronic Equipment Operation	PAV	Pavements
ELT	Electronics	PER	Personnel
EMT	Emergency Medical Technology	PHA	Pharmacology
ENM	Environmental Medicine	PHE	Physical Education
ENV	Environmental Science	PHO	Photography
EPP	Electric Power Production	PHY	Applied Physics
EXP	Explosives Handling & Disposal	PLB	Plumbing
FDS	Food Service	PTH	Physical Therapy
FHM	Force Health Management	PTR	Physiological Training
FIN	Finance (Accounting)	QCI	Quality Assurance
FIP	Fire Protection	RAD	Radiologic Technology
FNS	Food & Nutritional Science	REC	Recreation
FSC	Family Support Center	RTB	Radio & Television Broadcasting
FTL	Foreign Technical Language	SAF	Safety
FUS	Fuels	SAN	Sanitation
GEO	Applied Geography	SDI	Special Duty/Reporting Identifier Internship
GPS	Geophysical Sciences	SEC	Security
GRA	Graphics	SOC	Social Services
HAR	Heating, Air-Conditioning & Refrigeration	SOO	Solar Observation
HEO	Heavy Equipment Operation	SUR	Surveying
HIS	Applied History	SVE	Survival Equipment
HIT	Histologic Technology	SVR	Survival & Rescue
HRM	Human Resource Management	SVS	Services
HSA	Health Services Administration	TRN	Transportation
INT	Internship	TVS	Television Systems
ITL	Intelligence	VEM	Vehicle Maintenance
JOU	Journalism	WEL	Welding
LAW	Law Enforcement		

(AAS) AIRCRAFT ARMAMENT SYSTEMS

AAS1201 Aircraft Armament Systems Maintenance

Aircraft armament systems. Includes component functions of nuclear weapons, missiles, rockets, bombs and ammunition with emphasis on explosive safety.

AAS1202 Aircraft Air Munitions Loading and 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 hand tools, and use of applicable handling equipment.

AAS1203 Aerospace Ground Equipment Handling, Support and Maintenance

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

AAS1204 Aircraft Armament Launch Ejection Systems

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

AAS2200 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 hand tools. (May be repeated for credit on various aircraft.)

AAS2201 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.

(ACL) AIRCREW LIFE SUPPORT

ACL1101 Basic Life Support

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

ACL1102 Basic Life-Support Equipment

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

ACL1103 Inspection and Use of Life-Support Equipment

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

ACL1104 Maintenance of Aircrew Night Vision Devices

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

ACL2101 Advanced Life Support

Life-support operations. Includes Air Force occupational safety and health, technical orders, supply, aircrew instructions, supervision, training and life-support systems.

ACL2102 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.

(ACT) AIRCREW TECHNOLOGY

ACT1201 Aircraft Systems Familiarization

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

COURSE DESCRIPTIONS

ACT1202 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.

ACT1203 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.

ACT1205 Introduction to Aircraft

Function and use of aircraft systems for aircrew members. Includes fuel, flight control, communication, pneumatic, engine, electrical, air-conditioning and pressurization, and oxygen systems as well as aircraft ground-handling and servicing procedures.

ACT1206 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.

ACT1207 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.

ACT1210 Aerial Gunner Principles and Procedures

Comprehensive study of airborne weapon systems and aircrew duties related to the aerial gunner. Includes aircraft armament systems operation, servicing and inspection, performance of in-flight maintenance and aircrew functions under training, combat or testing conditions, forecasting

ammunition requirements, and navigation waypoint identification. Strict compliance to flying, weapon and explosive safety standards in all facets of aircrew operations is emphasized. (May be repeated for credit on various aircraft.)

ACT1211 Flight Attendant Principles/Procedures

Performs preflight, through flight and post flight inspections of aircraft emergency, cabin and galley equipment; provides passenger safety and comfort during aircraft operations; validates manifest and supervises loading and off-loading of aircraft passengers and baggage; applies restraint devices to unsecured baggage and equipment; ensures access to escape exits; maintains proficiency in emergency equipment operations, procedures and egress; provides emergency medical assistance; and prepares and checks records and border clearance documents.

ACT2101 Parachuting Jumpmaster

Parachuting techniques as applied to directed and computed airdrop releases. Includes instruction in parachute characteristics and operations, personnel inspection, plotting and spotting techniques, aircraft characteristics and inspection, personal equipment, door bundle rigging, and air operations.

ACT2201 Helicopter Ground Training

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

ACT2202 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.

ACT2204 Flight Engineer Ground Training

Evaluation of aircraft systems operation in both normal and emergency circumstances. Includes fault isolation techniques, operational checks, aircraft operating limitations, weight and balance computations, calculation of minimum airspeed requirements for takeoff and landing, preflight and pre-takeoff checklists and inspections, and airframe aerodynamics.

COURSE DESCRIPTIONS

ACT2205 Flight Engineer Flying Training

Flight instruction on normal and emergency airborne procedures. Includes navigation, aerial cargo delivery, air refueling, search intercept and night flying. Emphasizes weight and balance adjustments, fuel management, monitoring of aircraft instruments, and in-flight normal and emergency procedures.

ACT2207 Flight Engineer Aircraft Systems Familiarization

Location, description, normal and emergency operation; 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, emergency signals and emergency evacuation routes.

ACT2208 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.

ACT2209 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 communications, and emergency procedures.

ACT2213 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 communications and emergency procedures.

ACT2214 Tiltrotor Aircraft Ground Training

Advanced tiltrotor flight performance, system familiarization, and emergency procedures. Includes power plant performance, flight control limitations/operational checks, systems trouble analysis, loading and refueling parameters, weight/balance computations, prediction of takeoff and landing performance, theory of flight, aerodynamics, airspeed measurement, pre-flight/pre-takeoff inspections.

(ADM) ADMINISTRATION

ADM1101 Typing I

Touch typing to include thorough knowledge of keyboard and operation of word processing software. Emphasizes centering, simple tables, business letter, envelopes, rough drafts and manuscripts.

ADM1102 Chapel Management

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

ADM1103 Document and Publications Management

Introduction to the management of publications and documents. Emphasizes the preparation and management of all types of written communication to include proper formatting and routing procedures of official memorandums, letters, and publications. Includes forms development, design, inventory controls, and acquisition.

ADM1104 Administrative Communications

Management of written communications. Includes preparation of official letters, messages and administrative orders as well as suspense control of written communications.

ADM1106 Information Management

Introduction to general administrative support and office management. Includes planning, coordinating, managing, sharing, and controlling data, and the proper flow and management of information in both paper and electronic mediums. Emphasizes content development, e-mail and internet management policies, plans and programs, official correspondence, suspense files, document security, official mail handling, and quality assurance.

ADM1107 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 and inquiries, directory functions, administration of postage accounts, money order services, and postal supplies and equipment.

COURSE DESCRIPTIONS

ADM1108 Introduction to Computer Systems and Network Management

Introduction to computer systems and network management concepts with emphasis on managing local area networks and initial diagnostics of information systems. Client Support Administration responsibilities within the network environment include management of computer hardware and software; installation and configuration of software operating systems and office automation applications, information assurance, development of web pages and management of websites.

ADM1109 Records Management

Management of official records utilizing automated publishing tools to create, maintain, protect, preserve and dispose of records in both paper and electronic mediums. Includes preparation of automated file maintenance and disposition plans; identifying, declaring and protecting vital records, disposition and cutoff procedures.

ADM2106 Advanced Information Management

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

(AFM) AIRFIELD MANAGEMENT

AFM1101 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.

AFM1201 Aviation Resource Management

Introduction to aviation resource management principles. Includes operational scheduling, flight data management, aviation coding, aeronautical orders, incentive pay, flight/physiological training, flight/jump records, aircrew training with associated products, and the computer hardware/software to manage these functions.

AFM2101 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, airfield inspections, and airfield safety.

AFM2201 Advanced Aviation Resource Management

Advanced techniques and procedures of aviation management. Includes information and automated data processing capabilities used to manage and administer aircrew/parachutist training and evaluation, flight scheduling functions, flying safety, qualifications and related functions needed to attain and maintain combat or mission readiness.

(AGE) AEROSPACE GROUND EQUIPMENT

AGE1101 Aerospace Ground Equipment Familiarization

Theory of operation and minor maintenance of ground support equipment. Includes service inspection, preoperational inspection, forms review and annotation.

AGE1102 Auxiliary Aerospace Ground Support Equipment

Inspection, maintenance, and repair of both powered and non-powered aircraft support equipment. Includes fault isolation; hydraulic, electrical, and pneumatic schematics; maintenance stands; mobile work platforms; jacks and testers; oil and hydraulic servicing carts; liquid nitrogen and oxygen cart chassis maintenance; air cycle machines; tank dollies; tow bars; cowlings trailers; seat removal cranes; and fuel reclamation units.

AGE1103 Aerospace Ground Equipment Generator Sets

Familiarization, fault isolation procedures and maintenance of generator sets. Includes components, electrical systems, scheduled inspections and load bank testing.

AGE1104 Introduction to Hydraulic Test Stands

Theory of operation and maintenance of ground support hydraulic test stands used to operate aircraft hydraulic systems; interpretation and use of hydraulic, and electrical schematics and diagrams; operation, fault-isolation procedures, inspection, bleeding, testing, prime mover repair, adjustment, and repair of both high- and low-pressure hydraulic system components; and use of hydraulic fluid testing equipment.

COURSE DESCRIPTIONS

AGE1105 Air Compressors

Theory of operation and maintenance of rotary and reciprocating air compressors; interpretation and use of airflow and electrical schematics and diagrams; operation, fault-isolation procedures, inspection, testing, prime mover repair, adjustment, and repair of both high- and low-pressure system components; and use of hydrostatic test equipment.

AGE1106 Bomb-Lift Equipment

Systems and components used in bomb lifts and munitions handling trailers. Includes performance of operational checks, inspections, load testing, fault-isolation, and maintenance of hydraulic, electrical and mechanical subsystems.

AGE1107 Diesel Engine Maintenance

Operating characteristics and malfunction analysis of diesel engines; fuel system components; governing, cooling, and lubricating systems; and associated power plant accessories.

AGE1108 Basic Ground Support Equipment Electricity and Electronics

Basic electricity fundamentals; Ohm's law, series, parallel, and series parallel circuits; inductive and capacitive circuits, transformers, principles of single- and three phase- motors and motor controls, resonance, and filters. Includes circuit analysis using electronic test equipment.

AGE1109 Gas Turbine Engines

Theory of operation and maintenance of gas turbine engines; interpretation and use of airflow, electrical, lubrication, fuel, and pneumatic schematics; operation; inspection; fault-isolation procedures; repair and testing of components; pneumatic load testing; and remote control use of pneumatic analyzers.

AGE1110 Introduction to Ground Heaters

Theory of operation and maintenance of diesel and electric ground support heaters; interpretation and use of electrical, lubrication and airflow diagrams and schematics; and operation, inspection, carbon monoxide testing and fault-isolation procedures.

AGE1111 Introduction to Ground Support Air-Conditioners

Theory of operation and maintenance of specific diesel and electric ground support air conditioners;

interpretation and use of airflow, refrigerant, fuel, lubrication, and electrical schematics and diagrams; operation; inspection; fault-isolation procedures; and repair and testing of components. Includes removal, evacuation and charging of refrigerant.

AGE2101 Advanced Hydraulic Test Stands

Application of advanced principles, theory, and operation of specific ground support hydraulic test stands used to operate aircraft hydraulic systems. Interpretation and use of hydraulic, fuel, lubrication, and electrical schematics and diagrams; operation; inspection; fault-isolation procedures; repair and testing of components. Emphasis placed on electrical, hydraulic, and prime mover operating theories and advanced trouble-shooting.

AGE2103 Advance Ground Support Air Conditioner Maintenance

Application of advanced principles, theory and operation of ground support air conditioners. Emphasis on fault-isolation of electrical, engine, refrigerant, fuel, lubrication and compressor systems.

(AMT) AIRCRAFT MAINTENANCE TECHNOLOGY

AMT1104 Introduction to Aircraft and System Components

Introduction to aircraft specifications, functions, system and component locations; basic knowledge and orientation of aircraft systems; and operational theory, inspection, and maintenance of landing gear, brake, flight control, pneumatic, hydraulic, oxygen, air-conditioning, pressurization, instrument, and fuel systems. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1105 Aircraft Maintenance Fundamentals

Basic aircraft systems theory and operation principles, operation and care of ground support equipment, aircraft familiarization, maintenance documentation, maintenance safety precautions, and technical manual usage. Includes identification, selection, use and care of common hand tools, torque wrench procedures, and safety wiring. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1106 Aircraft Familiarization and Flight-Line Operations

Introduction to aircraft ground operation hazards, movement, associated flight line safety procedures, weight and balance, aerodynamics, regulations,

COURSE DESCRIPTIONS

hardware, aircraft servicing and inspection concepts. Includes principles of corrosion control. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course)

AMT1107 Air Force Technical Manuals

Air Force technical order system, aircraft technical manuals, job guides, and fault isolation manuals for aircraft systems and components. Includes servicing, inspections, removal, repair, replacement, overhaul instructions, and interpretation of schematics and wiring diagrams. (May be repeated for credit on various aircraft.)

AMT1108 Air Force Technical Order System Management

Introduction to managing Air Force Technical Order System accounts and how to post changes, revisions, and rescissions to maintain current and accurate technical order libraries. Includes automated systems management and documentation required for performing account custodial duties.

AMT1110 Transport Aircraft Cargo Configuration

Theory of operation of aircraft configuration systems. Includes hands-on instruction for configuring aircraft for aeromedical litter support, container delivery, aerial delivery, troop drop and logistics pallets.

AMT1114 Aircrew Egress Systems Fundamentals

An introduction to aircrew egress systems. Includes operational theory, maintenance, and ground safety procedures; use of ground support equipment, hand tools, aircraft hardware, and safety devices; principles and operation of ballistic and non-ballistic aircraft escape system components; and handling, storage and care of explosive components. (May be repeated for credit on various aircraft.)

AMT1115 Aircrew Egress Systems Maintenance

Application of theory in removal, replacement, adjustment, and rigging of ballistic and non-ballistic aircraft canopy and ejection seat components for basic, dual, and multi-crew module escape systems. Includes inspection, repair, corrosion control, operational checks, fault isolation procedures, and basic, intermediate and advanced aircraft escape systems. (May be repeated for credit on various aircraft.)

AMT1121 Aircraft Electrical Fundamentals

Fundamentals of electricity, electrical circuitry, and system components related to aircraft maintenance specialist. Principles, theories, and concepts of alternating and direct current. Includes magnetism, electrical terms, symbols, circuit construction, wire maintenance, Ohm's law, electrical measuring equipment, interpreting electrical schematics, and nickel cadmium and lead acid battery fundamentals. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1122 Aircraft Environmental Systems Maintenance

Aircraft cabin pressurization and air conditioning systems. Includes an overview of theory of operation, repair of system components, operational checks, servicing procedures, fault isolation, cabin leakage checks, bench testing, and calibration of components; and inspection and maintenance of cabin pressure regulators, heat exchangers, flow control valves, temperature regulators, electronic temperature control units, distribution ducting and water separators. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program course applicable.)

AMT1123 Aircraft Electrical Systems Maintenance

Introduction to aircraft electrical systems, and the application of direct and alternating current generation and distribution systems for specific aircraft. Includes familiarization, inspection, operational checks on generators, transformers, rectifiers, inverters, control panels, frequency sensing relays, distribution busses, normal and emergency lighting, and aircraft subsystem electrical components. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1124 Aircraft Control and Warning Systems

Analysis of aircraft and engine control and warning systems principles. Includes fire-detection and overheat systems, antiskid normal/emergency braking system, landing gear warning system, takeoff warning system, master warning and caution panel, interior and exterior lighting systems, touchdown relays and weight on wheels switches, thunderstorm lighting, anti-collision lighting, starting and ignition systems, and other control and warning systems inspection procedures, preventive maintenance and fault isolation are also covered. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

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AMT1131 Aircraft Hydraulic System Fundamentals

Comprehensive study of hydraulic and pneumatic theory, operation, and maintenance. Includes power, landing gear, brake, anti-skid, steering, flight control, and other hydraulic systems and components; normal and emergency operations, inspection, and servicing procedures; repair, removal, and installation of components; adjustments and operational checkout procedures; and use of schematic diagrams. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1132 Aircraft Hydraulic Systems Maintenance

Intermediate-level maintenance for hydraulic component repair. Includes construction features, purpose, theory of operation, disassembly, inspection, repair, and reassembly of hydraulic pumps, pressure regulators, valves, reservoirs, accumulators, actuators, brake assemblies, shock struts, steering control units and other aircraft pneumatic system components; ultrasonic cleaning of system filters; use of bench test stands; and hose fabrication. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1141 Aircraft Fuel Systems Fundamentals

Operational theory, functions, and maintenance of aircraft fuel systems. Includes engine feed and cross feed, transfer, defueling, dump, scavenge, in-flight refueling, quantity indication, and vent pressurization systems. Emphasizes maintenance procedures with safety precautions and human factors. (May be repeated on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1142 Aircraft Fuel Systems Maintenance

Comprehensive study of integral, bladder, and externally mounted fuel tank systems and maintenance procedures. Includes use of special tools and equipment, selection of appropriate aircraft hardware; use of manufacturer's technical manuals; fault isolation; component removal, repair, and installation; tank entry procedures; leak detection; corrosion control; selection and application of sealants; and fuel cell testing. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1151 Helicopter Maintenance Fundamentals

An introduction to helicopter airframe, systems, engines, and flight-line maintenance procedures. Includes basic practices, tools, ground handling, equipment, inspections, troubleshooting, and removal and replacement of components; landing gear, electrical, fuels, utility, hydraulics, and flight controls systems; and transmission and main and tail rotor. (May be repeated for credit on various aircraft - AF Air Force Airframe & Powerplant Program applicable course.)

AMT1152 Helicopter Semirigid Flight Controls

Identification, purpose, and theory of operation of helicopter flight controls, semirigid rotor systems, and system components; and procedures and techniques with practical experience used in rigging, adjusting, removing, repairing, replacing, servicing and balancing flight control system components. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1154 Helicopter Flight-Line Maintenance

Comprehensive study of helicopter flight-line maintenance procedures, operations, and safety practices. Includes ground safety devices, servicing of aircraft systems, aircraft launch and recovery, towing and jacking, performance of scheduled inspections, and system operational checks. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1161 Turbine Engine Theory and Principles

Basic engine theory of operation, system integration, construction breakdown, and aircraft and engine specific features; use of tools and maintenance materials to include common hand tools, torque wrenches and micrometers; identification of aircraft hardware, lock-wiring techniques and safety devices; identifies purpose and locations of engine main bearings, seals, and major internal components of the engine; and removal and replacement of components and servicing. (May be repeated for credit on various engines - Air Force Airframe & Powerplant Program applicable course.)

AMT1162 Turbine Engine Inspection and Repair

Turbofan and turbojet construction, inspection, fault isolation, and repair of ignition, lubrication, fuel, starter, compressor bleed, and pneumatic systems; engine removal and installation; conditioning and servicing of installed engines; spectrometric oil sampling; disassembly inspection, repair, and

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reassembly of powerplant and accessories; and preservation for storage. (May be repeated for credit on various engines - Air Force Airframe & Powerplant Program applicable course.)

AMT1163 Aircraft Engine Operation

Detailed aircraft engine operation under normal and emergency operating procedures. Includes safety precautions, pre-run checks, post-run inspections, engine limitations using weapon system trainers and simulators; and operational checkouts of installed aircraft engines. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1164 Turbine Engine Blade Blending

Engine blade blending procedures according to aircraft and engine technical manuals. Emphasizes student knowledge and performance of proper tool usage and blending techniques. (May be repeated for credit on various engines - Air Force Airframe & Powerplant Program applicable course.)

AMT1165 Auxiliary Power Unit Systems

Theory of operation of gas turbine compressor power (GTCP) auxiliary power systems. Includes removal and replacement of engines and sub-systems and troubleshooting and fault isolation using multi-meters and other supporting equipment. Emphasizes normal and emergency operation of the GTCP system and subsystems, technical data, and safety precautions; and removal and installation of engines from shipping containers with preservation and non-preservation fluids. (May be repeated for credit on various power units - Air Force Airframe & Powerplant Program applicable course.)

AMT1166 Helicopter Engine and Transmission Maintenance

Theory of operation, purpose, and maintenance of turbine engines, semi-rigid helicopter rotors, and fully articulated rotor transmission and drive systems and components. Emphasizes performance assessments for removal and replacement of engines, rotor heads, main gearboxes, and selected components; servicing procedures; rigging of engine controls; final adjustments; performance checks; and fault reporting. (May be repeated for credit on various helicopter engine courses - Air Force Airframe & Powerplant Program applicable course.)

AMT1167 Aircraft Throttle Rigging

Fundamentals of throttle control rigging, cable installation and adjustment, system maintenance, and alignment. Includes corrosion control and treatment, evaluation of engine system components, operational checks, fault isolation, and repair; use of special tools and support equipment; application of safety; and use of manufacturer's technical manuals. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1168 Aircraft Engine Flight-Line Maintenance

Advanced theory of operation of the turbine engine and function of engine components. Includes fault isolation, overhaul, and testing procedures with hands-on disassembly, inspection, repair, reassembly and operational checkout of engines and accessories; and rigging and adjustment of fuel, oil, electrical, and propeller systems performed on operational aircraft engines. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1170 Aircraft Propeller Inspection and Repair

Theory, operation and control of aircraft propellers and related systems. Includes inspection, removal, replacement, repair, and maintenance of propeller systems. Provides practical experience in balancing of blades, hubs and testing and operational checks of hydraulic and electrical standard propellers. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1181 Aircraft Structural Maintenance Fundamentals

Airframe structures, sheet metal composition and identification, rivet composition and identification, hand tools, technical orders, drafting, interpreting technical drawings, flat pattern and metal layouts, and shop mathematics. Emphasizes fabrication techniques to include machine setup and operation, powered and non-powered bending, radius bends, hand and machine forming, hand and pneumatic riveting, hand and pneumatic drilling, dimpling, and countersinking, and personal, work center, and chemical safety standards and applications. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1182 Fundamentals of Low-Observable and Stealth Aircraft

Introduction to the history, principles, and theory of low-observable and Stealth aircraft design. Includes

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radar imagery, radar cross-section theory, radar signatures, radar signature reduction techniques and other related advanced stealth technology issues. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1183 Aircraft Specialized Structural Repair

Technical information for sheet metal repairs to include flush, non-flush and substructural aircraft damage restoration. Emphasizes special fastener identification, composition, installation, and removal; cable identification, composition and manufacturing; aircraft tubing identification, composition and manufacturing; and control surface balancing techniques and procedures. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1191 Aircraft Phased Inspections

Concepts and application of the phase inspection, techniques used to perform scheduled aircraft inspections, and the maintenance procedures. Includes use of inspection work cards, maintenance manuals, drawings, wiring schematics, special test and diagnostic equipment, lubrication equipment, safety precautions, assembly and rigging various aircraft systems, and maintenance records and forms documentation procedures. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT1195 Preflight and Postflight Inspections

Aircraft preflight, post-flight and between flight inspections. Includes ground handling, aircraft launch and recovery procedures, safety, aircraft airworthiness inspection, engine inlet and exhaust inspection and servicing, proper use of inspection work cards, technical publications, and documentation of maintenance and inspections on aircraft forms. (May be used for credit on various aircraft - Air Force Airframe & Powerplant Program applicable.)

AMT2117 Advanced Aircrew Egress Systems Maintenance

Comprehensive study of advanced aircrew egress systems theory and maintenance procedures. Includes component location, removal, replacement, rigging, adjustment, repair, inspection, and fault isolation procedures. (May be repeated for credit on various aircraft.)

AMT2121 Advanced Aircraft Environmental Systems Maintenance

Advanced study of aircraft environmental systems theory for specific aircraft and associated equipment. Emphasis on component location, fault isolation, servicing, repairing, testing, and inspecting aircraft environmental systems. Includes bleed air manifold distribution, cabin pressurization, air-conditioning, under floor heat, gaseous and liquid oxygen systems, neo-electro static applications, anti-ice systems, and fire-extinguishing systems. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program course applicable.)

AMT2122 Advanced Aircraft Electrical Systems Maintenance

Advanced aircraft electrical systems theory and operation of associated test equipment. Includes generation and distribution of alternating and direct current and primary, secondary, and emergency electrical systems. Emphasizes circuit analysis, wire maintenance, fault-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 - Air Force Airframe & Powerplant Program applicable course.)

AMT2131 Advanced Aircraft Hydraulic Systems

Advanced principles and design of specific aircraft hydraulic systems. Includes application of principles to determine functions and interrelationships of components using electrical and hydraulic schematics, fault isolation, and practice in removing, installing, repairing, servicing, adjusting, inspecting and modifying aircraft hydraulic systems. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2132 In-flight Refueling Systems Maintenance

Advanced maintenance procedures for removal, installation, rigging, and adjustment of in-flight refueling boom and receptacles and associated equipment. Includes system operational checkout and fault isolation procedures. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2141 Advanced Aircraft Fuel Systems Maintenance

In-depth maintenance procedures and configuration of integral, bladder, auxiliary and externally mounted fuel systems. Includes fault isolation, leak source and path analysis, corrosion prevention, sealant preparation and application, repair and maintenance

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procedures, operational checkout, inspection, and storage; and engine feed, fuel transfer, scavenge, refuel, defuel, dump, vent, pressurization, fuel indication and in-flight refueling systems. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2151 Advanced Helicopter Airframe and Systems Maintenance

Advanced theory of operation, component identification, 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 troubleshooting, replacement, and rigging of flight controls; repair of landing gear systems; and scheduled inspections. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2161 Advanced Turbine Engine Maintenance

Advanced turbine engine theory and operational maintenance. Includes engine removal and replacement, related aircraft systems operation and fault isolation, testing and adjustment, repair of installed and un-installed engines; hands-on evaluations pertaining to disassembly, reassembly, inspection, preservation and depreservation; corrosion identification and control and flight-line and shop engine support equipment, engine trimming and trending diagnostics. (May be repeated for credit on various engines - Air Force Airframe & Powerplant Program applicable course.)

AMT2162 Turbine Engine Fiber-optic Borescope

Fiber-optic borescoping. Includes use, handling, and storage of Olympus, General Electric, or other flexible and rigid digital borescoping devices; inspections on engine sections and modules to include fan section, core section, turbine section, and combustion chamber. Emphasizes performance on rigid and flexible borescope inspections as intended for flight line or shop maintenance. (May be repeated for credit on various engines - Air Force Airframe & Powerplant Program applicable course.)

AMT2163 Turbine Engine Test Cell Maintenance

Advanced operator maintenance and preparation of engines for testing. Includes prestart checks; engine operation; and fault isolation using vibration, temperature, and pressure data to determine serviceability or isolate engine problems; and service adjustments and use of portable and semi-portable engine test facilities. (May be repeated for credit on various pieces of equipment - Air Force Airframe & Powerplant Program applicable course.)

AMT2164 Aircraft Turbine Engine Accident and Incident Analysis

Turbine engine construction and design differences required for accident and incident investigation and analysis of engine accessory failures. Includes fuel and oil system contamination, compressor and turbine section damage and failure, material failure, accident cause factors, identification and analysis of compressor, turbine, and bearing failures, identification of in-flight and post-impact fires, and estimation of engine power at impact. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2165 Turbine Engine Starting and Secondary Power Subsystems

Advanced maintenance and fault isolation of various engine-starting systems. Includes analysis of the jet fuel starter, central gearbox, accessory drive gearbox and the airframe mounted accessory drive; starter and accessory drive electrical systems; servicing of the major components; and use of test equipment to isolate and correct system malfunctions. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program.)

AMT2182 Advanced Aircraft Composite Repair

Advanced composites to include cutting, trimming, drilling, countersinking, liquid shimming and installation of advanced composite structures. Emphasizes advanced training in aramid fiber and graphite structures, skin and core repairs, advanced composite repairs, and in-shop safety procedures; and visual inspection methods and tap testing, damage evaluation and classification, moisture removal, and programmable hot bond curing equipment. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

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AMT2183 Assessment and Maintenance of Radar Absorbing Materials

Concepts, principles, and procedures for maintenance of aircraft radar absorbing materials. Includes inspection procedures and techniques, damage limitations, and removal and installation of materials. (May be repeated for credit on various aircraft--Air Force Airframe & Powerplant Program.)

AMT2184 Assessment and Maintenance of Low Observable Material

Concepts, principles, and procedures for maintenance of aircraft low observable materials. Includes inspection procedures and techniques, damage limitations, and removal and installation of materials. (May be repeated for credit on various aircraft.)

AMT2191 Intermediate Aircraft Maintenance

Advanced maintenance procedures and systems operational theory. Includes removal, replacement, repair, rigging, and operational checkout of airframe accessories, primary and secondary flight controls, landing gear, throttle, canopy, and other related systems; use of special tools and test and diagnostic equipment; and systematic use of maintenance manuals, drawings, and wiring schematics during fault isolation, inspection, and aircraft modification. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2192 Aircraft Weight and Balance - General

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; weight and balance computations and algebraic formulas; methods, procedures, equipment, and safety precautions required for weighing aircraft to determine center of gravity location; and loading calculations using manufacturer's loading charts, load adjuster slide rules, and scientific calculators. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2195 Advanced Aircraft Maintenance

Advanced aircraft systems operation theory and maintenance procedures. Includes system operation analysis, use of wiring diagrams,

engineering drawings, manufacturer's maintenance manuals, and special tools and equipment; rigging techniques and operational checkout of flight controls, landing gear, powerplant, hydraulic, electrical, environmental and airframe systems components; ground handling; fault isolation; and inspection concepts to ensure aircraft safety and airworthiness. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2198 Canopy Rigging

Advanced study and practice of removing, installing, and adjusting jettison aircraft canopies. Includes egress system safety precautions, use of maintenance safety devices, and system operational checks. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2199 Aircraft Landing Gear and Door Rigging

Advanced procedures for fault isolation, adjustment, and operational checkout of aircraft landing gear and door sequencing systems; and use of special tools and equipment. Emphasizes adherence to technical data and instructions provided in maintenance manuals. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program.)

AMT2210 Advance 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.)

AMT2219 Aircraft Flight Control Systems Maintenance

Advanced maintenance and operation of primary and secondary flight control systems. Includes operational checks, rigging and adjustment and hydraulic power systems of primary flight control systems for ailerons, rudders, stabilators and elevators and secondary flight control systems for flaps, slats and speed-brakes. (May be repeated for credit on various aircraft - AF A&P program applicable course.)

AMT2220 Aircraft Transition Training and Familiarization

Airframe transition training for skilled aircraft maintenance technicians converting from one aircraft

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to another. Includes general aircraft egress and/or ejection safety procedures, aircraft safe for maintenance identification, specific airframe engine, electrical, pneudraulic, environmental control, fuel, and related systems. (May be repeated for credit on various aircraft - Air Force Airframe & Powerplant Program applicable course.)

AMT2228 Advanced Aircraft Fault Isolation

Advanced procedures and techniques used for fault isolation in aircraft malfunction situations. Includes aircraft technical data, fault isolation charts, and reading and interpretation of aircraft wiring diagrams and system schematics. (May be repeated for credit on various aircraft - AF A&P program applicable course.)

AMT2236 Advanced Aircraft Maintenance Laboratory

Maintenance procedures and systems theory as applied to specific aircraft. Includes systems 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 as necessary. 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.

AMT2297 Aviation Quality Assurance

Advanced quality assurance procedures used to detect and analyze maintenance management deficiencies, determine causes, and recommend corrective action; and develop skills to evaluate maintenance activities and personnel to ensure safety procedures are observed and maintenance practices meet the highest standards. Includes written policies, managerial communications, directives and technical manuals, evaluation processes, inspection categories, deficiency analysis, management of aircraft weight and balance programs, administration of product quality deficiency reports and research and investigation of component failures and manufacturer defects.

AMT2298 Aviation Maintenance Supervisor

Aircraft maintenance management programs, policies and procedures for the first-line maintenance supervisors. Includes supervisory principles, aircraft safety, corrosion control, ground

servicing procedures, engine operation, operational checkouts, fault isolation, ground handling procedures, inspection concepts, and flight safety. (May be repeated for credit on various aircraft.)

AMT2299 Advanced Aviation Maintenance Management

Aviation maintenance organizational structure. Includes concepts of production management, resources management, quality control and assurance, labor hour and cost accounting, material deficiency and product quality deficiency reporting, training documentation, and Core Automated Maintenance Systems.

AMT2301 Aviation Production Superintendent

Advanced aircraft maintenance management and flight-line operation procedures. Includes establishing maintenance priorities, directing maintenance actions, and developing monthly and weekly maintenance plans; cannibalization procedures and supply system management; disaster preparedness, exercise scenarios, emergency war order and contingency planning; and determining and reporting aircraft mission capability and airworthiness status.

(AST) ASTRONAUTICS

AST2402 Introduction to Space Systems

Space systems and mechanics and defense and satellite systems. Includes launching fundamentals, identifying orbital parameters, and understanding applicable technical language and space-tracking detection systems.

AST2404 Space Systems Operations

Discussion of the various space operations which relate to space surveillance and missile warning. Emphasis is on console operator duties and responsibilities, to include a review of alert systems, cryptographic publications, systems operability, and emergency procedures.

AST2405 Space Systems Event Processing

Discussion of procedures involved in performing attack warning and space track event processing, with emphasis on security objectives and the application of strategic nuclear forces in sustaining these objectives. Includes the development of U.S. doctrine and policy, and the foreign threat doctrine.

AST2406 Satellite Systems Operations

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

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control operations, duty positions, and crew procedures.

(ATC) AIR TRAFFIC CONTROL

ATC1403 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 an unsecured tower communication system.

ATC1405 Air Traffic Control Non-radar Procedures

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

ATC1406 Air Traffic Control Radar Procedures

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

ATC1408 Air Traffic Control Fundamentals

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

ATC2405 Airspace Management

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

ATC2407 Terminal Instrument Procedures

Development of terminal instrument procedures. Includes applications of trigonometry and analytic geometry, elements of airspace design and utilization, non-precision approach and radar procedures, textual development, administrative

techniques and planning criteria for airspace area design and utilization.

ATC2408 Air Traffic Control Facility Management

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

ATC2409 Tactical Air Command and Control Management

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

(AVI) AVIONICS

AVI1705 Automatic Flight Control Systems Theory

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

AVI1706 Automatic Flight Control Systems Maintenance

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

AVI1707 Fundamentals of Avionic Systems

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

AVI1708 Engine Instrument Maintenance

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

AVI1709 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.

AVI1710 Flight Instrument Maintenance

Operation, analysis, and maintenance of pitot-static and vertical scale indicating systems, mechanical airspeed indicators, altimeters, air data computers,

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computer modules, sensors, and automatic attitude reporting systems.

AVI1717 Avionic Maintenance Management

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

AVI1726 Avionic Manual Test Station Operation

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

AVI1729 Integrated Avionic Systems Theory

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

AVI1730 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.

AVI1731 Avionic Radar Systems Theory

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

AVI1732 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.

AVI1733 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.

AVI1734 Optical Sighting Systems

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

AVI1735 Avionic Radar Navigation Systems Theory

Inertial navigation systems theory and detailed circuit analysis of stable platforms and computers.

Includes integrators, accelerometers, gyroscopes, and resolvers.

AVI1736 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.

AVI1737 Avionic Terrain-Following Radar

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

AVI1738 Electronic Warfare Systems Theory

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

AVI1739 Basic Electronic Warfare Systems Maintenance Laboratory

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

AVI1740 Electronic Warfare Systems Maintenance Laboratory

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

AVI1741 Automatic Test Station Operation

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

AVI1742 Automatic Test Station Maintenance

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

AVI1743 Avionic Inertial Navigation Systems Theory

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

AVI1744 Avionic Inertial Navigation Systems Maintenance

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

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AVI1746 Avionic Sensor Systems Laboratory

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

AVI1747 Infrared Sensors Theory

Principles, characteristics, and functional analysis. Emphasizes circuit analysis using wiring diagrams and logic symbols.

AVI1748 Infrared Sensors Maintenance

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

AVI1754 Avionic Radio Communications Systems Theory

Operational characteristics of avionic communication equipment. Includes use of schematic diagrams, data flow, and detailed circuit analysis of receiver and transmitter systems.

AVI1755 Avionic Radio Communications Systems Laboratory

Operational testing, adjustment, inspection, malfunction analysis and maintenance of avionics communication equipment.

AVI1756 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.

AVI1757 Avionic Radio Navigation Systems Laboratory

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

AVI1759 Airborne Warning and Control System Familiarization

Introduction to Airborne Warning and Control Systems. Includes power distribution, cooling systems, and use of safety and security procedures and technical publications.

AVI1760 Intercommunication System

Operating characteristics, circuit analysis, and troubleshooting procedures of typical aircraft intercommunication system. Includes block diagram and detailed circuit analysis.

AVI1761 Global Positioning Systems (GPS) Navigation Theory

Operational characteristics of avionic Global Positioning Systems (GPS) navigation equipment. Includes use of schematic diagrams, data flow and detailed circuit analysis.

AVI2204 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.

AVI2251 Identification Equipment

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

AVI2715 Flight Director System

Maintenance and troubleshooting of the flight director system. Includes operational theory, circuit analysis, use of associated test equipment, service inspections, malfunction detection and isolation, and repair of system components.

AVI2716 Avionic Systems Laboratory

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

AVI2718 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.

AVI2719 Avionic Search Radar

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

AVI2722 Electronic Countermeasures

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

AVI2725 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

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operational checkout, alignment, troubleshooting and repair of electro-optical viewing system using specialized and standard test equipment.

AVI2728 Data Display Systems

Circuit analysis through use of logic symbols and schematics. Includes troubleshooting and bench checks.

AVI2729 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.

AVI2730 Advanced Avionic Systems

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

AVI2732 Airborne Command Post Communication Systems

Advanced theory and operation of satellite communication systems. Includes data flow, circuit and systems analyses.

(BEE) BIOENVIRONMENTAL ENGINEERING

BEE1301 Introduction to Bioenvironmental Sciences

Application of mathematics, physical and biological principles to personal protection. Includes measurement of illumination and ionizing and non-ionizing radiation.

BEE1302 Bioenvironmental Protection

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

BEE1303 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.

BEE1304 Water Systems Management

Collection and chemical testing of water samples, monitoring of water treatment facilities, and preparing reports with recommendations to prevent contamination.

BEE1305 Waste Management

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

BEE2101 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.

BEE2102 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.

BEE2319 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.

BEE2320 Ionizing Radiation Management

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

BEE2321 Advanced Bioenvironmental Measurements

Extensive fieldwork in industrial hygiene, radiation and environmental quality is conducted. Field methods include chemical and physical hazards along with other environmental programs.

**(BET) BIOMEDICAL EQUIPMENT
TECHNOLOGY****BET1101 Introduction to Biomedical Equipment
Technology**

Introduction to role and responsibilities, safety and hazards associated with biomedical equipment maintenance. Includes manufacturer's specifications, pneudraulics and refrigeration principles, hand tools, soldering techniques; and the troubleshooting and repair of biomedical equipment.

BET1102 Introduction to Medical Equipment

Familiarization with maintenance and operation of medical equipment. Demonstration of proficiency with infusion pumps, hypo and hyperthermia units, infant incubators, and audiometers in a performance lab. Principles of safety, anatomy and physiology, and clinical applications are introduced.

BET1103 Physiological Monitoring Equipment

Familiarization with maintenance and operation of physiological monitoring equipment. Demonstration of proficiency with pulse oximeters, central patient monitoring systems, telemetry monitoring systems, diagnostic ultrasound doppler units, electrocardiograph units, defibrillators, fetal heart monitors, and invasive/non-invasive blood pressure monitors in a performance lab. Principles of safety, anatomy and physiology, and clinical applications are introduced.

BET1104 Medical Support Equipment

Familiarization with maintenance and operation of medical support equipment. Demonstration of proficiency with fume and laminar flow hoods, blood cell washing systems, electrolyte analyzers, electronic particle counters, chemical automixers, blood gas analyzers, blood/fluid warmers, chemistry analyzers, and centrifuges in a performance lab. Principles of safety, refrigeration, anatomy and physiology, and clinical applications are introduced.

BET1105 Surgical Equipment

Familiarization with maintenance and operation of surgical equipment. Demonstration of proficiency with respiration monitors, pulmonary function analyzers, volume/pressure and high frequency ventilators, electrosurgical units, and anesthesia units in a performance lab. Principles of safety,

anatomy and physiology, and clinical applications are introduced.

BET1106 Field Equipment Systems

Familiarization with maintenance and operation of field equipment systems. Demonstration of proficiency with generators, field power distribution systems, expandable shelter systems, environmental control systems, oxygen storage and generation systems, field lighting systems, tactical shelters, field communications equipment, and water recovery systems in a performance lab. Principles of safety and testing procedures are introduced.

BET1201 Dental and Sterilizer Systems

Principles of operating procedures, characteristics and internal circuitry of clinical and operatory dental equipment, sterilization equipment and systems, ultrasonic cleaners, plumbing and medical gas and vacuum systems. Includes technical analysis of corrective maintenance, preventive maintenance and calibration.

BET1203 Respiratory Equipment

Introduction to volume and pressure ventilators, pulse oximeters, pulmonary function analyzers, anesthesia systems and anesthesia and pulmonary gas analyzers. Includes equipment operations theory, calibration, repair, clinical and /practical applications, external operation, and internal electronic circuitry.

BET1204 Cardiographic Diagnostic Equipment

Operation and maintenance of multichannel electrocardiographs, fetal heart monitors, defibrillators, blood pressure monitors and physiological monitors. Includes equipment operation theory, clinical and practical applications, related physiology, calibration, repair, external operation and internal electronic circuitry.

BET1205 Clinical Laboratory Systems

Operation and maintenance of optics, electrolyte, blood gas and chemistry analyzers, blood cell counters, laboratory centrifuges water purification, tissue processors and microscopes. Includes clinical and practical applications, equipment operations theory, related physiology, calibration, repair, external and internal electronic circuitry.

BET1206 Introduction to Diagnostic Imaging

Principles of diagnostic imaging, ionizing radiation, X-ray production and generation and radiation physics. Includes equipment operation theory and safety, clinical and practical applications, related physiology,

COURSE DESCRIPTIONS

calibration, repair, external operation, internal electronic circuitry of mobile radiographic systems, film processor systems, dental laser and filmless imaging systems.

BET2201 Intermediate Diagnostic Imaging

Equipment operation theory for the maintenance of mobile fluoroscopic systems, fixed imaging systems and high-frequency imaging systems. Includes related physiology, practical and clinical application, calibration, repair, external operation and internal electronic circuitry.

BET2202 Biomedical Equipment Practicum

General maintenance practices and associated duties of a biomedical equipment repair shop. Includes troubleshooting, isolation and repair, or replacement of defective components, modules and circuit boards according to manufacturer's specifications; and identifying facts and statements concerning clinical applications, related physiology and complete specific maintenance tasks on a wide variety of medical systems and units.

BET2322 X-ray System Technology

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

BET2401 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.

BET2402 Advanced Field Medical Support Systems

Emergency shelter preparation and power generation. Includes diesel generator units and field electrical systems. Emphasis on lighting, environmental control, and X-ray systems.

BET2404 Computer-Based Medical Systems

Conceptual and practical applications for advanced computer-based medical systems. Includes peripherals, networks, and microprocessors.

BET2405 Telemedicine

Clinical applications, functions and benefits of a picture-archiving and communication system.

Includes systems operations, preventive maintenance, inspection, calibration, troubleshooting and repair of hardware and software related to a variety of telemedicine computer operating systems.

BET2406 Advanced Diagnostic Imaging Systems

Advanced clinical and practical applications, related physiology, modalities, equipment operations theory, calibration, circuit analysis, troubleshooting and repair of advanced diagnostic imaging medical systems. Includes radiographic and fluoroscopic imaging systems, mammography and ultrasound systems.

BET2407 Advanced Medical Systems

Advanced clinical and practical applications, laser physics, related physiology, modalities, equipment operation theory, calibration, circuit analysis, troubleshooting, safety precautions and repair of advanced medical and laser systems.

BET2408 Advanced Medical Laboratory Systems

Advanced laboratory anatomy and physiology, clinical and practical applications, modalities, equipment operation, calibration, circuit analysis, troubleshooting and repair of medical laboratory systems. Includes general clinical laboratory equipment, blood gas analyzers, cell washers, hematology analyzers and plasma sterilizers.

BET2409 Tomography System Clinical Applications

Advanced clinical and practical applications for computed tomography systems. Includes clinical applications, equipment theory of operation and circuit analysis, calibration, preventive maintenance, and safe operating procedures for plasma sterilizer systems.

(CIV) CIVIL ENGINEERING

CIV1101 Civil Engineering Organization and Work Force Management

Functional responsibilities associated with various base civil engineering operations and management; principles of work information management system and civil engineering materiel acquisition system including capabilities of each; quality management to include 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.

COURSE DESCRIPTIONS

CIV1108 Geographic Information Systems (GIS)

Basic functions and applications of the Geographic Information System (GIS). Includes understanding and development of spatial data models, GeoBase concepts, database queries, conversion of data, metadata tools, files, ArcMap, legends and scales.

CIV1150 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 quality management.

CIV1151 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.

CIV1152 Introduction to Drafting

Introduction to basic drafting fundamentals and techniques. Includes drafting sketches, pictorial and plain views, architectural, utility, detail and basic engineering drawings; manual and Computer Aided Design and Drafting (CADD).

CIV2107 Metals Layout and Fabrication

Material estimation and layout of structural components. Includes geometric principles, tools, machines, and metal materials.

CIV2517 Architectural and Structural Design

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

CIV2519 Civil Engineer 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.

CIV2520 Contract Construction Inspector

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

CIV2521 Site Planning, Facility Design, Soils and Pavement Testing

Preparation of required program documents, design sketches, and architectural and structural working drawings. Analysis of engineering design documents, sizing members for required strength, cost estimating, and master planning. Includes use of mix data, preparation and testing of concrete for slump and air content, use of mixed concrete to prepare cylinder and beam test specimens, listing specific gravity and grain size, moisture states, soil classification system, compaction control, California Bearing Ratio, density determination, field identification, soil exploration, and flexible/rigid pavements.

(CLT) CARDIOPULMONARY LABORATORY TECHNOLOGY

CLT1303 Fundamentals of Respiratory Therapy

An introduction to safe use of medical gases, humidification and aerosol therapy, intermittent positive pressure breathing, and pediatric ventilation. Emphasis is on use of oxygen equipment, respirators, equipment sterilization, endotracheal intubation, and prolonged ventilation.

CLT1304 Fundamentals of Cardiopulmonary Anatomy and Physiology

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

CLT1306 Introduction to Pulmonary Diagnostic Principles

Fundamentals of gas laws and respiratory dynamics; and assessment of pulmonary functions making use

COURSE DESCRIPTIONS

of spirometry, diffusion, lung volume, airway resistance, flow and volume loops, compliance, and blood gases.

CLT1307 Introduction to Respiratory Therapy

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

CLT1308 Introduction to Cardiopulmonary Management

Management of cardiopulmonary emergencies. Includes 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.

CLT1309 Introduction to Cardiopulmonary Medicine

Familiarization with basic medical terminology, anatomy and physiology, fundamentals of patient care, physiologic measurements, application of microbiology/infection control and gas physics calculations.

CLT2305 Introduction to Cardiopulmonary Instrumentation

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

CLT2306 Cardiovascular Noninvasive Diagnostic Procedures

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

CLT2308 Pulmonary Diagnostic Procedures

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

CLT2313 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.

CLT2314 Respiratory Care

Administration of oxygen, mixed gas therapy and medications. Includes patient history and therapy documents, terminology, airway management, chest physiotherapy, mechanical ventilation, emergency procedures, and patient maintenance.

(CLTR) Cultural Studies (Air University)

CLTR201 Introduction to Culture

Foundational course in the development of cross-cultural competence in the Air Force; provides an in-depth look at the concepts and domains of culture. Includes an exploration of cross-cultural communication, belief systems, family and marriage, inter-cultural relations, conflict resolution/negotiations, sport and culture, ethnocentrism and cultural relativism, and the cultural impacts on personality and behavior.

CLTR202 Introduction to Cross-Culture Communication

Foundational course in the development of cross-cultural communication competence; focuses on the theories, skills, and applications necessary to effectively communicate across cultural boundaries. Explores the challenges presented by cross-cultural interaction and how they affect people, jobs, and relationships. Includes nonverbal communication, paralanguage, cross-cultural communication conflict styles, active listening, and interaction management.

(CMR) COMPUTER MAINTENANCE & REPAIR

CMR1402 Diagnostic Testing

Analyzing and isolating electronic equipment malfunctions using computer programs. Includes use of technical manuals and general- and special-purpose test equipment.

CMR1746 Computer Maintenance

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

CMR1752 Computer Console Theory

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

COURSE DESCRIPTIONS

CMR2770 Computer Systems

Advanced operational theory and configuration. Includes data flow, logic, and circuit diagram analysis, system operation, and diagnosis of system malfunctions.

(COM) COMMUNICATIONS

COM1100 Communications System Operation

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

COM1400 Electronic Communications Theory

Transmitter and receiver systems. Includes electronic principles, transmission lines and antennas.

COM1403 Radio Communications Theory

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

COM1404 Communications Network Equipment Operation

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

COM1432 Ground Electronic Digital Timing Systems

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

COM1433 Airborne Radio Operations

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

COM1466 Communications Security Analysis

Basic principles of communication security. Includes intelligence structure, communication procedures, equipment, and applied electronics.

COM1467 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.

COM1468 Command Post Fundamentals

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

COM1713 Telephone Fundamentals

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

COM1714 Electronic Telephone Switching

Four-wire communications, radio signaling, intra-switch and outward dialing, safety procedures, fault isolation and repair and use of hand tools and general- and special-purpose test equipment.

COM1729 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 and securing aerial splicing equipment. Includes use of hand tools, cable cars, and technical publications.

COM1733 Underground Cable Splicing

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

COM1735 Cable Pressure Systems

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

COM1755 Communications Equipment Maintenance

Principles of operation, configuration, circuit analysis, and fault isolation. Includes use of special- and general-purpose test equipment, technical publications, and hand tools.

COM1759 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.

COURSE DESCRIPTIONS

COM1760 Cable Splicing and Sealing

Procedures and techniques for splicing, sealing and testing lead and plastic sheathed cable. Includes general- and special-purpose hand tools, safety and straight, bridge, and butt-splicing using auxiliary and lead sleeves.

COM2100 Communications Systems Operations and Maintenance

Communication systems maintenance, management, and administration; automation of record communications to include video, text, and voice; and system administration includes maintenance of wireless systems, mass alert systems and subordinate menus and hardware.

COM2101 Advanced Command and Control Operations

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

COM2411 Frequency Management Applications

Principles and techniques of applying frequency spectrum management controls. Includes organization and specific functions of international, national, and DoD agencies with practical application coordinating with and reporting to these agencies.

COM2412 Systems Planning and Engineering

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

COM2708 Antenna Installation

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

COM2723 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 and calculation, and use of safety and communication security procedures.

COM2725 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.

COM2733 Tactical Air Control Network Operations

Management of tactical air missions, communication operations, and weapons systems. Includes weather report analysis.

COM2734 Satellite Communications Operation

Theory associated with technical aspects of satellite communications operation control and hypothetical problem-solving situations.

COM2736 Introduction to Digital Switching Systems

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

COM2737 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.

COM2738 Digital Switching Systems Maintenance

Manual and automatic testing, inspection, troubleshooting, and operation of digital switching equipment.

COM2739 Communications Network Evaluation

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

COM2740 Communications Network Testing

Practical approach to systems analysis. Includes use of general- and special-purpose test equipment and technical manuals.

COM2741 Digital Switching Systems Administration

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

(CON) CONTRACTS**CON1618 Contract Solicitation and Award**

Administration of contract solicitations, formal advertising, selection of bids, evaluation and award. Includes competition requirements, acquisition methods, compliance checks, electronic commerce, post-award procedures, and termination of purchase and delivery orders.

CON1619 Government Contracting Applications

Practical application of pre-award, award, and post-award government contracting actions through execution of simplified acquisition procedures in the contracting work center. Includes research and compliance with the Federal Acquisition Regulation, Defense Federal Acquisition Regulation Supplement and Air Force Acquisition Regulation Supplement.

CON2109 Introduction to Contracting

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

CON2111 Contract Management

Contract management functions; quality assurance programs; manufacturing operations; industrial materiel management; subcontract management; and contract administration, with emphasis on post-award conferences, contractors made-or-buy program requirements, contractor financing, and contract file establishment, maintenance, and disposition.

CON2607 Principles of Contract Administration

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

CON2616 Base-Level Service Contracting

Advanced service contracting policies, contract requirements, and surveillance planning. Includes

case study on how to conduct job analysis, develop contract surveillance checklists, and evaluate contractor performance.

(COR) CORROSION CONTROL**COR1507 Metallic Corrosion Control**

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

COR1508 Metallic Protective Coatings

Practical care and use of coating equipment. Includes determining composition of coatings, and application of coating systems. Identification and application of aerospace equipment markings.

(DAS) DENTAL SPECIALIST**DAS1305 Basic Dental Sciences**

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

DAS1306 Clinical Procedures

Restorative and fourhanded dentistry techniques and procedures, clinical and general emergency care, and dental instrument use, and use of materials. Includes application of administrative regulations and procedures to dental records maintenance and patient scheduling.

DAS1314 Preventive Dentistry Sciences

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

DAS1315 Preclinical Procedures

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

DAS1316 Clinical Phase

Oral Hygiene techniques, operative assisting duties, and dental radiography. Emphasizes radiation exposure techniques and safety.

COURSE DESCRIPTIONS

DAS2318 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.

DAS2319 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 planning techniques, and patient education and motivation. Includes periodontal probing, plaque and calculus detection, use of disclosing solutions, health care instructions, infection control procedures, instrument sharpening, hand instrumentation, ultrasonic instrumentation, fluoride therapy, dental sealants, and use of other ultrasonic devices.

(DLT) DENTAL LABORATORY TECHNOLOGY

DLT1317 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.

DLT1318 Complete Dentures I

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

DLT1319 Complete Dentures II

Nonanatomic denture occlusion; complete denture relines and repair; and fabrication of immediate dentures, surgical templates, interim acrylic removable partial denture, and soft mouth guard.

DLT1320 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.

DLT1321 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, orthodontic appliances.

DLT1322 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.

DLT1323 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.

DLT1324 Dental Ceramics

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

DLT2310 Porcelain and Metal Ceramic Restorations

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

DLT2314 Removable Prosthodontics

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

DLT2315 Functional and Esthetic-Fixed Prosthodontics

Pouring and articulating of dies and master casts, creating functional anatomic and metal-ceramic wax-up, investing and burning out wax-up, casting metal, and applying porcelain.

(DMS) DIAGNOSTIC MEDICAL SONOGRAPHY

DMS2201 Diagnostic Sonography

Diagnostic sonography principles and equipment. Includes abdominal and pelvic sonography and obstetrical applications.

DMS2202 Ultrasonic Scanning

Procedures and application of obstetrical, pelvic, abdominal, thyroid, breast, testicular and superficial structure scans.

COURSE DESCRIPTIONS

DMS2301 Diagnostic Sonography Practicum

Diagnostic sonography principles and equipment. Includes abdominal and pelvic sonography and obstetrical applications.

DMS2302 Ultrasonic Scanning Practicum

Procedures and application of obstetrical, pelvic, abdominal, thyroid, breast, testicular and superficial structure scans.

(DPO) DISASTER PREPAREDNESS

DPO1102 Disaster Preparedness

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

DPO1104 Warfare Defense

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

DPO1106 Emergency Operations

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

DPO1350 Disaster Medicine

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

DPO2104 Advanced Emergency Management

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

DPO2105 Emergency Management 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.

(EDP) DATA SYSTEMS

EDP1106 Principles of Computer Operation

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

EDP1112 Computer Data Handler

Techniques, principles, functions, and methods of input for data-handler system. Includes report generation.

EDP1113 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; and methods required to construct, input, and retrieve data from computer using format statements.

EDP1116 Operational Systems Utilities

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

EDP1118 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.

EDP1130 Introduction to System Software

Computer system software. Includes catalog and file management software, library editor software, utility software, Internet applications and time-sharing procedures.

EDP1131 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

COURSE DESCRIPTIONS

online data system, system troubleshooting procedures, and processing techniques.

EDP1132 Computer System Familiarization

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

EDP1136 Microcomputer Software Applications

Database, spreadsheet, graphical and word-processing software applications. Includes operating systems, graphical presentations, and database management applications.

EDP1139 Computer System Familiarization

Computer hardware and software, data processing, electronic forms management, network protocols and standards, network and communication programming concepts, and basic world wide web fundamentals.

EDP1140 Contracting Computer Applications

Introduction to basic components and functions of contracting databases utilizing basic software applications. Includes data input, retrieval and manipulation, word processing, and excel spreadsheets.

EDP1202 Software Engineering

Principles for developing software package to maximize software life cycle. Emphasizes problem solving, algorithm design, and user interface.

EDP1203 Principles of Database Applications

Principles and techniques of database design, utilization, and maintenance using commercial software on personal and mainframe computers; and use of SQL, tables, and indexes to create queries and reports.

EDP1204 Introduction to Logistics Automated Data System

Introduction to standard base supply system that emphasizes 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.

EDP1207 Software Engineering II

Principles of software development. Includes fundamentals of Visual Basic, error trapping and debugging, use of dialogue boxes, use of arrays in Visual Basic, functions found in Windows libraries, looping techniques, and file processing.

EDP1601 Cyber Surety

Fundamentals of network and telecommunication systems security. Includes firewalls, network protocols, operating systems, intrusion detection tools, web proxies and emission security. Analyzes security scans; defines and eliminates risks.

EDP2178 Data Retrieval Systems

Advanced techniques for writing and inputting computer inquiry statements. Includes coding, data retrieving and data analysis to solve given management problems.

EDP2183 Advanced Computer Networking

Theory of computer-to-computer communications. Includes terminology and network configuration principles.

EDP2201 Computer System Administrator

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

EDP2206 UNIX Operating System

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

EDP2207 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.

EDP2208 Senior Leader Communication Systems Network Operations

Theory of local area network operations for all line replaceable units in the Senior Leader Communication Systems Secure/Non-Secure LAN (SLCS). Includes power distribution, equipment location and operation/purpose of SLCS.

COURSE DESCRIPTIONS

EDP2209 CISCO Networking

Introduction to concepts required to configure, install, and operate CISCO routers and switches within LAN and WAN environments, including VoIP and wireless networks.

EDP2404 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.

EDP2614 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.

EDP2616 Database Administration and Maintenance

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

EDP2619 Computer Systems Security

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

(EDT) EDUCATION & TRAINING

EDT1102 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.

EDT1803 Instructor Fundamentals

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

EDT1808 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.

EDT1809 Use of Computers in Training

Application of computers in training and instructional programs. Includes training files management, instructional system development, and use of computer-assisted instruction principles in classroom environment.

EDT2110 Military Training Instructor

Prepares military training instructors to plan and deliver Air Force concepts, principles, and philosophies to Air Force basic trainees. Includes core values, leadership, human relations, psychological behavior, staff referral agencies, flight management and administration, dormitory instruction, and drill and ceremony procedures.

EDT2111 Military Training Leader

Prepares military training leaders to advise and counsel technical school students on training and personal problems. Includes core values, military training and discipline, operational risk management, physical conditioning, counseling and guidance, human behavior, group dynamics, first aid and cardio-pulmonary resuscitation.

EDT2112 Academy Military Training NCO

Prepares Air Force Academy military training personnel to instruct, evaluate and supervise Air Force cadets on military training issues. Includes core values, military standards, discipline, counseling, human relations, mentoring, professional development, flight management and administration, dormitory instruction, safety, and drill and ceremony procedures.

EDT2201 Supervised Teaching

Observing, participating, and teaching in area of specialization under the supervision of an experienced faculty member. Includes classroom preparation and management and the integration of technology in various phases of the curriculum.

COURSE DESCRIPTIONS

EDT2202 Curriculum Development

Curriculum development and employment of a variety of technologies to research and plan instruction. Includes matching of instructional tools and resources to satisfy instructional needs.

EDT2203 Teaching Qualification

Test administration, measurement tools, preparation and use of audio visual aids, student counseling, behavior intervention, faculty evaluation programs and establishment of subject matter competency.

EDT2204 CCAF ISD Internship – Planning and Analysis

Comprehend and conduct the Planning and Analysis phase of the curriculum ISD process. Encompasses needs assessments, target audience profiles, task analysis, learning analysis and resource analysis. Includes analyzing occupational data and develop cost benefits analysis, instructional budgets and schedules and instructional system management plans.

EDT2205 CCAF ISD Internship – Design and Development

Comprehend and conduct the Design and Development phase of the curriculum ISD process. Selection of appropriate instructional media and methodology, as well as develop objectives and tests, instructional materials and validation plans. Includes conducting instructional system tryouts by utilizing training management systems and/or software.

EDT2206 CCAF ISD Internship – Implementation and Evaluation

Comprehend and conduct the Implementation and Evaluation phase of the curriculum ISD process. Implementing instructional system functions, to include instructor and training preparation, and also perform instructional delivery. Includes interpretation of internal and external evaluation data, and utilizing evaluation data to make necessary changes to the instructional system.

EDT2801 Instructional System Development

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

EDT2802 Development and Management of Instructional Systems

Concepts and philosophies of training and educational process, and development and management techniques for effective instructional systems and educational programs.

EDT2803 Applied Instructional System Development

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

EDT2804 Principles and Methods of Teaching

Selection of teaching methods, organization of materials, and preparation of written plans with behavioral objectives. Includes fundamentals of instructional systems development, principles of evaluation, and practice in employing teaching interview, experiential, case study, guided discussion, demonstration-performance, and lecture teaching methods. Emphasizes improvement in communicative skills.

EDT2805 Instructor Methodology

Introduction to the principles of teaching and teaching strategies. Includes instructional systems development, learning theory, principles of evaluation, effective visual support, concept and principle teaching, and methods of instruction to include guided discussion, teaching interview, demonstration-performance, case study, and lecture.

EDT2806 Basic Counseling

Comprehension of human behavior. Includes adjustment mechanisms and different considerations in academic and nonacademic counseling, application of various counseling approaches, use of referral agencies, documentation, and follow up.

EDT2808 Evaluation of Instruction

Principles and methods of evaluating instruction in the classroom. Includes presentation and evaluation of case study, teaching interview, demonstration-performance, and experiential teaching methods. Students evaluate communicative skills, instructional techniques and adaptation to various student styles in the classroom.

EDT2809 Supervision of Instruction

Course control documents and instructional system development, management of student academic

COURSE DESCRIPTIONS

programs, and measurement and evaluation of student and instructor performance.

EDT2813 Instructional Methodology

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

EDT2823 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.

EDT2842 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.

EDT2846 Teaching Practicum

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

EDT2848 Teaching Internship - SERE

Survival, evasion, resistance, and escape (SERE) teaching internship. Observing, participating, and teaching under the supervision of an experienced instructor supervisor. Includes lesson planning, teaching lecture and demonstration-performance instruction, evaluation methods and techniques, student performance critique, academic counseling, and preparation and use of instructional aids. Students demonstrate the ability to present and perform primary survival principles, methods and skills.

EDT2850 Aircrew Instructor Flight Training

Prepares personnel for duties as an in-flight instructor, improves student instructor knowledge of aircraft systems and ability to instruct the systems in a formal aircraft and classroom environment, and enhances student instructor

understanding of various instructional techniques under actual flight conditions through observation and performance.

EDT4102 Principles and Methods of Teaching

Selection of teaching methods, organization of materials and preparation of written plans with behavioral objectives. Includes fundamentals of instructional systems development, principles of evaluation, and practice in employing teaching interview, experiential, case study, guided discussion, demonstration-performance, and lecture. Emphasizes improvement in communicative skills.

(EEO) ELECTRONIC EQUIPMENT OPERATION

EE01201 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.

EE01206 Aircraft Control and Warning Operations III

Theory and operation of a combat reporting center. Includes control and center operator consoles with operational procedures for all positions and overview of capabilities of aircraft control and warning system.

EE01207 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.

EE01212 Combat Reporting Center and 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 and 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.

EE01213 Airborne Warning and Control Systems

Basic air surveillance console switch action operations necessary to effectively use computerized,

COURSE DESCRIPTIONS

multisensory systems. Includes detecting, identifying, and tracking surface and airborne objects; manual and automatic transfer of air defense information; basic sensor system employment; and combating electronic warfare.

EEO1214 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.

EEO1215 Airborne Warning and Control Systems In-flight Activities

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

EEO1217 Air Weapons Controller Procedures

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

EEO1218 Missile Warning Operations

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

EEO2101 Aerospace Control and Warning Systems Operation

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

(ELT) ELECTRONICS

ELT1102 Modulator Equipment

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

ELT1103 Satellite Communications Systems

Operational theory and logic, and circuit diagram analysis. Includes security and use of technical manuals.

ELT1104 Satellite Communications Maintenance

Preventive and corrective maintenance and troubleshooting. Includes use of hand tools, safety procedures, general-and special-purpose test equipment, and technical manuals.

ELT1105 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 and safety precautions, Air Force supply system, and maintenance management.

ELT1106 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.

ELT1107 Basic Soldering Connections

Basic performance laboratory. Includes soldering techniques, safety, and soldering and desoldering of components to terminal connections and printed circuit boards.

ELT1108 UHF/VHF AM Transmitters and Receivers

Theory of operation and maintenance of UHF/VHF ground-to-air single channel AM radios. Includes introduction to signal flow, schematic diagrams, alignments, preventive maintenance, and troubleshooting/repair.

ELT1109 Unmanned aerial Vehicle Systems

Fundamental principles of unmanned aerial vehicle systems. Includes operations and maintenance of flight control, fuel, electrical, environmental, and landing gear systems.

ELT1210 Basic Electronic Principles and Circuits

Basic electronics, electrostatics, and series, parallel, and series-parallel circuits; and changing currents, inductance, capacitance, inductive and capacitive circuits, transformers, resonance, and filters. Includes circuit analysis using electronic test equipment.

COURSE DESCRIPTIONS

ELT1211 Basic Electronic Circuits

Introduction to P-N junctions, transistor operation, amplifiers, coupling and waveshaping circuits, integrated circuits, digital circuits, power supplies, sinusoidal and relaxation oscillators, hand tools, and soldering techniques. Includes circuit fabrication using electronic fundamentals trainer and malfunction analysis using electronic test equipment.

ELT1219 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 hand tools for depot level repair.

ELT1223 Cryptographic Systems and Devices

Principles of secure communication systems. Includes use of electronic cryptographic devices; encrypted teletypewriter, data, and narrow- and wide-band secure voice terminals; system configurations; and emanation suppression techniques.

ELT1259 Introduction to Electronics

Electronic circuits and their use in various electronic systems. Includes power supplies, solid-state devices, digital techniques, digital mathematics, and basic troubleshooting.

ELT1262 Metrology Measurement Principles

Tracing and verifying precision measurement equipment standards, publications, forms, and supply management.

ELT1264 Electromagnetic Pulse Detection Unit

Theory of electromagnetic pulse and electrostatic discharge effect upon electronic devices. Includes electromagnetic and electrostatic emission protective devices.

ELT1282 Multiplexer Maintenance

Operation, logic, malfunction analysis, and repair of multiplexer and demultiplexer equipment. Includes delay compensator, synchronizer monitor logic analysis, system troubleshooting, and use of hand tools and general test equipment.

ELT1437 System Troubleshooting

Overall system troubleshooting. Includes alignment, adjustment, self-tests and performance checks.

ELT1451 Fiber-optic Cable Installation and Maintenance

Installation, splicing, and maintenance procedures for fiber-optic cables and associated equipment, and use of specialized test equipment.

ELT1452 Satellite Communications Group Maintenance

Analysis of satellite communications terminal tracking and control systems. Includes maintenance, calibration, repair, and inspection of servo-electronic, monitor, control equipment, and alarm systems.

ELT1453 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.

ELT1455 Communications Systems Theory

Principles of multiplexing, tunable microwave and tropospheric scatter systems. Includes performance laboratory to emphasize analysis, troubleshooting, maintenance, and repair using standard test equipment.

ELT1456 Digital Data Communication Theory

Digital data communication systems theory. Includes functional and circuit analysis of transmitters, receivers, power supplies, data reception and detection circuits, and receiver timing and detection circuits.

ELT1457 Missile Launch Control Facility Maintenance

Launch control center, facilities and support systems. Operational theory, logic, and circuit diagram analysis, and preventive and corrective maintenance. Includes general- and special-purpose test equipment and technical manuals.

ELT1501 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.

ELT1529 Power Production Equipment

Fundamental principles of power production equipment. Includes operation, troubleshooting, and repair of internal combustion engines, generators,

COURSE DESCRIPTIONS

exciters, voltage regulators, launch facility power generation system, and launch facility and launch control facility power distribution system.

ELT1544 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.

ELT1701 AC Circuits

Fundamentals of alternating current. Includes motors, generators, meter movements, inductance, inductive reactance, capacitance, capacitive reactance, frequency spectrum, and use of oscilloscope.

ELT1702 DC Circuits

Fundamentals of direct current. Includes series, parallel, and series-parallel resistive circuits, magnetism, and relay operation.

ELT1712 Basic Solid-State Theory

Solid-state power supplies and amplifiers. Includes P-N junctions; transistors; rectifiers; filters; limiters and clippers, and power, special, and wide-band amplifiers.

ELT1713 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.

ELT1714 Solid-State Applications

Fundamental principles of solid-state applications in wave generation. Includes basic, pulsed, and blocking oscillators, multivibrators; and time-based generators.

ELT1716 Standard Test Equipment Laboratory

Operational theory, function and use of low-frequency generators, multimeters, electronic counters, frequency converters, audio oscillators, oscilloscopes, and differential voltmeters.

ELT1717 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.

ELT1719 Sensing Systems Maintenance I

Functional descriptions, technical characteristics, installation and operation procedures, block diagram and circuit analysis, preventive maintenance, and troubleshooting procedures of wind and temperature dew point measuring equipment.

ELT1721 Electrical Fundamentals

Ohm's law; series, parallel, and series-parallel circuit theory; meters and test equipment; and electrical code, terminology, and wiring diagrams.

ELT1727 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.

ELT1729 Radar Systems Troubleshooting

Circuit analysis of transmitters, receivers and transponders. Includes use of test equipment, troubleshooting, and preventive maintenance.

ELT1731 Surveillance Indicator Systems

Circuit analysis of plan position indicator system. Includes synchronization system, sweep circuits, video circuits, amplifiers, and cursors.

ELT1733 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.

ELT1744 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.

ELT2105 UHF Radio Communications

Analysis of UHF multichannel radio transceivers. Includes performance testing, troubleshooting, alignments and adjustments using associated test equipment.

ELT2106 Mobile Communications Systems Maintenance

Communications centrals. Includes nomenclature classification, equipment features, operational modes,

COURSE DESCRIPTIONS

malfunction analysis, field repairs, supply procedures and safety.

ELT2112 Radio Equipment Theory

Principles of HF, VHF, and UHF communication equipment. Includes performance laboratory in troubleshooting and repair of HF, VHF, and UHF mobile and portable communication equipment.

ELT2113 Ground Radio Theory

Principles of transmitters, receivers, audio and data intercept consoles, and automatic switchboard principles as applied to ground radio system.

ELT2114 Radio Maintenance Laboratory

Trouble analysis and fault isolation of subunits of transmitter, receiver, and control sites.

ELT2123 HF Receivers

Operation and circuit and functional analysis of HF receivers.

ELT2125 Radio Transceivers

Operation, maintenance, and circuit functional analyses of universal radio equipment transceivers.

ELT2129 Instrument Landing System

Operation and functional analyses of instrument landing system. Includes familiarization with ground check procedures and flight inspection recordings.

ELT2136 Video Processing

Circuit analysis of normal and moving target video-processing circuits, antenna azimuth processing circuits, and radar control circuits.

ELT2138 Ground Tactical Air Navigation Theory

Introduction to flight facilities equipment systems theory. Includes circuit functional analysis of ground tactical air navigation systems using test equipment and technical data.

ELT2140 Very High Frequency Omni Range (VOR) Transmitter

Theory of operation and maintenance of VOR ground station major assemblies. Includes antenna system theory, radiated signals/errors, computer commands, control indicator theory, transmitter operation/alignments, monitor operation, and system troubleshooting.

ELT2202 Electronics Quality Assurance

Advanced quality assurance procedures to detect and analyze maintenance management deficiencies, determine cause, and recommend corrective action. Students develop skills to evaluate maintenance activities and personnel to ensure safety procedures are observed and maintenance practices meet the highest standards. Includes written policies, managerial communications, directives and technical manuals, evaluation processes, inspection categories, deficiency analysis, management of electronics installation project evaluations, training effectiveness evaluations, logistics, and research and investigation of component failures and manufacturer defects.

ELT2401 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; RF, IF, and video circuits; and troubleshooting and repair techniques.

ELT2704 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.

ELT2733 Logic and Circuit Analysis

Digital logic and analysis of computer circuits. Includes basic circuits, adders, registers, and coder and decoders.

ELT2739 Radar Transmitter Maintenance

Circuit analysis and repair of radar transmitters.

ELT2740 Radar Receiver Maintenance

Circuit analysis and repair of radar receivers.

ELT5714 Specialized Instrumentation

Operational theory and application of special instrumentation principles. Includes principles of video recording, closed-circuit television, and microwave and laser systems.

ELT5717 Radar Data Display Circuits

Operational theory, application, and maintenance of precision-timing circuits, wave-shaping devices, sweep generation circuits, video-processing circuits and cathode ray tubes. Includes troubleshooting and

COURSE DESCRIPTIONS

fault analysis using multimeters, voltmeters and dual trace oscilloscopes.

ELT5728 DC and Low-Frequency AC Measurement

Introduction to metrology of voltage, current and power. Includes knowledge of instrument calibration standards, precision voltage and current measurement, differential voltmeters, thermal converter meters, 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.

ELT6723 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 electronics equipment, conformal coating removal and replacement of solid-state components.

ELT6778 Communications Control Console and Landline Selector Control

Maintenance of communication console control group and landline selector control group. Includes equipment operation, circuit analysis, alignments and adjustments, and fault isolation.

ELT6791 Mobile Communications Systems Maintenance

Communications centrals. Includes nomenclature classification, equipment features, operational modes, malfunction analysis, field repairs, supply procedures and safety.

ELT7737 Radio (Air and Ground 50KHz)

VHF/UHF communications equipment principles. Includes troubleshooting and repair of VHF and UHF communications equipment.

ELT7750 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.

ELT7762 Digital Selective Identification

Functional and logic diagram analyses of digitized selective identification feature system. Includes encoder and decoder, and fault isolation.

ELT7767 Radar Identification Equipment

Functional and circuit analysis of identification equipment (air traffic control and friend or foe); includes analysis of transmitter, receiver, control circuits, power supply, and system maintenance.

(EMT) EMERGENCY MEDICAL TECHNOLOGY

EMT1101 Emergency Response

First responder role and responsibilities, understanding the human body, preventing disease transmission, establishing priorities of care, one and two rescuer cardiopulmonary resuscitation, treating injuries, identifying medical emergencies, and crisis intervention.

EMT1102 Emergency Medical Technician - Basic

An introduction to emergency medical care; medical and legal ethics; management of shock, trauma, fractures and hemorrhage control; management of environmental, behavioral and medical emergencies of infants, children and adults; obstetrical, gynecologic and childbirth emergencies; transportation, lifting, and moving of the sick and injured; radio communications, documentation, ambulance operations, scene evaluation and emergency medical technician safety. Includes all required modules of the 1994 *EMT Basic National Standard Curriculum*.

EMT1103 Emergency Medical Technician - Intermediate

Theory and techniques of advanced emergency medical care in prehospital and hospital settings, and prepares student to challenge National Registry Emergency Medical Technician - Intermediate examination. Includes patient assessment, advanced airway management, intravenous fluids, shock and clinical duties.

EMT2101 Emergency Medical Technician - Paramedic

Theory and techniques of advanced emergency medical care. Includes emergency pharmacology, drug calculations, and paramedic 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.

COURSE DESCRIPTIONS

EMT2301 Introduction to Emergency Medical Technology

Medical terminology, basic pharmacy, therapeutics, medical laboratory and postmortem care; and techniques in lecturing on allied health subjects.

EMT2302 Management of Common Medical Disorders

Care of acute dental, respiratory, eye, ear, nose, throat, genitourinary, integumentary, cardiovascular, gastrointestinal, neurological and psychiatric disorders.

EMT2303 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.

EMT2305 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.

EMT2306 Emergency Service Management

Introduction to emergency service management, and 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 use of available resources to ensure optimal care for nonemergency conditions, management and operations of an emergency service.

EMT2316 First Aid and Self-Help

Identification and treatment of hemorrhage; shock; fracture and dislocations; burns; heat disorders; hypothermia; chemical and botanical poisons; snake, insect and marine-life bites under field conditions; and application of drug therapy, artificial respiration and heart massage.

(ENM) ENVIRONMENTAL MEDICINE

ENM1311 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.

ENM2304 Advanced Occupational and Public Health Management

Introduction to Food and Drug Administration food code, epidemiological concepts, occupational and public health principles and programs, management principles and trend analysis.

ENM2306 Public Health Emergency and Disaster Operations

Didactic and field training in public health preventive medicine for emergency and disaster operations. Emphasizes 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.

(ENV) ENVIRONMENTAL SCIENCE

ENV1101 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.

(EPP) ELECTRIC POWER PRODUCTION

EPP1100 Airfield Lighting System

Basic airfield lighting system configurations. Includes control system, beacon lights, lighting fixtures, regulators, and transformers, and condenser discharge cable repair, troubleshooting, and maintenance.

EPP1502 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.

EPP1503 Equipment and Pole Climbing

Pole-climbing techniques using hot line tools and protective equipment, crossarm installation and

COURSE DESCRIPTIONS

removal, pole step installation, and civil engineering management procedures. Includes operations, communication security, general safety practices, and pole-top rescue techniques.

EPP1504 Construction of Overhead Electrical Distribution Systems

Electrical prints and staking sheets for pole location, framing, setting, and erection techniques using anchors and guys. Includes 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; de-energized conductor transfers; and line and aerial bucket operation and maintenance.

EPP1505 Underground Distribution Systems Maintenance

Maintenance and inspection of underground electrical distribution system and manhole equipment. Includes fabricating and testing in-line splices, installing direct burial cable, replacing underground cable, tape termination techniques, and termination point inspection and testing.

EPP1506 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 post operation procedures.

EPP1507 Generator Set Operation and Aircraft Arresting Barriers

Operating characteristics and configuration of aircraft arresting system, generator set associated equipment, and power plant generator operation, problem analysis and diesel engine tests and maintenance.

EPP1508 Wiring Methods

Wiring diagrams, electrical terms and symbols, conduit application, and bending techniques; and branch circuit construction, switch and outlet installation, and troubleshooting techniques using test equipment and safety procedures per national electrical code guidelines.

EPP1509 Electrical Special-Purpose Systems

Maintenance; troubleshooting; and repair of transformers, voltage regulators, battery banks and chargers, and emergency lighting systems. Includes dining hall and domestic appliances.

EPP2100 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.

EPP2503 Transportable Distribution Systems

Set up, maintenance, troubleshooting, and repair procedures for electrical distribution systems and secondary distribution centers under field conditions. Includes use of electrical plant schematics, test equipment, and safety practices.

EPP2504 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.

EPP2505 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.

EPP2506 Emergency Airfield Lighting System

Installation, operation and maintenance of the Emergency Airfield Lighting System during contingency operations. Includes the installation and maintenance of precision approach, threshold and taxiway lighting systems; mobile generator power supply, voltage regulator unit and control panel operations; and system packaging with trailers, cable reels and containers for rapid deployment.

(EXP) EXPLOSIVES HANDLING & DISPOSAL

EXP1101 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, chemical and biological ordnance.

EXP1102 Explosive Ordnance Disposal Apprentice - Phase II

Methods and procedures for safe identification, recovery, evaluation, and disposal of all conventional and nuclear explosive ordnance. Includes placed, projected and dropped munitions, and associated fuses; aircraft explosive hazards; guided missiles; and detailed instruction on recovery, evaluation and disposal of nuclear weapons.

EXP1706 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.

EXP2101 Advanced Explosive Ordnance Disposal

Management skills and operations training for explosive ordnance disposal craftsman. Includes base recovery after attack plans, emergency off-base response, explosive ordnance reconnaissance and environmental protection considerations.

(FDS) FOOD SERVICE

FDS2620 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.

FHM (FORCE HEALTH MANAGEMENT)

FHM1100 Hearing Conservation

Introduction to the mechanics of hearing, anatomy of the ear, physics of sound, and types and causes of hearing loss. Familiarization with audiometric testing equipment including operation, calibration, and testing techniques. Proper

selection and fitting of hearing protection. Disposition of patients and records. Course includes certification as "Hearing Conservationists" by the Council for Accreditation in Occupational Hearing Conservation (CAHOC).

FHM1101 Physical Examination and Medical Standards

Principles, policies, procedures, and administration of military physical examinations. Introduction to medical qualification standards for military service and worldwide duty. Includes proper documentation, review of medical records, and physical serial profile reports.

(FIN) FINANCE ACCOUNTING

FIN1109 Budgeting

Planning, programming and budgeting system within the federal government. Includes the federal budget cycle, influence of foreign currency, fiscal control, management controls and reports, and fiscal year closeouts.

FIN1113 Introduction to Financial Analysis

Financial statement analysis. Includes preparation of financial statements, and horizontal, vertical and ratio analyses.

FIN1119 Financial Planning

Basic principles of financial planning. Includes development of fund requirements for personnel, nonpersonal services, materiel and travel budget functions.

FIN1122 Introduction to Accounting and Finance

Functions and responsibilities of accounting and finance systems used in governmental operations.

FIN1201 Accounting Principles

Financial and managerial accounting principles. Includes basic financial statement preparation, the accounting cycle, and current and long term liabilities.

FIN1202 Federal Funds

Federal budget systems used by DoD. Includes accounting structure and computer codes, general governmental accounting systems, general ledger accounting systems, reporting procedures, and practical experience determining funds availability.

FIN1203 fiscal Law and Financial Management

Basic concepts of business law, fiscal law, financial management, ethics, and legal problems. Includes governmental budgetary and proprietary accounting.

COURSE DESCRIPTIONS

FIN1204 Cost Analysis

Application of concepts and techniques of cost and economic trend analysis. 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.

FIN1205 Travel and Relocation Accounting

Computation of travel allowances. Includes permanent change of station, dependent travel entitlements, dislocation allowance, temporary duty pay, and leave accounting for travel-generated leave.

FIN1206 Finance Customer Support - Active Military

Introduction to military pay systems and accounts. Includes direct deposit pay, financial statements, address changes, computation of basic and special pay, tax tables, and allowances for housing, subsistence, clothing, and family separation. Including fundamentals of communication.

FIN1207 Finance Customer Support - Reserve Forces

Computation of pay for Reserve Forces personnel. Includes accounting procedures for annual training, inactive duty training, and retirement pay. Including fundamentals of communication.

FIN1208 Overseas Duty Pay and Allowances

Accounting procedures for overseas military duty. Includes temporary lodging, overseas housing, and cost of living allowances and computation of duty status.

FIN2113 Financial Management Supervision and Leadership

Supervisory responsibilities and managerial oversight within the finance office environment. Includes leadership philosophy, mentorship, employee development, manpower management, and deployment manager duties.

FIN2119 Accounting Liaison Web Based

Organization and functions of accounting and finance liaison principles. Includes office and various web accounting systems used at the base-level.

FIN2133 Advanced Financial Analysis

Cost and economic analysis, use of statistical techniques and communicative skills to support analytical efforts, support agreements, financial planning and management systems, status of funds, contingency operations, and management and supervisory responsibilities.

FIN2134 Advanced Resource Management Accounting Systems

Organization and functions of base-level accounting and finance office and various accounting systems used in base-level accounting.

(FIP) FIRE PROTECTION

FIP1101 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.

FIP1804 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; and structural fire ground operations. Includes fire hose, appliances and stream, salvage and overhaul, sprinklers, and practice in fire control.

FIP1805 Aerospace Vehicle Firefighting

Aircraft fire response and firefighting principles. Includes aircraft and airport familiarization, rescue procedures, turret and pump operation, resupply of aircraft rescue firefighting vehicles, and live training fires on various aircraft.

FIP1807 Fire-Protection Fundamentals

Fire-protection mission, organization and publications; occupational health and safety; quality principles; portable fire extinguishers; and fire ground basics, behavior, alarm communications center, and prevention and readiness. Includes fire-protection contingency responsibilities.

FIP2101 Advanced Hazardous Materials

Advanced principles of hazardous materials. Includes incident management system, hazardous materials mitigation, use of monitoring devices and other

COURSE DESCRIPTIONS

competencies necessary to perform as a hazardous materials technician or incident commander.

FIP2102 National Incident Management Systems 300/400

Fundamentals of intermediate/advanced Incident Command System as it applies to multiple jurisdictional agencies to include: identifying performance requirements, resource management, applying incident principles and objectives, development of written action/demobilization plans and options related to major/complex incident management, and development of area command organization and activation of a multi-agency coordination system.

FIP2808 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.

FIP2818 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; and extensive use of ground and simulator exercises for performance of various crew duties.

FIP2820 History of Terrorism and Weapons of Mass Destruction

Identifies the principles of terrorism, current threats, and history of weapons of mass destruction as it applies to constantly changing world events.

(FNS) FOOD & NUTRITIONAL SCIENCE

FNS1301 Basic Medical Food Service Administration

Supervision and training of medical food service personnel, and security and maintenance of forms, records and medical materiel.

FNS1302 Nutrition and Diet Therapy

Principles of normal nutrition, metric system, food nutrients, and digestion and absorption. Includes recommended daily allowances, therapeutic nutrition, and professional and patient relationships.

FNS2302 Advanced Nutrition and Dietetic Therapy

Practical application of nutrition in population health. Emphasis on body mass index calculations, performance nutrition, aviation nutrition, dietary programs and supplements, and advanced dietary counseling.

FNS2304 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.

(FSC) FAMILY SUPPORT CENTER

FSC1102 Family Support Center Manager Qualification Course

Overview of quality of life changes in the Air Force and introduction to the principles of managing change in the Family Support Center function.

FSC1103 Family Support Center Family Readiness Qualification Course

Principles of contingency planning. Includes crisis response to casualty situations, identification of coping strategies during separations and evacuations, stress management, and community resource collaboration.

(FTL) FOREIGN TECHNICAL LANGUAGE

FTL1401 Intermediate Technical Russian

Application of technical vocabulary and language used to describe military equipment, operations and control procedures. Emphasizes development of skills necessary to translate oral communications and written materials. Prerequisite: resident language course or demonstrated proficiency.

FTL1402 Intermediate Technical Chinese

Application of technical vocabulary and language used to describe military equipment, operations and control procedures. Emphasizes development of skills necessary to translate oral communications and written materials. Prerequisite: resident language course or demonstrated proficiency.

FTL1404 Intermediate Technical Vietnamese

Application of technical vocabulary and language used to describe military equipment, operations and control procedures. Emphasizes development of skills necessary to translate oral communications and

COURSE DESCRIPTIONS

written materials. Prerequisite: resident language course or demonstrated proficiency.

FTL1405 Intermediate Technical Spanish

Application of technical vocabulary and language used to describe military equipment, operations and control procedures. Emphasizes development of skills necessary to translate oral communications and written materials. Prerequisite: resident language course or demonstrated proficiency.

FTL1406 Intermediate Technical Arabic

Application of technical vocabulary and language used to describe military equipment, operations and control procedures. Emphasizes development of skills necessary to translate oral communications and written materials. Prerequisite: resident language course or demonstrated proficiency.

FTL1409 Intermediate Technical Korean

Application of technical vocabulary and language used to describe military equipment, operations and control procedures. Emphasizes development of skills necessary to translate oral communications and written materials. Prerequisite: resident language course or demonstrated proficiency.

FTL1410 Intermediate Technical Hebrew

Application of technical vocabulary and language used to describe military equipment, operations and control procedures. Emphasizes on development of skills necessary to translate oral communications and written materials. Prerequisite: resident language course or demonstrated proficiency.

FTL1412 Intermediate Technical Persian-Farsi

Application of technical vocabulary and language used to describe military equipment, operations and control procedures. Emphasizes development of skills necessary to translate oral communications and written materials. Prerequisite: resident language course or demonstrated proficiency.

FTL1413 Intermediate Technical Serbo-Croatian

Application of technical vocabulary and language used to describe military equipment, operations and control procedures. Emphasis on development of skills necessary to translate oral communications and written materials.

Prerequisite: completion of resident language course or demonstrated proficiency.

(FUS) FUELS

FUS1101 Fuels Fundamentals

Introduction to fuels concepts and practices. Includes career ladder progression, security and fuels management; and use of Air Force publications, technical orders, Air Force Office of Safety and Health safety precautions, Air Force supply system and hazardous materials.

FUS1501 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.

FUS1503 Hydrant System Maintenance

Operation, inspection, and servicing of original/modified Panero and Pritchard hydrant system; includes loading/offloading facilities, filters and separators, gauges, valves, and strainers.

FUS1507 Fuel Subsystems (Mechanical)

Operation, inspection and maintenance of fuel mechanical subsystems. Includes tanks, filtration equipment, meters, and loading and offloading equipment.

FUS1508 Specialized Fuel Systems and Tank Entry

Identification of components of Type III/IV Phillips system; motor vehicle fueling system; principles of troubleshooting, inspecting and operating; and procedures for tank entry and deactivating fuel systems. Includes identification of cryogenic product hazards, and procedures for cryogenic product issue/receipt and Fuels Mobility Support Equipment set up/tear down.

FUS1509 Fuel Hydrant and Air-Transportable Systems

Operation and maintenance of permanently installed hydrant and air-transportable systems. Includes Panero and Pritchard hydrant and application of hydrant accounting relative to transferring, receiving, issuing and defueling.

FUS1602 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.

COURSE DESCRIPTIONS

FUS2101 Cryogenic Fundamentals

Principles of cryogenics and production of industrial gases. Includes pressure characteristics, temperature effects, refrigeration methods, safety and environmental concerns, technical orders, inspection forms, gas cylinders and quality control.

FUS2102 Oxygen and Nitrogen Plant Components

Advanced operation and maintenance of oxygen and nitrogen plant components and support equipment. Includes cryogenic fuel system concepts, functions, relationships, temperatures and settings, advanced propulsion concepts, air purifiers, air separators and schematics.

FUS2103 Oxygen and Nitrogen Plant Operation

Principles of plant operation. Includes cryogenic operations, concepts of flow controls from start-up to shutdown, preventive maintenance, electrical schematics, troubleshooting and repair.

FUS2503 Fuels Analysis

Analysis of Fuels. Includes 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 fuels system icing-inhibitor testing, and cloud point analysis.

FUS2504 Air-Transportable Hydrant Refueling Systems

Operation and maintenance of various air-transportable fueling systems that receive, issue, and transfer fuel. Includes implementing petroleum product quality control procedures.

FUS2601 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, fuels system icing inhibitor, potential hydrogen odor and flashpoint.

FUS2602 Fuel Storage Facilities Maintenance

Application of complex maintenance techniques and repair procedures for filtration equipment, electrical controls, pumps and conventional hydrant fuel systems.

FUS2607 Fuels Management

Application of advanced techniques for planning, organizing, and coordinating fuels activities involving personnel, facilities and equipment.

(GEO) APPLIED GEOGRAPHY

GE01403 Area Studies

Geographic, climatic, economic, political, and military characteristics of a major area of interest. Emphasizes political and historical development of the area and impact of geography on deployment of weapons systems.

(GPS) GEOPHYSICAL SCIENCES

GPS1402 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 and local analyses.

GPS1403 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.

GPS1404 Seismic Equipment Operation

Introduction to seismic equipment and station operation. Includes station block diagrams, logs and routine forms, timing and signal subsystem theory and operation, oscilloscope operation and timing synchronization, seismic signal generation and transmission, and methods of signal amplification and control.

GPS1406 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.

GPS1411 Scientific Technician Orientation

Professional responsibilities of the scientific technician, selection and use of various publications, equipment and personal safety, and areas directly associated with scientific analysis.

COURSE DESCRIPTIONS

GPS1412 Detection Systems

Introduction to seismic, hydroacoustic and satellite detection systems. Includes operational characteristics and concepts.

GPS1413 Satellite Detection Systems

Introduction to orbital mechanics and satellite equipment operations. Includes physics of orbit, conic sections and sensor theory.

(GRA) GRAPHICS

GRA1102 Media Selection

Introduction to the principles of media. Includes media selection and familiarization, the advantages and disadvantages of each type of media, and the application of media design and development.

GRA1800 Introduction to Graphics

Care and use of graphic arts equipment and materials, plus establishment and use of comprehensive art files.

GRA1803 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.

GRA1806 Computer Automated Graphics

Theory and basic operation of computer automated graphics. Includes familiarization and use of hardware and software.

GRA1807 Multimedia Presentations

Multimedia applications and tools to create multimedia projects for online and offline presentations. Includes digital video, audio editing, animation, and Web page development.

(HAR) HEATING, AIR-CONDITIONING & REFRIGERATION

HAR1105 Refrigeration and Air-Conditioning Systems

Fundamental principles for operating, maintaining and troubleshooting the following systems and components: refrigeration, air-conditioning, pneumatic, electronic and electrical controls, dampers, air handlers, fan units, dehumidifiers and humidifiers, evaporators, generators, condensers, air compressors, water pumps, refrigeration lines,

filters, water chillers, cooling towers, ventilation systems, control center, launch duct, computer room air-conditioning systems, and air balancing.

HAR1106 Domestic and Commercial Refrigeration

Maintenance, troubleshooting and repair of cold storage and small commercial systems. Includes cooling towers, evaporative condensers, water pumps, and air-compressing equipment with electrical, electronic, pneumatic, motor controls and devices.

HAR1108 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.

HAR1109 Electrical and Electronic Controls

Fundamentals of electrical and electronic control operation and application; and installation, adjustment, troubleshooting, and maintenance on electrical control circuits, sensors, controllers and control devices. Includes cybernetics and energy monitoring control systems.

HAR1110 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.

HAR1111 Air-Conditioning and 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.

HAR1113 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.

HAR1115 Heating, Air-Conditioning and Refrigeration Contingency Training

Heating, refrigeration and water treatment equipment associated with contingency operations. Includes

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miscellaneous support equipment, international electrical systems and contingency responsibilities of civil engineering personnel.

HAR2103 Automotive Air-Conditioning

Operation, service, inspection and maintenance of automotive air-conditioning systems.

HAR2105 Liquid Oxygen Storage Tank Maintenance

Operation and maintenance of liquid oxygen storage tanks; and use of special test equipment to analyze malfunctions, bench test and repair storage tanks.

HAR2106 Oxygen and Nitrogen Plant Components

Advanced operation and maintenance of oxygen and 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.

HAR2107 1.5 Ton Oxygen and Nitrogen Plant Operation

Principles of plant operation. Includes concepts of flow controls and inspections and maintenance of expansion engines.

HAR2110 Heating, Ventilation and Air-Conditioning System Control

Advanced operation, maintenance, and troubleshooting techniques for pneumatic controls to include their transmission system and components, electric, and electronic controls; analysis of thermodynamics and psychometrics on equipment design; and schematics and use of calibration equipment on various system configurations.

(HEO) HEAVY EQUIPMENT OPERATION

HEO1601 Pavement and Construction Equipment Operator

Introduction to rigid and flexible pavement construction and maintenance, fencing, snow and ice control, welding, drainage structures, career field structure, contingency responsibilities, quality management, and safety; and 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.

(HIS) APPLIED HISTORY

HIS1501 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.

HIS1502 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.

HIS1503 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.

(HIT) HISTOLOGIC TECHNOLOGY

HIT1101 Histology

Study of human organs and tissues for developing histotechnological skills. Emphasizes recognition, composition and functions of organs and tissues; and autopsy, surgical and cytological procedures.

HIT2302 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.

HIT2303 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.

HIT2304 Autopsy

Identification of major organ groups and techniques for performing autopsies.

HIT2305 Histologic Practicum

Practical application in identifying microscopic tissue types and performing administrative procedures, tissue processing, microtomy, decalcification,

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autopsies, gross surgical procedures, and specimen filing.

(HRM) HUMAN RESOURCE MANAGEMENT

HRM1001 Introduction to Human Resource Management

Introduction to personnel management, business communications, administrative functions and the selection, classification, and evaluation process. Includes elements required for training, placement, reassignment, promotion, separation of personnel, pay procedures, performance evaluations, and techniques for scheduling and conducting meetings.

HRM1002 Introduction to Human Resource Information Systems

Principles, functions, and techniques of entering and retrieving data from a military personnel data system. Includes data maintenance procedures and methods, computer output products and data utilization.

HRM2101 Manpower and Personnel Base Level Systems

Manpower and personnel base level computer system functions and operations. Includes personnel accountability during deployment or exercise situations; accessing the system and the main module functions; overview of contingency reports and program configuration; file creation and message preparation; and the role of personnel support for contingency operations.

HRM2105 Personnel System Data Management

Personnel data system orientation, equipment configuration, network architecture, user management, communications interfaces, and retrieval of data. Includes table and password management, UNIX system administration, construction of queries for retrieval of data, and security administration procedures.

HRM2106 Military Justice System

Analysis of history and evolution of military law and military justice system. Special emphasis on US Constitution, Uniform Code of Military Justice and Manual for Courts-Martial. Includes application of rules of evidence and legal aspects of apprehension, search and seizure regarding suspect's constitutional rights and legal and procedural aspects of court testimony.

HRM2107 Unit Administration

Management of unit personnel and the implementation of procedures to ensure compliance with military standards, protocol, written correspondence and directives. Orchestrates the proper use of computer products containing sensitive information on unit personnel. Administers the assignment of special duties and the minimization of unit absenteeism. Processes unit grievances and inquires. Investigates all alleged medical conditions which affect on a member's ability to report for duty. Ensures unit personnel understand their obligations for dependent care. Schedules and monitors commander's calls; enforces Privacy Act issues; responds to security police reports and handling of damage to private property, unit property, or government property.

HRM2108 Quality Force Management

Principles and procedures for achieving and maintaining a quality workforce. Enforcement of unit policies associated with dormitory management, individual financial responsibility, professional military education, retention programs, the military weight control program, derogatory information files, other disciplinary actions and administrative separation of personnel from the military.

HRM2109 Human Resource Preventive Interventions

Principles of human resource management. Includes policies and procedures regarding orientation and guidance of newcomers to the workforce; counseling referrals to various agencies; purpose of morale, welfare, and recreation programs; policies and procedures for control of drug and alcohol abuse; maintenance of discipline using prevention-correction punishment methods; and workplace relationships.

HRM2110 Deployment Issues

Analysis of the first sergeant's roles and responsibilities during a deployment processing line and application of human resource management skills in a deployment scenario. Concentration on military law, quality force issues and administering unit specific policies at the Aerospace Expeditionary Force employment sites.

HRM2201 Salesmanship

Sales fundamentals and the importance of personal qualifications required for effective selling. Includes advertising, recruiting aids, the sales interview and closing the sale. Sales performance is evaluated using simulated prospects.

COURSE DESCRIPTIONS

HRM2202 Human Resource Selection Methods & Techniques

Principles and procedures for personnel recruitment, selection and placement. An in-depth view of sound selection and evaluation practices, including statistical concepts and tools and techniques essential to effective selection and evaluation programs. These tools and techniques may include, but are not limited to, advertising, recruiting aids, speech deliveries, interviews, test evaluations, eligibility processing, placement and legal considerations.

HRM2203 Human Resource Information Systems

Hardware, software and basic personnel file maintenance. Includes application software, databases and time and activity management.

HRM2204 Compensation and Benefits

Salary compensation, education, training, advancement and retirement benefits. Includes advancement through promotion and commissioning programs, travel, recreation and family services.

HRM2205 Advanced Human Resource Management

Advanced policy and procedures of human resource management. Includes customer service management; support program referrals; career enhancement; adverse administrative actions; management of automated systems; and contingency operations.

(HSA) HEALTH SERVICES ADMINISTRATION

HSA1305 Health Care Management

Introduction to medical computer systems, medical service account, documentation and communications management. Includes publications and forms management; collection of fees; and preparation of vouchers, medical expense and performance reporting system, report of patients and typed communications.

HSA1306 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 and risk management, and medical terminology.

HSA2315 Medical Readiness Planning

Introduction to planning, exercises, readiness training, National Disaster Medical system, status of resources, and unit medical training system.

(INT) INTERNSHIP

INT3000 Internship - Apprentice

Successful completion of apprentice training requirement of Air Force dual channel on-the-job training (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.

INT5000 Internship - Journeyman

Successful completion of fully skilled journeyman training requirements of Air Force dual channel 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.

INT7000 Internship - Craftsman

Successful completion of craftsman training requirements of Air Force dual channel 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.

(ITL) INTELLIGENCE

ITL1101 Intelligence Fundamentals

Mission and organization, intelligence cycle, libraries, administration and data-handling systems. Emphasizes recognition of document security, operations security and communication security.

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ITL1102 Analysis and Reporting of Intelligence Data

Identification of essential elements of information, selection of reporting vehicle, and production of concise, timely and technical summaries.

ITL1103 Intelligence Operations Laboratory

A comprehensive laboratory designed to improve intelligence skills proficiency through the employment of intelligence operations scenarios.

ITL1104 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.

ITL1105 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.

ITL1106 Communication Signals Collections and Processing

Collection and processing of automated and remote international communication signals. Includes an overview of principles of security, classification requirements, and intelligence community operations.

ITL1201 Airborne Intelligence Operations

Procedures relating to airborne command, control and communications. Includes pre-mission preparation, aircraft system operation, mission objective orientation, crew coordination, airborne battle staff support for electronic combat, weapons systems, and targeting and post-mission operations.

ITL1301 Aircrew Intelligence Training

Aircrew intelligence using available resources and presentation media to present aircrew intelligence training in evasion and escape, survival and rescue, and enemy capabilities.

ITL1401 Electronic Signal Exploitation

Analysis of electronic signals to obtain electronic intelligence. Includes technical documents, computerized data for management and analysis,

and potential for electronic intelligence usage in electronic combat.

ITL1402 Radio Communications Analysis

Computerized data in analysis of radio communications network administration. Includes determining network organization, operation and types of related communications.

ITL1404 Signal Analysis

Use of oscilloscope and sonograph for specific purpose of radio signal analysis, and analyzing, identifying and recording communications.

ITL1503 Photographic Interpretation I

Analysis of photographs to determine structural characteristics of industrial transportation, power and housing facilities.

ITL1507 Photographic Interpretation II

Photographic interpretation of military facilities and equipment. Includes analysis of capability, activity, camouflage, and concealment and deception techniques.

ITL1601 Mission Planning and Support

Target determination and analysis of threat parameters, and selection and plotting of mission tract using all available intelligence data.

ITL1602 Conventional Weapons Application

Use of computer-assisted weaponeer data, target analysis and knowledge of delivery systems to solve weapons application problems.

ITL1603 Predictive Battlespace Awareness

Fundamentals of Predictive Battlespace Awareness (PBA) and Intelligence Preparation of the Battlespace (IPB). Includes concepts of theater level command and control, joint forces operations; and Intelligence, Surveillance, and Reconnaissance (ISR) capabilities.

ITL1903 Target Materials Management

Indexing, maintaining and issuing target materials to fulfill unit intelligence and mission requirements; and use of reference documents and procedures to keep materials current.

ITL2401 Voice Intelligence Collection

Aural recognition and comprehension of foreign language voice communications, communication procedures, and weapons systems parameters unique to various nations.

COURSE DESCRIPTIONS

ITL2402 Airborne Intelligence Collection

Application of operational procedures relating to the collection of communications and electronic intelligence. Includes ground preparation; operation of aircraft interphone and keyboard equipment; emergency procedures; and performance of preengagement, engagement and postengagement operations.

ITL2504 Multisensor Analysis

Multispectral analysis of designated system capabilities to counter specific DoD intelligence problems. Includes special operations, denial and deception, low-intensity conflict, and possible solutions.

ITL2505 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.

ITL2506 Exploitation Support Data

Imagery interpretation and analysis to support DoD designated intelligence problems using imagery titling and exploitation support data with mensuration techniques.

(JOU) JOURNALISM

JOU1101 Basic Journalism

The history, philosophy, ethics, and practices of the press in preparing multimedia communications. Includes an introduction to the techniques of communication through printed, oral, graphic, radio and television media to support preparation of news releases, articles, photographs and broadcasts.

JOU1102 News Writing for Print

Fundamentals of news writing. Includes structural components of a news story, research, writing style and evaluating news. Authors various types of news copy for external release.

JOU1103 Newspaper Production

Application of photojournalism, news, sports and feature writing techniques. Emphasis is placed on editing, layout and design for newspaper or magazine production.

JOU1104 Radio and Television Writing

Applied script writing for radio and television spot announcements, newscasts and features. Includes writing and editing applications in broadcast journalism, formatting techniques and the importance of sound and visual effects on the presented material.

JOU1105 Public Affairs

Theory, concepts and principles of public affairs. Includes the fundamentals of foreign and domestic policy; state, local, and federal governments; international relations; US foreign policy; foreign country study and the functions of overseas governmental agencies.

(LAW) LAW ENFORCEMENT

LAW1801 Marksmanship Laboratory

Qualification training in the use of 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 and function checks; and ammunition types and uses.

LAW1803 Fundamentals of Law Enforcement

Legal and procedural aspects of police operations, lawful and physical apprehension, restraint techniques, searches and seizures, patrol operations to include enforcement of traffic laws, operation of speed detection equipment, resource protection, self-aid buddy care, arming and use of force, accident scenes, crisis intervention and air base ground defense.

LAW1853 Police Safety and Survival Tactics

The essentials of individual defensive techniques with application experiences in weapons familiarization, control and retention, disarming suspects, use of chemical restraints, handcuffing techniques, building entries, use of cover and concealment, and baton defense. Includes review of the vulnerabilities of armed personnel and their relationship to mental states of awareness. Exercises include realistic and simulated environments.

LAW1901 Fundamentals of Security Forces

Fundamental concepts of law enforcement and security operations required for the protection of Air Force resources. Includes skills and techniques

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needed to perform patrol tactics, self awareness and safety, domestic violence issues and various types of responses to priority resources.

LAW2102 Security Forces Evaluations and Measurement

Principles and techniques of assessing unit's effectiveness by evaluating training, personnel and procedures; and inspecting functional areas. Includes methods, procedures and evaluative instruments to determine achievement of operational goals.

LAW2201 Criminal Law

The nature of criminal law and its application to law enforcement and the judicial system; and definitions and concepts, elements of crime, defenses, and criminal responsibility in the context of the criminal justice system and rules of evidence.

LAW2801 Patrol Dog Detection Techniques

Specialized training techniques that prepare military working dog handlers to perform drug and explosive detection operations. Includes dog conditioning, drug and explosive identification and detection, and legal aspects of searches and seizures.

LAW2811 Traffic Planning and Management

Analysis of police traffic functions and services, traffic patterns, and traffic movement in response to emergency situations. Includes theory of traffic control and safety procedures, analysis of traffic trends and collision causes, preparation of reports and records, traffic engineering and control techniques, research and development, and use of speed-measuring devices and breathalyzer units.

LAW2824 Principles of Traffic Collision Investigation

Analysis and application of advanced techniques used to gather facts and determine causes of traffic collisions. Includes review of traffic safety procedures; preparation of field sketches, diagrams, and traffic violation and collision investigation reports and forms; and techniques used to teach traffic collision investigation to other policemen.

LAW2829 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 haven), practical

exercises on foot and motorized escorts, and employment of antiterrorism techniques.

LAW2842 Advanced Special Investigations

Responsibilities, jurisdiction and interagency relationships with federal investigative agencies. Includes collection and dissemination of counterintelligence information; legal processes pertinent to evidence; legal rights of the accused; apprehension, search and seizure; methods of interviewing and interrogating; report preparation and processing of case files; and communicative skills.

LAW2843 Criminal Investigations

Fundamentals of criminal investigation in the field. Emphasis on the analysis of special techniques and procedures in crime-scene processing, collecting and preserving physical evidence, interviews and interrogations, sources of information, advisement of rights, felony crimes, surveillance and case preparations.

LAW2845 Advanced Principles of Security Forces

Comprehensive examination of law enforcement and security operations. Includes advance study of traffic laws, operation of speed detection equipment, use of force/confrontation management, and air base defense operations.

LAW2846 Information Security

Protection of information critical to the Air Force mission and the security of the United States. Includes identification, classification, downgrading, declassification, marking, protecting and destroying classified material and information.

(LEG) LEGAL SERVICE

LEG2107 Legal Office Management

Law library management, legal research, staff judge advocate and noncommissioned officer-in-charge relations, office budgets, on-the-job-training, USAF judiciary, human relations, and paralegal utilization and practical exercises for effective oral and written communicative skills and civil service employee matters.

LEG2111 Introduction to Civil Law

An introduction to law for the paralegal. Includes career progression as a paralegal; ethics; preventive law; legal assistance; powers of attorney and wills; law office administration and law libraries; and administrative separations, inquiries and investigations.

LEG2112 Legal Claims and Tort Investigation

Fundamentals of claim and tort investigation, legal procedures and the Armed Forces Claims Information Management System. Includes legal research, techniques for investigating incidents and accidents, witness statements and special research assignments involving accident and hospital recovery claims.

LEG2113 Legal Claims and Tort Administration

Procedures for processing general claims and tort litigation. Includes the Military Personnel and Civilian Employees' Claims Act, claimant interviewing and documentation for processing claims, insurance recovery, depreciation, salvage procedures, settlement letters and use of the Armed Forces Claims Information Management System.

LEG2114 Nonjudicial Punishment

Nonjudicial punishment and the Uniformed Code of Military Justice. Includes jurisdiction and sufficiency of evidence, elements of proof, supplementary actions and the Automated Military Justice Analysis and Management System. Using case studies, students determine appropriate punitive article(s) and prepare a nonjudicial punishment action from offer through legal sufficiency.

LEG2115 Pre- and Post-trial Administration

Pre- and post-trial procedures and administration. Includes interviewing and handling of victims and witnesses, types of courts-martial, records of trial, action and court-martial order, appellate review and use of the Automated Military Justice Analysis and Management System.

LEG2116 Introduction to Legal Research

Introduction to legal research techniques. Identify basic facts on legal research, legal publications, and categories of legal literature; case citation and methods of research; conduct manual and computer-assisted research.

LEG2211 Advanced Civil Law

Advanced instruction in civil law for the paralegal. Includes unfavorable information files, discharge of officer and enlisted personnel, environmental law, and line of duty and report of survey case files. Joint services ethic regulations and professional responsibilities of a paralegal in accordance with Air Force Rules of Professional

Conduct and Air Force Standards for the Administration of Criminal Justice are emphasized throughout the course.

LEG2212 Advanced Claims Administration

Principles and procedures for management of Air Force claims funds. Includes claims investigation, medical malpractice claims, hospital recovery claims, detection of fraudulent claims, and property damage tort claims.

LEG2213 International Law

Concepts of international law and status of forces agreements. Includes Air Force operations in the aerospace environment, basic concepts and fundamental principles of various conventions governing armed conflict, and support of deployment operations.

LEG2214 Legal Research and Writing

Legal research using the law library and computerized research tools; preparation of accurate, well-written legal memoranda; research and analysis of published opinions; preparation of legal reviews and case briefs; and analysis and summary of property damage tort claims.

LEG2215 Military Justice

Nonjudicial punishment, court-martial charges and specifications, trial procedures and the Automated Military Justice Analysis and Management System. Includes pretrial procedures, investigative techniques, witness interviews, lawful search and seizure, confessions, rights to counsel, and post-trial procedures.

LEG2216 Law Office Supervision and Training

Supervisory skills, techniques, and training management within the legal office environment. Includes mentoring, conflict management, the Paralegal Career Field Education and Training Plan and on-the-job training, determination of training needs, development of training standards, and management of related automated products and individual training records.

(LMM) LEADERSHIP, MANAGEMENT & MILITARY STUDIES

LMM1101 Leadership and Management I

Leadership role and responsibilities of journeymen; theories, techniques, and practical application of leadership and followership; supervision;

COURSE DESCRIPTIONS

management; problem solving; conflict resolution; concepts of human behavior; global diversity; standards of discipline; counseling and interpersonal relationships; mentoring; group dynamics; team development; ethics and core values; evaluation of enlisted personnel; time management; stress management; substance abuse; and current social issues.

LMM1102 Managerial Communications I

Principles of oral and written communications for airmen; theories and concepts of communications; factors influencing the communication process; speaking techniques such as oral presentations; and principles of effective writing.

LMM1103 Military Studies I

Combat leadership and professionalism; air and space expeditionary force fundamentals; national security and strategy; foreign terrorism; joint and multinational forces; code of conduct; law of armed conflict; dress and appearance; drill and ceremonies; customs and courtesies; and personal readiness.

LMM2121 Leadership and Management II

Role and responsibilities of the supervisor. Includes human resource development; diversity; team dynamics; performance, change, and conflict management; discipline; time and stress management techniques; substance abuse; operational risk management; and organizational leadership skills to include situational leadership, problem solving and the functions of management.

LMM2122 Managerial Communications II

Principles of oral communications and effective writing for the supervisor. Includes planning, organizing, formatting, and supporting oral and written communication; overcoming barriers to effective communication; and effective speaking skills.

LMM2123 Military Studies II

Air Force history and culture, wellness, standards of conduct, national security, and the role of the noncommissioned officer within the military profession. Includes national strategy, global instability, and military operations.

LMM2131 Leadership and Management III

Senior noncommissioned officer responsibilities for managing military resources using selected leadership and management theories, concepts,

techniques, and skills necessary to maintain order and discipline. Includes roles and views of human resources in management hierarchy and methods for improving worker performance through analytical decision making.

LMM2132 Managerial Communications III

Advanced practical experience in communications through written and oral reports on various military topics.

LMM2133 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 US Air Force, in achieving national objectives and application of USAF and joint forces in various military environments past and present.

LMM2134 Organizational Theory and Behavior

Organizations and their structure and intensive examination of important behavioral processes, and theories discussed in terms of behavioral, technological and communications factors. Includes organizational norms, conflict, motivation, self-concept, values, stress and interpersonal relations.

(LOG) LOGISTICS

LOG1101 Introduction to Supply Management

Organizational structure and functions, definitions, terminology, basic concepts and processes of Air Force supply system.

LOG1102 Introduction to Logistics Planning

Logistics principles, practices and techniques. Includes career progression, logistics module, wartime and contingency planning, logistics command and control, support agreements, and deployment management.

LOG1103 Contingency Response Training Basic

Introduction to logistics processes and terminology, basic command structure, pre-deployment briefing procedures, Contingency Response Group rapid response and operations, Air base/air-field operations and skills needed to support a joint/combined military environment. Includes a basic-level understanding of the mission, roles, core capabilities, limitations, organization, and operating environments of the Contingency Response Group.

COURSE DESCRIPTIONS

LOG1201 Materiel Storage and Distribution

Principles of handling and storing property, warehouse types, layout and design, storage aid systems, and material handling equipment. Includes warehouse validations, inventory processes, hazardous commodity management, and inspection procedures to determine identity, condition and shelf-life.

LOG1202 Logistics Automated Systems

Processing transactions and performing system inquiries using supply automated systems and associated interfaces. Includes computer security practices, file interrogation, issue requests, backorders, receipts, shipments, turn-ins and other item record updates.

LOG1601 Logistic Maintenance Support

Interpreting automated records and file maintenance; includes rejects and inquires, repair cycle, bench stock, issue procedures, and inventory.

LOG1602 Stock Control

Maintenance of proper stock levels. Includes practical exercises in requisitioning, materiel control, monitoring requirements, due-out releases and shipments.

LOG1603 Equipment Management

Management of equipment allowances and authorizations. Includes Practices in turn-in procedures, records maintenance and special procedures.

LOG1609 Introduction to Medical Materiel

Introduction to supply discipline. Includes principles and concepts of property accounting by computer systems, and use of medical materiel publications and computer terminals.

LOG1611 Medical Stock Control

Stock control procedures peculiar to medical materiel. Includes issues, inventory control, requisitioning, maintenance of due-in and due-out files, and receipts resulting from requisitions.

LOG1612 Medical Asset Management

Principles of 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.

LOG2101 Advanced Logistics Planning

Advanced logistics planning techniques. Includes wartime and contingency planning, logistics command and control systems, and deployment management.

LOG2103 Contingency Response Training Advanced

Practical application of logistics processes and terminology, advanced command structure, pre-deployment briefing procedures, Contingency Response Group rapid response and operations, Air base/air-field operations and skills needed to support a joint/combined military environment. Includes advanced-level understanding of the mission, roles, core capabilities, limitations, organization, and operating environments of the Contingency Response Group.

LOG2601 Introduction to Planning and Programming

Logistics planning techniques and concepts. Includes types and composition of plans, mobility planning, logistics center operation and planning for contingency, war reserve material and crisis actions.

LOG2602 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.

LOG2604 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.

LOG2605 Supply System Management and Analysis

Understanding supply computer system, customer support procedures, materiel management, financial management and supply management analysis. Includes extensive use and analysis of management reports and listings.

COURSE DESCRIPTIONS

LOG2606 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, inventory adjustments, property disposition, quality control, and corrective actions.

LOG2611 Automated Asset Sourcing

Methods and procedures for sourcing of mission-essential assets using standard base supply system interfaces to query and analyze local, lateral and depot assets. Includes monitoring and updating status, interrogation of various automated systems, web-based customer account tracking and web visual logistics information processing.

LOG2620 Contingency and Wartime Support

Strategic material management during wartime contingencies. Includes wartime processing procedures, special requisitions, and manning and reporting actions using concepts from combat supply management and weapons system management information systems, and combat follow-on supply systems using war reserve material, deployable assets and war-readiness spares kits.

(MAC) MACHINIST

MAC1101 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.

MAC1104 Milling Operations

Milling operations within drawing specifications. Includes plain and face, angular, form, gear cutting, internal milling operations and adjustment, maintenance, storage, and cleaning of milling equipment and attachments.

MAC1105 Lathe Operations

Lathe operations within drawing specifications. Includes turning (straight, shoulder, taper), filing, parting, knurling, boring, external and internal threading, tool grinding, center alignment, facing and center drilling, drilling, and reaming.

MAC2101 Intermediate Computer Numerical Control

Intermediate-level computer numerical control machine operations for use in computer-aided manufacturing. Includes technical mathematics, programming and multidimensional milling techniques.

(MAP) MAPPING

MAP1401 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.

(MAT) MATHEMATICS

MAT1103 Introduction to Statistics

Principles of frequency distribution and computing and interpreting probability, discrete and continuous probability distributions, binomial formulas, and probability tables; and statistical methods to emphasize variance analysis, correlation procedures, standard deviation and correlation programs.

MAT1405 Spectrum Analysis Mathematical Applications

Basic mathematical functions used to determine emission symbols as applied to spectrum management. Includes square root, exponents, plain and solid geometry, and basic algebraic and trigonometric functions.

MAT1601 Electronic Mathematics

Mathematic principles and their application to electronics. Includes algebraic expressions, solution of equations, word problems and trigonometric functions.

(MEA) MEASUREMENTS

MEA2707 Optical Measurements

Theory of geometry of reflection and refraction. Includes lens system, optical tooling instruments, and optometric and special devices.

COURSE DESCRIPTIONS

MEA2710 Electronic Measurements

Time and frequency measurements. Includes practice in phase, distortion and frequency measurements; waveform analysis; and use of oscilloscope calibrating equipment.

MEA2716 Precise Time and Frequency Calibration Systems

Advanced precise time and frequency calibration. Includes measurements, standards and time-transfer methods.

MEA2720 Applied Physical Measurements I

Introductory physical, linear, and angular measurements and their technical applications.

MEA2721 Applied Physical Measurements II

Principles of physical measurements. Includes temperature, mass weight, force density, viscosity and flow, and pressure measurements.

MEA2722 Applied Physical Measurements III

Principles of physical measurements. Includes rotary motion, torque, humidity, sound and vibration measurements.

MEA2724 Engine Measurement Systems

Theory, operation, alignment, and calibration of jet engine equipment and test stands. Includes theory and calibration techniques using block diagrams.

(MEC) MECHANICAL MAINTENANCE

MEC1211 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.

MEC1507 Mechanical Fundamentals (Missile Complex)

Knowledge of principles of mechanics. Includes configuration of a missile complex, use and care of hand tools, security, weapons system operational capabilities, technical orders, civil engineering manuals, maintenance management and missile safety.

MEC2501 Diesel Generator Maintenance Laboratory

Troubleshooting, repair and maintenance of diesel-powered generating equipment.

MEC2504 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 engaging and arresting mechanisms.

(MED) MEDICAL ASSISTANT

MED1301 Introduction to Medical Assisting

Preventive, occupational, and disaster medicine; hearing conservation programs; clinical procedures; office file maintenance; and ordering and management of office supplies and materials.

MED1302 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 and perceptive deafness; and electrocardiography procedures.

MED1305 Human Anatomy and Physiology

Characteristics and functions of human body systems including: musculoskeletal, circulatory, respiratory, digestive, nervous, reproductive, immune, and urinary systems.

(MET) METEOROLOGY

MET1403 Weather Fundamentals

Introduction to career field duties, organizational structure, standard and tactical weather communications, effects of atmospheric conditions on military operations, weather sensors, and sensor principles.

MET1802 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 communication equipment.

MET1803 Weather Observation

Practice in observing weather elements; making instrument evaluations; encoding and recording weather observations of sky conditions, cloud forms, atmospheric phenomena, visibility and obstructions, wind, temperatures, humidity, pressure and

COURSE DESCRIPTIONS

precipitation; and classification of storm echoes received on storm detection equipment.

MET1807 Environmental Support of Electro-optical Systems

Principles of operation and environmental sensitivity of precision-guided munitions, and application of physics of atmospheric radiative heat transfer to provide data necessary for target acquisition and tactics.

MET1808 Weather Maps and Charts

Analysis 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.

MET1809 Weather Forecasting Products

Interpretation of meteorological bulletins, products and codes. Includes observations, forecasts, space bulletins, numerical prediction products and cross sections.

MET2102 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.

MET2103 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.

MET2801 Weather Radar Operation

Principles and operation of weather radar system. Emphasizes interpretation of weather radar echoes.

MET2805 Weather Analysis Laboratory

Analysis of upper level and surface weather maps; includes application of basic concepts of analysis, wind pressure relationships, elements of frontal theory, geostrophic and gradient wind exercises, hydrostatic equation, and vertical sounding data.

MET2806 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; and preparation and presentation of weather briefings.

MET2809 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.

MET2817 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.

MET2819 Satellite Picture Interpretation

Application of principles of satellite tracking, picture gridding, and interpretation of satellite imagery and meteorological phenomena.

MET2821 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.

MET2822 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; and isallobaric indicators, tropospheric flow and steering, time differential charts, and grid and J.J. George methods.

MET2825 Advanced Weather Station Operations

Requirements and procedures for acquisition and management of weather resources and programs, environmental support plans, certification of weather personnel, unit quality control programs, management information system input, obtaining meteorological support from other weather agencies, and determining concepts and procedures to support unique operations requirements.

MET2826 Space and Solar Forecasting

Utilization of space and solar data to develop solar event forecasts, advisories, and warnings. Includes

COURSE DESCRIPTIONS

Proton, shock arrival and geomagnetic events. Integration of various solar products to develop routine solar forecasts. Includes geomagnetic, sunspot, HF/UHF and high altitude radiation. Knowledge of data resources and procedures for anomaly assessment.

MET2827 Mesoscale Meteorology

Identification of atmospheric stability, mass continuity theory, convective and non-convective severe weather. Includes analysis of skew-t charts and radar products.

MET2828 Macroscale Meteorology

Identification of atmospheric motion, dynamics, long waves, jet streams, satellite imagery, and analysis of these features. Includes principles of model products, as well as, recording and encoding weather observations.

(MGT) MANAGEMENT & SUPERVISION

MGT1109 Overview of Maintenance Systems Analysis and 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.

MGT1110 Introduction to Maintenance Scheduling

Introduction to time compliance technical order system; 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. Emphasizes use of computer terminal.

MGT1601 Automated Maintenance Data Systems

Introduction to Core Automated Maintenance Systems (CAMS), Integrated Maintenance Data Systems (IMDS), and other associated maintenance data systems for job scheduling, status determination, and documentation management. Includes initialization, microcomputer processing, file structure, time-sharing, query language processor retrievals, report generation, reject management, and database management.

MGT2116 Production Control Management

Production control management techniques. Includes interpreting work requirements, planning

duties, controlling work requests and applying material management techniques.

MGT2120 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; engine documentation duties; and use of remote terminal devices.

MGT2206 Maintenance Control and Analysis Craftsman

Controlling maintenance scheduling, and analyzing and reporting vehicle and equipment status. Includes troubleshooting system errors using the on-line vehicle integrated management system, applicable software and related publications.

MGT2212 Advanced Maintenance Management

Detailed analysis of vehicle maintenance structure. Includes supervisory responsibilities, self-inspection system, maintenance programs, material and maintenance control functions, environmental awareness, and requirements for manpower, budgeting, mobility, contingencies and training.

MGT2600 Management Applications, Functions and Techniques

Management principles and techniques, organizational assessment skills, supervisory and leadership techniques, and application of principles to planning and scheduling use of resources.

MGT2601 Maintenance Systems Management

Concepts, data systems, creating reports, forecasting manpower requirements, scheduling aerospace vehicle and equipment needs, and producing generation flow plans, maintenance plans and engine tracking procedures.

MGT2963 Electronic Communications Programs 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.

COURSE DESCRIPTIONS

MGT2964 Advanced Communications-Electronics Maintenance Management

Techniques/concepts of electronic communication system maintenance and personnel management. Major focus on required documentation and publications, understanding configuration controls, hardware quality control and tracking, support resources, hardware engineering and installation, organizational design specifications, mobile communication systems, wide-area network usage, command and control systems, unique functional organizations and mission needs, and personnel training and supervision.

(MIL) MILITARY SCIENCE

MIL1201 Military Operations

Concepts and principles of ground, air and naval operations. Includes strategic, tactical and support operations.

MIL1202 US and Allied Offensive and Defensive Forces

Components, functions and capabilities of US and allied offensive and defensive forces. Emphasizes weapons systems and method used for effective employment.

MIL1203 Third World and Nonaligned Nations Forces

Components, functions, and capabilities of offensive and defensive forces of nonaligned nations. Emphasizes weapons systems and employment.

MIL1204 Contingency Operations – Pre-Deployment

Wartime contingency operations and procedures. Includes introduction to joint military forces/operations, counterinsurgency doctrine, theater rules of engagement, fundamentals of survival in deployed environment, weapons familiarization and live fire, basic tactical movements, and aspects of regional culture and language.

MIL1302 Offensive and Defensive Forces

Force components, functions, and capabilities of foreign offensive and defensive forces. Emphasizes weapons systems and methods of employment.

MIL1402 Air Defense

Principles of territorial air defense stressing command, control, communication and warning

procedures as well as map reading relating to plotting of airborne aircraft locations.

MIL1403 Tactical Air Operations

Tactical air operations stressing command and control. Includes ground attack, aerial interact and general aerial operations.

MIL1406 Aviation Transportation

Concepts and principles of air transport operations. Includes organization, facilities, command, control, communications and operational procedures.

MIL2403 Analysis of Foreign Air Forces

Evaluation of command, control, communications and employment capabilities of Communist air forces. Includes organizational structure, installations and equipment.

MIL2503 Analysis of Foreign Ground Forces

Evaluation of capabilities, command, control, communications, and employment. Includes organizational structure, installations and equipment of foreign ground forces.

MIL2602 Foreign Naval Forces

Evaluation of command, control, communications and military capabilities of foreign naval forces. Includes employment, organizational structure, installations and equipment.

MIL2702 Special Military Studies

Analysis of foreign and domestic forces denial and deception techniques, specialized warfighting concepts, and counternarcotics operations. Includes study of special operations forces, US Government and DoD functions relating to special operations, and domestic and international legal theory relative to military operations.

MIL2802 Defensive Missiles

Analysis of foreign defensive missiles. Includes organizational structure, installations and employment; and functions and components of launch sites, support facilities and related electronic equipment.

(MKS) MARKSMANSHIP

MKS1104 Combat Arms Instructor

Fundamentals of teaching emphasizing proficiency in technical course writing, tests and measurements, programmed instruction, instructional systems development and academic counseling. Includes the

COURSE DESCRIPTIONS

adult learning process, effective study methods, audiovisual aids, automated teaching systems, techniques of dry and live fire supervision, coaching, and firearms range operations and safety.

MKS1105 Initial Marksmanship Laboratory

Initial qualification in the use of handguns, shotguns, rifles, machineguns and grenade launchers. Includes basic nomenclature, capabilities and characteristics of specific weapons; operator care, cleaning and maintenance; application of marksmanship fundamentals, weapons safety and clearing procedures; and types of ammunition.

MKS2101 Marksmanship Laboratory

Indepth knowledge and functions of handguns, shotguns, rifles, automatic weapons, grenade launchers and night vision devices. Includes basic nomenclature, capabilities and characteristics of specific weapons; operator care; application of marksmanship fundamentals, weapons safety and clearing procedures; and ammunition types and uses.

MKS2102 Firearms Maintenance

Operation and maintenance of handguns, shotguns, rifles, automatic weapons, grenade launchers, and night vision devices. Includes safety procedures, technical order indexes and detailed disassembly and 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.

(MLT) MEDICAL LABORATORY TECHNOLOGY

MLT1304 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 and 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.

MLT1305 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; and protein, glucose, and enzyme testing using automated and manual spectrophotometric principles, and urinalysis chemical analysis.

MLT1306 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.

MLT1307 Medical Laboratory Fundamentals

Introductory medical laboratory procedures, regulatory guidelines and accreditation standards. Includes phlebotomy, specimen processing and shipment, clinical chemistry theory, safety precautions, accident reporting, professional conduct and ethical standards.

MLT2302 Clinical Laboratory Procedures

Medical materiel procedures and receipt and preparation of blood, fluids, cultures, and stool specimens in a hospital environment. Includes laboratory administration, professional and patient relations, supervision, and publications.

MLT2303 Immunology and Blood Banking

Theoretical and supervised practical application of immunology, blood banking, and immunohematology. Includes antigen-antibody reactions, serological testing, quality assurance, atypical antibodies studies, and transfusion, donor service and blood storage procedures.

MLT2304 Hematology

Theoretical and supervised practical application in hematology. Includes cellular morphology, automated analysis, quality assurance and coagulation studies.

MLT2306 Medical Microbiology

Theoretical and supervised practical application of medical microbiology, parasitology, mycology and

COURSE DESCRIPTIONS

virology. Includes collection of clinical specimens, sterilization, storage, quality assurance, microscopic examination and culture procedures.

MLT2307 Medical Laboratory Administration

Principles and procedures of procurement and disposition of laboratory equipment and supplies, supervision of personnel, quality improvement, and required standards to maintain accreditation and regulatory agency guidelines.

MLT2308 Chemistry Laboratory

Theoretical and supervised practical application of chemistry. Includes quality assurance, safety, toxicology, blood gases, urinalysis and special chemistry procedures.

(MPH) MILITARY PUBLIC HEALTH

MPH1100 Introduction to Public Health

Introduction to the field of public health. Familiarization with relationships of local, state, and federal public health agencies; occupational safety and health agencies; and the USAF medical mission. Basic concepts of biostatistics and public health metrics.

MPH1101 Biological and Physical Sciences

Fundamentals of microbiology and chemistry as they apply to the field of public health. Introduction to medical terminology, ethics, and record entries. Applied concepts of the Health Insurance Portability and Accountability Act of 1996.

MPH1102 Principles of Communicable Disease Control

Terminology, detection, and control of communicable diseases including tuberculosis, viral hepatitis, HIV/AIDS, and sexually transmitted diseases. Investigation of animal bite incidents and epidemiological events. Development of education and training programs.

MPH1103 Principles of Food Safety and Sanitation

Introduction to food safety, chemistry, preservation, storage, and foodborne pathogens. Roles and responsibilities in food facility evaluations, subsistence inspections, hazardous food recalls, and foodborne illness outbreaks in accordance with the Food and Drug Administration (FDA) Food Code.

MPH1104 Occupational Medicine/Industrial Hygiene

Introduction to the workplace environment with emphasis on the health and safety of the industrial worker. Principles of toxicology, industrial operations, hazard communication, material safety data sheets, reproductive health, occupational illness/injury reporting and investigation, industrial case files, and personal protective equipment. Familiarization with chemical and physical occupational hazards as well as Air Force and OSHA regulations.

MPH1105 Medical Entomology

Theory of entomology and its importance in public health and transmission of diseases. Principles of biology and control of mosquitoes, arthropods, ticks, rodents, mites, roaches, fleas, lice, and other pests or vectors of medical significance. Familiarization with surveillance and trapping methods; packaging and shipment of specimens. Concepts of personal protection and military quarantine activities.

(MRD) MEDICAL READINESS

MRD1300 Basic Medical Readiness

Relationship of human body systems to triage, treatment and transportation of casualties.

MRD1301 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 communications in emergency situations.

MRD1302 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.

MRD1303 Expeditionary Medical Readiness Course

Introduction to expeditionary medical support and establishment of field medical facilities. Includes concept of operations; casualty movement; security; medical aspects of nuclear, biological, and chemical warfare; communication systems; and a comprehensive casualty flow training exercise.

COURSE DESCRIPTIONS

MRD2101 Medical Decontamination

Advanced instruction on removal and neutralization of nuclear, biological, and chemical (NBC) agents on wartime casualties before being admitted to a medical treatment facility. Includes roles in triage; lifesaving NBC casualty care techniques; facility operations, and site selection, set up and recovery.

MRD2110 Expeditionary Medical Support

Introduction to expeditionary medical support and establishment of field medical facilities. Includes concept of operations; casualty movement; security; medical aspects of nuclear, biological, and chemical warfare; communication systems; and a comprehensive casualty flow training exercise.

(MSL) MISSILE MAINTENANCE TECHNOLOGY

MSL1203 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 and impedance; component identification and operation; interpretation of schematic diagrams, function and operation of meters; and circuit measuring instruments.

MSL1205 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 semitrailers and tractors and similar vehicles; portable heating and air-conditioning units; ventilation safety filtering units; hydraulic pressure charging units; cable testing equipment; dispatching of equipment and inspection and maintenance of related facilities.

MSL1206 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; electric, mechanical and hydraulic operated vault doors up to 100 tons in size; cagetype elevators; hydraulic and electric

actuator systems and support equipment; and associated test equipment.

MSL1207 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.

MSL1208 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 semitrailers and tractors, crane, winches, and hoists; and use of test equipment to ensure correct installation of electric and hydraulic systems.

MSL1211 Missile Familiarization

Knowledge of missile assembly, weapons systems and launch complex, and basic principles of security, safety, deployment, dispatching and professional responsibilities. Includes basic concepts of corrosion control, preventive maintenance and treatment.

MSL1502 Missile Crew Procedures

Introduction to performance of missile crew duties. Includes operation of power supply, launch control checkout and monitoring, practical experience communications, and evaluation of hazard-sensing and warning systems as well as alert support, alert emergencies and launch procedures.

MSL2101 Launch Base Fundamentals

Duties and responsibilities of space launch base units, space system test philosophy, launch management and launch documentation. Includes safe handling of cryogenics, high-pressure gases, fuels and oxidizers; and storage, handling and disposal of hazardous waste.

MSL2102 Launch and Space Vehicles

Launch and space vehicle operations. Includes airframes, payload fairings, propulsion, major systems and components.

MSL2206 Missile Maintenance Laboratory

Missile and weapons systems familiarization and troubleshooting; manufacturer's maintenance manuals and technical data; removal and replacement of access panels for adjustment of

COURSE DESCRIPTIONS

mechanical subsystems; and replacement of components; experience in electrical checkout of ordnance circuits; and inspection and maintenance of environmental and RF interference shielding.

(MUN) MUNITIONS

MUN1201 Munitions Systems Maintenance

Munitions career field functions and familiarization with nuclear and nonnuclear munitions. Includes differentiation of component functions of nuclear and conventional weapons, missiles, and ammunition. Emphasizes control procedures, inspection and explosive safety.

MUN1202 Nuclear Weapons Systems

Nuclear weapons career field maintenance functions and familiarization with nuclear weapons systems. Includes principles of nuclear weapons, nuclear weapons publications, practicing nuclear standards and application of nuclear security.

MUN1203 Operation and Function of Nuclear Weapons

Operation and function of components of specific nuclear weapons. Includes preparation for strike, disassembly, limited life-component exchanges, weapons buildup, inspections and application of emergency procedures.

MUN1204 Nuclear Weapons Maintenance

Standard specifications for nuclear weapons, operation and maintenance of special tools, measurement of defects, packaging, and general repair procedures. Includes cleaning, painting, marking, and surface repair and prevention.

MUN1205 Weapons Movement

Familiarization and operator maintenance on cargo vehicles, tow vehicles, ground power units and general munitions trailers. Includes initial and periodic inspections and lift vehicle operations.

MUN1206 Munitions Inventory Procedures

Nuclear and conventional munitions accountability systems. Includes allocations, munitions accountability (automated and manual), files maintenance, custodial support and concepts and procedures for document control, stock control, inventory procedures and supply discipline.

MUN1208 Munitions Inspection Procedures

Conventional munitions inspection procedures. Includes munitions serviceability determinations;

civilian, DoD and Federal Aviation Administration shipments; manufacture's modifications; issue and turn-in inspections; and ammunition disposition requests.

MUN2201 Reentry Systems Maintenance

Advanced operation and maintenance of specific space reentry systems. Includes functions, shroud operation, deployment module, reentry system final buildup, preparation and packaging for transport, and application of safety and security procedures.

MUN2203 Advanced Munitions Systems

Advanced operational theory and maintenance of specific air munitions. Includes assembly, disassembly, guidance systems testing, handling, electronic systems troubleshooting, and safety. (May be repeated for credit for various munitions systems.)

MUN2204 Advanced Munitions Production Planning

Advanced munitions combat planning. Includes munitions logistic systems, construction and validation of conventional munitions plans, combat production concepts, practical assembly and delivery of munitions, and contingency stock control procedures.

(NDT) NONDESTRUCTIVE TESTING

NDT1101 Fundamentals of Nondestructive Testing

Introduction to nondestructive testing of aerospace metals and structures; and eddy current, liquid penetrant, magnetic particle, radiography, and ultrasonic testing methods. Includes basic metallurgy, technical publications, aircraft construction features, and occupational safety and health standards. (AF A&P program applicable course.)

NDT1102 Fundamentals of Radiographic Inspection

Basic theory of radiographic inspection and how electronically generated and isotope sources of radiation are used for radiographic inspection. Includes methods and materials used for radiographic inspection and film processing, correct interpretation of radiographs, development of inspection techniques, and performance of radiographic inspections. (AF A&P program applicable course.)

NDT1103 Fundamentals of Liquid Penetrant Inspection

Basic theory of liquid penetrant inspection used to determine the severity of surface discontinuities in materials and objects; and explains capillary action and how it is used in penetrant inspection, inspection

COURSE DESCRIPTIONS

methods, operation of equipment and performance of inspections. Includes chemical safety and hazard training incorporating Occupational Safety and Health Act and Air Force Safety and Health standards. (AF A&P program applicable course.)

NDT1104 Fundamentals of Magnetic Particle Inspection

Basic theory of magnetic particle inspection and how magnetizing currents are used in magnetic particle testing. Includes the use of wet and dry materials, equipment operation, interpretation of indicators, inspection techniques, and performance of inspections. (AF A&P program applicable course.)

NDT1105 Fundamentals of Ultrasonic Inspection

Basic theory of ultrasonic inspection and how principle of sound generation is used in ultrasonic inspection. Includes straight and angle beam testing, sound wave propagation, calibration and use of equipment, Snell's Law, inspection techniques, equipment maintenance, ultrasonic standards and performance of ultrasonic inspections. (AF A&P program applicable course.)

NDT1106 Fundamentals of Eddy Current and Bond Testing Inspection

Basic theory of eddy current and bond testing inspections, electromagnetic principles, formulas and inspection techniques used in eddy current inspections. Includes phase amplitude and impedance testing, identification and inspection techniques of conventional and advanced composites, and eddy current equipment calibration and inspections on composite materials. (AF A&P program applicable course.)

NDT2103 Advanced Dye Penetrant, Magnetic Particle and Radiographic Inspection

Advanced training in penetrant, magnetic particle, and radiographic inspection techniques and procedures. Includes in-shop process control techniques, radiation techniques, curve charting and special radiographic inspection procedures; radiation safety; and equipment maintenance and operation. (AF A&P program applicable course.)

NDT2104 Advanced Oil Analysis and Spectrometric Results

Principles of spectrometric oil analysis. Includes analysis of wear patterns, types of failures, sources of wear and nonwear metals in oil wetted systems, interpretation and evaluation of analytical data in oil analysis case histories, and

maintenance of atomic emission spectrometer and atomic absorption spectrophotometer equipment. (AF A&P program applicable course.)

(NMT) NUCLEAR MEDICINE TECHNOLOGY

NMT1101 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. Includes operating radionuclide imaging and detection devices and assisting medical professionals in preparing and administering radiopharmaceuticals and organizing and administering radionuclide-imaging services.

NMT1300 Applied Nuclear Medicine Mathematics

Mathematics applicable to nuclear medicine; includes fundamental algebra, logarithms, graphing, calculations of doses of radionuclides, and statistics.

NMT1301 Applied Nuclear Physics

Basic units and mass energy relationships, quantum theory, nuclear structure, physical characteristics and modes of radioactive decay, electromagnetic radiation.

NMT1302 Applied Nuclear Medicine Chemistry

Basic chemistry as it applies to nuclear medicine; includes basic definitions and conversions, electron configuration, inorganic nomenclature, and balancing chemical reactions.

NMT1303 Radiation Safety

Introduction to radiation safety; includes shielding requirements, nuclear regulatory commission license, personnel dosimeter, and radiation accidents and casualties.

NMT1304 Radiation Instrumentation for Nuclear Medicine

Scintillation spectrometer calibration, operating principles of scintillation gamma camera, radionuclide counting systems of liquid scintillation, speck and alternate imaging modalities, semiconductor detectors, and quality control.

COURSE DESCRIPTIONS

NMT1305 Radiopharmacy

Introduction to radiopharmaceuticals, quality control, radioactive equilibrium, and radionuclide generators.

NMT2319 Computer Applications in Nuclear Medicine

Imaging, data reduction, functions, and programming language in nuclear medicine.

NMT2320 Clinical Diagnostic Imaging

Procedures and techniques for diagnostic imaging. Includes quality control, preventive maintenance, collimation, counting statistics, image acquisition parameters, and data analysis.

NMT2321 Nuclear Laboratory Procedures

Clinical analysis of human blood cells and plasma. Includes volume and mass measurements, Schillings test, radioassays, radioimmunoassays, quality control of assay procedures, and laboratory equipment.

NMT2322 Clinical Radiopharmacy

Measurements, calculations, quality control, and interpretations for nuclides, technetium, iodine, chromium, cobalt, xenon, gallium, indium, and thallium. Includes diagnostic and therapeutic applications, administration of radiopharmaceuticals and primary thyroid therapy applications with radioactive iodine.

NMT2323 Clinical Radiation Safety

Application of radiation safety techniques, quality control, and Nuclear Regulatory Commission requirements for a licensed laboratory. Includes labeling procedures, warning signs for radionuclide storage, waste disposal and decontamination of personnel, equipment, and space.

NMT2324 Administrative Procedures

Procedures for ordering radionuclides, equipment, and supplies; scheduling patients for films; and recording/filing reports.

NMT2325 Didactic Review

Lectures and examinations in clinical nuclear medicine areas requiring demonstrated knowledge. Includes clinical procedure updates and didactic review of basic science.

(NUR) NURSING

NUR1101 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.

NUR1103 Otolaryngology

Functions and responsibilities of clinical and surgical assistant to an otolaryngologist. Includes audio evaluations; maintenance and care of specialized otolaryngologic instruments and equipment; diagnosis and treatment of common ear, nose and throat disorders; and pre- and postoperative patient care. Emphasizes procedures and administrative management.

NUR1104 Orthopedics

Anatomy, medical terminology, and care and handling of orthopedic patients; and assisting with management of orthopedic clinics, minor surgery, fabrication and modification of casts, and treatment of patients with orthopedic conditions or injuries.

NUR1304 Fundamentals of Patient Care

Human anatomy and physiology, medical terminology, interpersonal relations and human needs, patient needs, basic nursing techniques, and cardiopulmonary resuscitation.

NUR1318 Basic Nursing

Infection control; patient movement, safety, comfort and hygiene; specimen collection; nutrition and elimination; vital signs; and pre- and postoperative care.

NUR1319 Intermediate Nursing

Medications and fluid therapies; basic wound care; cardiorespiratory procedures; skeletal and immobility procedures; obstetric, neonatal and pediatric care; eye, ear, nose and throat care; patient care planning; and basic cardiac life-support procedures.

NUR1324 Introduction to Operating Room Technology

Anatomy and physiology, medical terminology, safety, surgical supplies and equipment, anesthesia, pre- and postoperative patient care, and transportation and positioning of surgical patient.

COURSE DESCRIPTIONS

NUR1325 Operating Room Technology

Microbiological basis for sterilization, asepsis and disinfection of operating room; and scrubbing, gowning and gloving in this environment.

NUR1326 Operating Room Practicum

Practicum in scrub and circulator duties, preparation of surgical patient, and professional ethics.

NUR1328 Introduction to Clinical Practicum

Introduction to hospital nursing care. Includes patient sensitivity, safety, security, medical readiness, plans, documents and patient care.

NUR1332 Emergency Department Practicum

Hospital emergency department experience and procedures. Includes patient transfers, simple triage, wound preparation, communications and operation of emergency vehicles.

NUR1333 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.

NUR1334 Mental Health Evaluations

Principles and techniques of interviewing, documentation of initial mental health screening, social histories, and administration and scaling of mental health tests.

NUR1336 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.

NUR1338 Operating Room Nursing Practicum

Clinical experience in scrub and circulating technician duties in orthopedic, general, and obstetric and gynecologic surgery.

NUR1339 Fundamentals of Central Sterile Supply

Practicum in operation of equipment used in central sterile supply.

NUR1340 Introduction to Substance Abuse Counseling

Programs, policies and administrative procedures likely to be encountered when counseling substance abusers. Emphasizes substance abuse identification, drug testing, prevention and

intervention, cultural awareness, and basic theory and skills needed to provide for clients.

NUR1341 Introduction to Mental Health Services

Mental health procedures and documentation, psychological testing methods, emergency life-support procedures, crisis management, psychopharmacology, and role playing exercises demonstrating ability to appropriately handle client scenarios likely to be encountered in mental health services profession.

NUR1342 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.

NUR1350 Inpatient Unit Practicum

The use of theory and clinical experience to emphasize the practice of daily inpatient care. Includes admission and discharge procedures, patient assessment, wound management, intravenous therapy, lifting and transport techniques, interpretation and transcription of preoperative and postoperative instructions, and medication administration.

NUR1351 Outpatient Unit Practicum

The use of theory and clinical experience to emphasize the practice of outpatient procedures. Includes scheduling, recording of vital signs, soft tissue and musculoskeletal injury management, specimen collection, annual physical health assessment, medication administration, and medical materiel logistics.

NUR2315 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.

NUR2316 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.

COURSE DESCRIPTIONS

NUR2325 Organization and Administration of Aeromedical Evacuation

Introduction to aeromedical evacuation operations, responsibilities, patient classification, documentation, and aircraft capabilities and configurations.

NUR2326 Aeromedical Evacuation Equipment

Fundamentals of aeromedical evacuation equipment. Includes traction devices, oxygen analyzers, respirators, ventilators, "A" frames, and other life support equipment.

NUR2327 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.

NUR2329 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.

NUR2334 Operating Room Administration

Human and fiscal management of surgical environment, time management, supervision and resource management. Emphasizes staff development, professional and patient relationships, quality, and medical readiness.

NUR2335 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.

NUR2342 Aeromedical Evacuation Contingency Operations

Cognitive and performance based instruction on aeromedical evacuation system, mobilization and command structure, casualty management and movement, communication and information system, and coordination center responsibilities as related to contingency operations.

NUR2350 Health Promotion and Fitness

Development and management of health promotion programs. Includes population health principles, tobacco cessation, fitness and nutrition, appointment processing, weight and body fat measurement, marketing and office administration.

(OCC) OCCUPATIONAL THERAPY

OCC1101 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.

(OLT) OTOLARYNGOLOGY TECHNOLOGY

OLT2306 Clinical Technology and Practicum

Special emphasis placed on clinical examinations, diseases of head and neck, emergencies and functional problems of ear, nose, and throat, and dysfunction of eustachian tube; includes clinic procedures, administration, and design; related pharmacology and microbiology; related radiography, radiotherapy, and radioisotopes; photography in otolaryngology; and local anesthesia, otoneurology, electronystagmography, and equipment nomenclature; also includes patient counseling, patient history taking, cancer patient follow-up, and clinical practicum.

(OPD) ORTHOTIC PROSTHESIS DEVICES

OPD1301 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.

OPD1303 Principles of Upper Extremity Orthotics

Anatomy, physiology, kinesiology, components, materials, and clinical applications of lower extremity orthoses, with emphasis on design, fit, and function of orthoses for the hand, wrist, and arm.

OPD1304 Principles of Lower Extremity Orthotics

An introductory study of the anatomy, physiology, and kinesiology, components, materials, and clinical

applications of lower extremity orthoses. Emphasis is on design, fit, and function of orthoses for the hip, leg, knee, ankle and foot.

OPD1305 Principles of Spinal Orthotics

An introductory study of the anatomy, physiology, and kinesiology of the spine and pelvis orthoses. Emphasis is on design, fit, and function of orthoses for the lumbar, thoracic, and cervical vertebrae.

OPD2101 Orthotics Management

Advanced knowledge and skills necessary to perform as an orthotic craftsman. Includes patient and professional relations, supervision, safety and management of resources and medical materials. Proficiency in the selection, fabrication, fitting and modification of the Boston Scoliosis Orthoses Module is required.

(OPT) OPTOMETRIC TECHNOLOGY

OPT1302 Visual Acuity and Its Correction

Anatomy and physiology of visual system, eye as an optical instrument, visual acuity measurement, and spectacle selection, ordering, repair and verification procedures.

OPT1303 Assisting Optometrist Practicum

The practicum includes the applications of tonometry, visual fields and eye safety measures, and fitting of contact lenses.

OPT1306 Optometry Fundamentals

Introduction to the roles and responsibilities of an optometric technician. Includes identifying and reporting safety and security issues, review of ethical concepts and professionalism, patient information documentation procedures, and familiarization of medical record systems.

OPT1307 Ocular Anatomy and Physiology

Introduction to anatomy and physiology of the eye. Includes basic identification and treatment of common ocular injuries and disorders.

(PAV) PAVEMENTS

PAV1507 Rigid Pavements

Tasks associated with construction and maintenance of rigid pavements.

PAV1508 Flexible Pavements

Tasks associated with construction and maintenance of flexible pavements.

(PER) PERSONNEL

PER1110 Personnel Support for Contingency Operations

Concepts of deployment of personnel in contingency or exercise situation emphasizing duties and responsibilities to support area commander at a deployed site. Includes concepts, accountability, predeployment planning, operation of microcomputers, field condition procedures and redeployment.

PER2108 Manpower Management

Concepts of manpower organization. Includes measurement methods, development of manning tables, management advisory studies, authorization routines and manpower reports.

PER2121 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.

(PHA) PHARMACOLOGY

PHA1306 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 and avoirdupois system.

PHA1307 Introductory Pharmacology

Principles of pharmacology, human anatomy and physiology; studies of drug abuse, toxicology, and pharmaceutical and medicinal agents; and role-play in using prescriptions to dispense in a model pharmacy.

PHA1309 Pharmacy Practicum

Inpatient and outpatient pharmaceutical procedures. Includes computerized information systems, sterile and nonsterile compounding, dispensing of medication and logistical procedures.

PHA1310 Pharmacy Calculations

Introduction to the metric, avoirdupois, and apothecary systems of measurement and the

COURSE DESCRIPTIONS

calculations used in pharmacy practice. Includes ratio and proportion, dosage determinations, percentage preparations, reducing and enlarging formulas, dilution and concentration, specific gravity, and flow rates. Required to correctly perform calculations to prepare a medication order.

PHA2101 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.

(PHE) PHYSICAL EDUCATION

PHE1000 Physical Education and Wellness

Basic concepts and principles of wellness. Includes physical fitness, nutrition, sexually transmitted diseases, suicide awareness and prevention, sexual assault prevention and response, self-aid/buddy care, healthy lifestyles, and an introduction to the Air Force fitness program using drill, calisthenics, and running.

PHE1800 Physical Conditioning

Calisthenics and running to condition muscle and body organs (heart, lungs). Includes coordination, stamina and overall fitness for extensive field exercises.

PHE1801 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.

(PHO) PHOTOGRAPHY

PHO1101 Basic Broadcasting

Organization, function, station management and administrative services; news writing; spot announcements; and feature material for radio and television. Includes announcing news, sports, features and special events; interview techniques; control room operation; programming and production; and regulatory agencies and broadcast standards.

PHO1102 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.

PHO1408 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.

PHO1409 Advanced Principles of Photography

Laboratory principles and procedures for photocopying, spotting, enlarging, printing of copy negatives, and use of chemistry for various emulsions.

PHO1414 Photoprocessing Quality Control

Fundamentals of continuous processing methods and equipment. Includes chemical process control, sensitometry, densitometry and analysis of film characteristics.

PHO1457 Photographic Assignments

Theory and procedures for applied photographic assignments. Includes lighting techniques, filters and portrait, passport, identification, aerial and industrial photography.

PHO1458 Photojournalism

Journalistic techniques, communicative composition, photo layout, and public relations. Includes practical work in writing captions and news, techniques of sports photography, developing a picture story, photographing small groups, and constructing photo features.

PHO1500 Basic Motion Picture Photography

Introduction to the principles of motion picture photography. Includes camera operation, film selection, handling of sensitized material, camera shutters and exposures, optics and the uses of motion pictures.

COURSE DESCRIPTIONS

PHO1501 Motion Picture Photography

Framing, composition, basic sequencing and reestablishment techniques. Includes performance of screen direction, arrangements, cutaway techniques, use of filters and exposure meters and assembly of film.

PHO2405 Color Film Processing

Introduction to color film emulsions, color process control, plotting characteristic curves, exposing and processing color film and color slide duplication.

PHO2406 Color Printing

Internegative film, masking, and creating black and white and color prints from color negatives. Includes chemical analysis, use of densitometer, and photographic quality assurance.

PHO2417 Digital Imagery

Introduction to the technology and use of computers for photographic purposes. Emphasis is on the creative use of the computer to develop and execute aesthetic solutions to photographic digital problems. Includes use of digital camera systems, imaging software, scanners, and digital printers.

PHO2501 Combat Camera Operations

Principles of contingency readiness. Includes principles and practices of base defense, communications security and operations, physical security, night operations, military tactics and operations, field sanitation, and field operations in the joint war-fighting environment.

(PHY) APPLIED PHYSICS

PHY1422 Applied Technical Physics

Physics survey. Includes basic principles, atomic structure, quantitative processes, interactions, transformations, principles of radiation, detectors, and measurement techniques.

(PLB) PLUMBING

PLB1501 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.

PLB1504 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 materials recovery and restoration.

PLB1505 Utility Equipment

Maintenance of utility system equipment. Includes piping, fire hydrants, sprinkler, natural gas, fire-suppression systems and components, and backflow prevention.

PLB1507 Water and Waste Distribution Systems

Waste, water supply and building distribution systems. Includes fire-suppression, deluge, sound suppression, hazardous waste water, installation of water heaters, safe work practices; steel pipe and copper tubing assembly, corrosion identification and control, and application of fraud, waste and abuse information.

(PTH) PHYSICAL THERAPY

PTH2401 Physical Therapy Practicum

Supervised practice under a licensed physical therapist or physical therapist assistant in clinical settings and rotations with emphasis on neurological, geriatric, pediatric and cardiac treatment concepts.

(PTR) PHYSIOLOGICAL TRAINING

PTR1301 Introduction to Aerospace Physiology

Principles of basic laws of atmosphere and gas as they apply to pressure chamber operations and procedures, and introduction to medical terminology, medical computer systems, decompression sickness, pressure chamber effects and administrative duties. Includes publications and forms management, filing, and scheduling.

PTR1303 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, and participation in low-pressure chamber flights.

PTR2350 Hyperbaric Physiology and Therapy

Nitrogen narcosis, oxygen toxicity, air embolism, carbon monoxide poisoning, gas gangrene, mechanical effects of compression and

COURSE DESCRIPTIONS

decompression, and application of treatment tables and therapy.

PTR2351 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.

PTR2352 Aerospace Physiology Management

Management of an aerospace physiology unit. Includes information management system, symptoms and treatment of decompression sickness, and career progression.

(QCI) QUALITY ASSURANCE

QCI2202 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.

(RAD) RADIOLOGIC TECHNOLOGY

RAD1301 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 communications, methods of patient care, radiobiology, and computer applications in radiology department.

RAD1302 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.

RAD1305 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.

RAD1307 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.

RAD1308 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.

RAD2301 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 and scattered radiation, radiation protection, department administration, and review of radiographic anatomy..

RAD2303 Advanced Special Radiographic Procedures

Radiographic equipment used for special procedures, review of radiographic examinations that require negative or positive contrast media, infection control procedures, surgical radiographic procedures, and mobile radiographic and fluoroscopic procedures.

RAD2304 Radiography Internship

Standard radiographic procedures accomplished under supervision of qualified radiologic technologists, and assisting radiologist with barium contrast studies, interventional studies and nonstandard radiographic procedures.

RAD2308 Clinical Mammography

Introduction and historical development of mammography, screening and educational programs for patient. Includes aseptic techniques/sterilization procedures; quality control testing; and proficiency training in clinical imaging, augmented breasts, localization methods for biopsy and breast specimen radiography.

COURSE DESCRIPTIONS

RAD2311 Management of Diagnostic Imaging Services

Diagnostic imaging services workload accounting, budgeting, occupational safety and health standards, and manpower applications. Emphasizes professional ethics, continuing education, total quality management and team building.

(REC) RECREATION

REC1102 Fitness and Health

Methods used in measuring physical fitness, determining nutrition requirements, evaluating human physiology, analyzing exercise physiology and managing health resources.

(RTB) RADIO & TELEVISION BROADCASTING

RTB1101 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.

RTB1102 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.

RTB1400 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.

RTB1500 Introduction to Radio Production

Fundamentals of radio production. Includes equipment use, direction techniques, studio and control room operation, audio editing, programming and production, and broadcast standards.

RTB1801 Audio Mixing and Production

Basic audio theory. Includes use of microphones and tape recorders; techniques for splicing, editing, duplicating, storing, and handling equipment and materials; and user maintenance of audio equipment.

RTB1802 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.

RTB1803 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.

RTB1805 Electronic Field Production (EFP)

Setup and operation of electronic field production 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.

(SAF) SAFETY

SAF1802 Missile, Explosives and Nuclear Safety

Safety standards for handling, storing, transporting, and operating conventional and nuclear munitions and missiles.

SAF1803 Accident Investigation

Accident investigation, reporting and analysis. Emphasizes trend analysis, statistical displays, report preparation, accident investigation and system validation.

SAF1811 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.

SAF1812 Safety Management I

Basic philosophy of accident prevention. Includes safety program manning, principles of learning, operational risk management, hazard reporting and abatement, human factors, safety education and training reference materials and safety plans and

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programs; recognition, avoidance and prevention of job-related hazards; conducting meetings, writing reports, and organizing and presenting material.

SAF2101 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.

SAF2604 Accident Prevention Management

Philosophy of accident prevention with emphasis on inspection, classification, mishap investigation and reporting. Recognition of hazards and design of elimination techniques through knowledge of accident prevention controls.

SAF2807 Advanced Safety Management

Safety standards pertaining to hazardous materials management, confined spaces, lockout and tagout procedures. Emphasizes inspection preparation and reporting, and mishap investigation and reporting.

SAF2809 Weapons Safety Program Management

Application of mishap investigation and safety inspection programs and procedures; storage, flight line handling and transportation of weapons; and procedures for site planning, management of explosive ordnance disposal, and related waivers and deviations.

(SAN) SANITATION

SAN1506 Vegetation Management

Identification of terrestrial weeds and characteristics of ornamental and turf pests, plant biology, and physiology; classification of herbicides and aquatic pests; application of pesticides; and herbicide use problems.

SAN1507 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.

SAN1808 Environmental Support Equipment

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.

SAN2802 Water Analysis and Treatment Laboratory

Analysis of basic chemistry as it pertains to water and wastewater treatment, water testing procedures, and treatment of water for industrial use.

SAN2821 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.

(SDI) SPECIAL DUTY/REPORTING IDENTIFIER INTERNSHIP

SDI3000 Special Duty Internship - Apprentice

Demonstrated knowledge and job proficiency (minimum 4 months) at apprentice level with rank of airman (E-2) or higher in career field represented by a special duty identifier and reporting identifier.

SDI5000 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 a special duty identifier and reporting identifier.

SDI7000 Special Duty Identifier - Craftsman

Demonstrated knowledge and job proficiency (minimum 12 months) at craftsman and supervisor level with rank of staff sergeant (E-5) or higher or career field represented by a special duty identifier and reporting identifier.

(SEC) SECURITY

SEC1804 Fundamentals of Ground Combat Skills

Analysis of airbase defense operations and instruction in subjects such as fire control and distribution measures, prisoner-war processing, early warning devices, land navigation, camouflage, and threats against resources. Includes application of tactical communications, associated support equipment and field training disciplines.

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SEC1805 Special Weapons and Tactics

Application of special weapons. Includes nomenclature, capabilities, and characteristics of slap flares, hand grenades, claymore mines and antitank weapons; employment of individual and team concepts in tactical situations; patrol techniques used in a combative environment; and principles of urban survivability.

SEC1806 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 and alerting systems, physical security safeguards, alarm systems, building and area search procedures, and introduction to security police automated system.

SEC1855 Specialized Mobile Security Functions

Concepts of worldwide mobile operations. Emphasizes practical application of defensive tactics and techniques. Includes the use of force continuum, international relations, explosive devices, lethal and nonlethal weapons, defensive tactics, terrorism, information sources, counter surveillance, hostage survival, threat conditions, aircraft familiarization and individual protective measures.

SEC1856 Antiterrorism

Introduction to the basic theories of international, domestic and cyber terrorism. Emphasizes increasing awareness of terrorist operations, surveillance detection, hostage survival, individual protection measures, threat conditions and explosive awareness with demonstration. Includes the use of recent case studies to help present an understanding of installation antiterrorism and force protection measures.

SEC2850 Intrusion Detection Equipment Operator

Understanding the characteristics, capabilities, limitations and vulnerabilities of associated sensor subsystems, small permanent communication and display segment equipment. Emphasis placed on the technical orders, system operation and control of response forces.

SEC2851 Closed-Circuit Television Operator

Understanding the characteristics, capabilities, limitations and vulnerabilities of perimeter surveillance and system closed-circuit television equipment. Emphasis placed on troubleshooting, system operations and television monitoring to prevent unauthorized entry into controlled areas.

SEC2853 Organization of Base Defense Forces

Leadership, organization and management of US military security forces. Emphasis on the legal and procedural aspects of police operations. 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.

SEC2855 Support Weapons Qualification

Application and knowledge of mortars, recoiled rifles, heavy machineguns, and/or grenade launchers; including nomenclature, characteristic capabilities of specific weapons systems, operator care and cleaning maintenance, weapons safety, tactical employment, forward observation and fire-direction center of operations (mortar courses only). Emphasis on ammunition types and uses, practical exercises involving crew drills for gunners, assistant gunner ammunition bearers and live firing qualification.

SEC2856 Ground Defense Leadership and 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. Emphasizes leadership of combat elements, patrol planning procedures and integration of defense forces. Includes increasing awareness of terrorist operations, application of special weapons and team concepts in tactical situations.

SEC2857 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.

SEC2860 Electronic Security System Operator

Analysis of characteristics, capabilities, limitations and vulnerabilities of electronic security systems. Emphasizes application of troubleshooting, installation and configuration techniques associated with battery modules, solar panels, handheld

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monitors, communication modules, tripods, sensors, power supply systems, annunciator systems and thermal imagers.

(SOC) SOCIAL SERVICES

SOC1208 Applied Counseling Techniques

Counseling interviews; includes transactional analysis, group counseling, crisis intervention, telephone counseling, awareness of basic human needs, value clarification techniques, and conducting practice counseling sessions.

SOC1209 Introduction to Equal Opportunity

Introduction to equal opportunity advisor skills and the human relations climate. Includes individual and group behavior, communications, discrimination, dynamics of power and major ethnic groups.

SOC1210 Equal Opportunity Problem Solving

Equal opportunity problem resolution and prevention. Includes knowledge and application of education and publicity programs, counseling referral agencies, preventive planning, and program evaluation.

(SOO) SOLAR OBSERVATION

SOO2501 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.

(SUR) SURVEYING

SUR1501 Fundamentals of Surveying

Surveying principles, theories, practices and management using manual, automated and Global Positioning System surveying equipment. Distance and direction measurement, establish horizontal and vertical control, and compute horizontal and vertical angles. Perform traverse and grading computations and instrument adjustment. Perform topographic surveying requirements, site reconnaissance, and perform and compute construction layout requirements. Utilize Global Positioning System surveying

equipment and accessories. Upload/download, process, and convert survey data.

SUR1502 Construction Surveys

Basic topographic mapping, road layouts, profile and cross-section surveys, vertical road alignments, earthwork computations, grade stakes, building layouts, and utility surveys.

(SVE) SURVIVAL EQUIPMENT

SVE1101 Sewing and Fabrication Principles

Introduction to sewing machine operation and fabrication of flight clothing and accessories. Includes inspection, repair, modification and fabrication of flight clothing, antigravity suits, protective covers and upholstery, and the characteristics of textiles used in soundproofing panels.

SVE1102 Sewing Machine Maintenance

Introduction to the operation, inspection, timing, adjustment, troubleshooting analysis, preventive maintenance of different series of sewing machines, and use of maintenance manuals to perform operator maintenance and troubleshoot malfunctions.

SVE1103 Automatic Parachutes

Principles of automatic back, seat and chest personnel parachutes, and special-purpose parachutes used for aircraft deceleration. Includes preparation and assembly of automatic parachutes, automatic rip cord release and inspection, and servicing according to technical publications.

SVE1104 Inspection and Maintenance of Survival Equipment

Inspections, maintenance, and packing of personal parachutes, life rafts, escape slides, life preservers and full pressure, and anti-exposure flight suits.

SVE1105 Survival Equipment Orientation

Introduction to survival equipment operations and practices. Includes identifying basic facts relating to Air Force Office of Safety and Health safety practices, operations security, use of Air Force publications, Air Force supply system, maintenance management, inspection systems, shop and maintenance practices, and environmental issues.

(SVR) SURVIVAL & RESCUE**SVR1101 Air Operations**

Techniques of conducting pararescue aerial operations emphasizing insertion operations. Includes water employment and aerial cargo delivery.

SVR1102 Ground Operations

Techniques of conducting pararescue ground operations. Includes pararescue assisted evasions, insertion and extraction operations, small team tactics, and adverse terrain operations.

SVR1501 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, burden carrying, and classroom and field location instruction.

SVR1801 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, shelter craft and firecraft unique to special environments, and classroom and field location instruction.

SVR1803 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, application of travel techniques, and classroom and field location instruction.

SVR1804 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; water and food procurement, preparation and preservation, and classroom, outdoor tower and mountainous field location instruction.

SVR1805 Psychology of Environmental Stress

Stresses encountered in prisoner-of-war environments. Includes resistance to exploitation; international agreements relative to captivity and camp organization; application of escape-and-evasion techniques; and Communist history and theory, interrogation and indoctrination procedures, and group resistance in captivity.

SVR1818 Pararescue Indoctrination

Pararescue techniques. Includes medical terminology, anatomy, treatment of temperature-related injuries, medical kits, mountain indoctrination and diving physics.

SVR1819 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.

SVR2801 Advanced Survival Techniques

Adaptation of survival-and-evasion principles, procedures and techniques necessary for survival in extreme environmental conditions. Includes barren arctic, barren desert, jungle and open ocean environments.

(SVS) SERVICES**SVS1101 Introduction to Services**

Introduction to food production, mortuary services, fitness and recreation and hotel/motel operations. Includes customer service techniques, employee relations, accounting, budgeting and quality assurance. Includes field and service operations.

SVS1102 Introduction to Food Services

Introduction to quantity food service functions. Includes principles of nutrition, sanitation, menu planning, kitchen and storeroom documentation, progressive cooking, waste prevention procedures, customer relations, and safety and food service specific computer operations.

SVS2100 Services Management

Management principles of services functions. Includes food production, mortuary services, fitness and recreation, accounting, budgeting, quality assurance, marketing, and hotel and motel

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operations; and customer service techniques and employee relations. May include field operations.

(TRN) TRANSPORTATION

TRN1604 Air Passenger Management

Flight schedules and publications, aircraft identification, preparation of air passenger documents, passenger reservations/scheduling, and transportation funding procedures.

TRN1605 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.

TRN1609 Air Transportation Weight and Balance

Preparation of transportation documents and reports; methods and techniques of weight-and-balance computations; and mathematical formulas, balance computers, weight charts, and aircraft weight records for hazardous and non-hazardous cargo including passengers.

TRN1610 Aircraft Load Planning

Palletized and nonpalletized cargo planning with special consideration to weight, bulk and properties. Includes preinspection of aircraft loading equipment, loading and restraining cargo for flights.

TRN1617 C-17 Loadmaster Qualification

Overview of C-17 cargo-handling system and passenger and aeromedical-handling procedures. Includes flight operations, mission preparation and special-handling procedures.

TRN1618 Surface Transportation of Dangerous Materials

Introduction to traffic management and terminal service for rail, motor vehicle, and water transportation. Includes special problems related to movement of dangerous materials.

TRN1619 Cargo Preparation

Packing and preservation principles for general, special, and hazardous cargo storage and shipment. Includes handling of hazardous materials, operation and maintenance of shop tools for the fabrication of shipping containers, safety procedures, and operation of material handling equipment.

TRN1622 Cargo Processing and Documentation

Techniques, principles, and computer methods of processing air cargo. Includes understanding requirement for mail, dangerous cargo and special equipment.

TRN1631 Traffic Management

Understanding the administration function of traffic freight, personal property and passenger management. Includes materiel, and storage of personal property, passenger movement, and automatic data processing management procedures.

TRN1638 Aircraft Systems Familiarization and Operations - C-5 Loadmaster

C-5 auxiliary power unit operation, hydraulic and kneeling systems, and forward and aft door operation. Includes preoperation inspection, trouble-isolation techniques, operational checks, operating limitations and use of synthetic trainers.

TRN1640 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.

TRN1641 Loadmaster Tactical Delivery/C-130 Aircraft

Tactical delivery of equipment/personnel by aircraft crewmembers; includes assembly/inspection of cargo load and emergency procedures.

TRN1642 Vehicle Operator Course

Fundamental principles of vehicle operating procedures unique to special purpose vehicles. Includes unusual environments, special configurations applicable for use of these vehicles; safety procedures for trailer towing, convoying and off-road situations.

TRN1644 Shipment Planning

Procedures for handling and transporting cargo economically and effectively. Includes standard transportation movement procedures, consolidation and routing of freight shipments. transportation and movement procedures, consolidation of shipments, and routing of freight shipments.

TRN1648 Air Passenger and Cargo Management

Transportation responsibilities, resources, and management of Military Airlift System (MAS). Special

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responsibilities of each transportation subdivision, safety, types of aircraft, airlift systems, military air terminals and manning and resources for operation. MAS capability to respond in war and peacetime.

TRN1801 Basic Combat Convoy Course

Introduction to ground operations during wartime contingencies. Includes convoy operations, ground operations, field communications, weapon fire control measures, weapon range estimation, surveillance, night observation devices, land navigation, combat lifesaving techniques, and urban reaction operations.

TRN1802 Transportation Combat Readiness and Resources

Introduction to transportation deployment operations and wartime contingency planning. Includes resource management accounting systems, war reserve materials, manpower and personnel processes, airlift validations and air expeditionary force planning.

TRN2602 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.

TRN2611 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.

TRN2612 Advanced Traffic Management

Movement of cargo and passengers using modern traffic management automated systems. Includes resolution of case problems, budgeting, planning, and scheduling.

TRN2621 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.

TRN2626 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.

TRN2627 Aerial Port Operations

Principles of aerial port operations; includes the command level functions and their relationship with aerial port functions and automated systems; basic responsibilities of capability forecasting; basic functions of information control, cargo palletization, shoring, restraints and load planning; passenger/baggage handling procedures and documentation; and customer service, terminal security, aircraft services, and airlift scheduling.

TRN2628 Transportation of Personal Property

Policies and procedures for movement of personal property. Includes entitlements; counseling of personnel; management and selection of carriers; packing, storage, and tracking of household goods; contract management; second destination funding; quality control responsibilities; and report generation using the Transportation Operational Personal Property Shipping System.

TRN2702 Airlift Operations Planning

Understanding the development of individual and joint operation plans. Includes interservice operations, airlift weight capabilities, war planning, shipment identification priorities, correction of transportation and/or materiel shortfalls in mobility operations.

TRN2801 Advanced Combat Convoy Operations

Convoy operations during wartime contingencies. Includes ground operations; field communications; weapon fire control measures; weapon range estimations; surveillance; night observation devices; land navigation; combat lifesaving techniques; and urban reaction operations.

(TVS) TELEVISION SYSTEMS

TVS1730 Basic Television Equipment Maintenance

Maintenance of receivers, monitors, videotape recorders, cameras and audio systems. Includes fundamentals of television communications, operational maintenance of studio transmissions and computer-embedded control systems.

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(VEM) VEHICLE MAINTENANCE

VEM1102 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 and specifications safety procedures.

VEM1104 Welding Operations

Knowledge, skills, and theories necessary to perform varied types of welding, such as, oxyacetylene, electric, shielded metal arc, gas metal arc, gas tungsten arc, and plasma cutting. Includes Air Force Occupational Safety and Health standards and job safety procedures.

VEM1501 Combustion Engines

Principles for operation and care of gasoline and diesel engines; includes emission, fuel/air, cooling, and lubrication systems; engine assembly/disassembly; and engine tune up procedures.

VEM1502 Brake and Suspension Systems

Hydraulic principles related to vehicle brake, steering and suspension systems. Includes hydraulic and air brakes, master cylinders, brake boosters, various front-end designs, wheel alignment, hand tools, portable testers, manufacturer's technical manuals and safety procedures.

VEM1503 Power Train Fundamentals

Operational principles of clutches, standard and automatic transmissions, torque converters, hydraulic systems, universal joints, propeller shafts, axles, differentials, transfer cases, and steering systems.

VEM1505 Accessory Equipment Repair

Window and door regulator alignment and adjustment, trim hardware and automotive glass replacement, and removal, repair and replacement of upholstery. Armor removal and installation. Includes safety procedures, manufacturer's specifications and tools equipment.

VEM1513 Automotive Electrical Systems

Troubleshooting and repair of vehicle electrical systems. Includes ignition, starting charging systems, electrical schematics, manufacturer's technical manuals and safety procedures.

VEM1517 Automatic Transmissions

Principles of troubleshooting, disassembling, repairing, and reassembling automatic transmissions and related components. Includes hand tools, manufacturer's technical manuals and safety procedures.

VEM1523 Diesel Engine Maintenance

Diesel engine principles emphasizing maintenance and tune up and operating principles of distributor and multiple pump-type fuel systems.

VEM1524 Specialized Support Vehicles

Fundamental maintenance of firefighting, refueling other special purpose vehicles. Includes hydraulic, pneumatic and electrical systems; tools; test equipment; publications; safety; and troubleshooting, adjustment and repair of associated system components.

VEM1530 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.

VEM1531 Vehicle Winterization and Corrosion Control

Preparation of vehicles for storage, shipment, and inclement weather. Includes corrosion control, wrapping procedures, checklists, compliance records, and test materials publications.

VEM1533 Body and Fender Repair and Painting

Repair, replacement, and refinishing of body panels, fenders, and frames. Includes manufacturer's specifications, tools and spray painting equipment.

VEM2501 Electromechanical Circuits and Systems

Automotive test equipment to inspect, service, test, adjust, and troubleshoot engine starting, ignition and charging circuits.

VEM2508 Advanced Special Support Vehicles

Maintenance of firefighting, 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.

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VEM2509 Advanced Automotive Maintenance

Maintenance principles using tools, portable testers, publications and safety procedures to inspect, troubleshoot and repair automotive systems. Includes gas and diesel engines, power trains and replacement of inoperative vehicle system components.

(WEL) WELDING

WEL1501 Oxyacetylene Welding

An overview of 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.

WEL1502 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.

WEL1503 Inert Gas Shielded Welding

Introduction to welding of edge, butt and tee joints of heat and corrosion resistant ferrous, aluminum, magnesium and titanium alloys.

COURSE DESCRIPTIONS

TERMS & ACRONYMS



TERMS & ACRONYMS ...

A&P, Airframe and Powerplant

AC&W, aircraft control and warning

ACE, American Council on Education

AETC, Air Education and Training Command

AFOSH, Air Force Occupational Safety and Health

AFRC, Air Force Reserve Command

AFSC, Air Force specialty code

AGE, aerospace ground equipment

Air Force specialty codes are alphanumeric identifiers of occupational specialties of airmen and their skill levels: unskilled (1 level), apprentice (3 level), journeyman (5 level), craftsman (7 level) or superintendent (9 level).

Air Force specialty is a group of related Air Force occupations that require common qualifications and are identified by title and code, the Air Force specialty code.

Airman refers to both male and female enlisted personnel.

AMT, aircraft maintenance technician

ANG, Air National Guard

APD, Acquisition Professional Development

Armed Services Vocational Aptitude Battery (ASVAB) consists of prerequisite tests for USAF enlistment and is a factor in occupational assignment.

ASCP, American Society of Clinical Pathologists

ATC, Air Training Command

AU, Air University

AU-ABC, Air University Associate-to-Baccalaureate Cooperative

AWACS, airborne warning and control systems

Board of Visitors (BOV) collectively reviews policies and operations that are forwarded to the Secretary of the Defense through the AETC commander, and guides CCAF actions.

CAD, computer-aided design

Candidates for graduation are students who—before commissioning, retiring or separating—have completed all requirements for their degree program, submitted final documents to the college and been recommended for award of the associate in applied science degree.

TERMS & ACRONYMS

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 courses are Air Force courses taught in affiliated schools.

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 nondegree-applicable courses may be applied toward certification but are not applicable to the degree program.

CCAF permanent record is the official record of each student who completes an Air Force course for which the college awards credit applied toward degree completion.

CCAF, Community College of the Air Force at Maxwell AFB, Alabama, is an institution of higher learning dedicated to the enlisted members of the United States Air Force. The college is accredited through Air University by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree in applied science degree.

CLEP, College-Level Examination Program

Commandant is the chief executive officer with command authority.

CRL, Command and Telemetry Command Reference Loop

DANTES, Defense Activity for Non-Traditional Education Support

Degree award date is the date Admissions & Registrar Directorate receives the degree completion documents 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.

DoD, Department of Defense

EFP, electronic field production

ELINT, electronic intelligence

EMT, emergency medical technician

FAA, Federal Aviation Administration

FAR, federal aviation regulation

FCC, Federal Communications Commission

FEMA, Federal Emergency Management Agency

GEM, General Education Mobile

GER, general education requirement

ICC, International Certification Commission

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.

ISD, Instructional Systems Development

ITMS, Instructor of Technology and Military Science

IVD, interactive videodisc

JSAMTCC, Joint Service Aviation Maintenance Technician Certification Council

LMMS, leadership, management and military studies

MWR, morale, welfare and recreation

NCO, noncommissioned officer

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.

OIC, Occupational Instructor Certification

OJT, on-the-job training

OSHA, Occupational Safety and Health Administration

Policy Council is a governing body that develops academic policies that are endorsed by the Board of Visitors. The council is composed of representatives from all elements of the CCAF system.

Primary Air Force Specialty Code (PAFSC) is what CCAF uses to determine degree program eligibility.

Proficiency (P) credit is awarded to Air Force enlisted personnel who complete Tri-Service or DoD *initial skills* career education/technical training and demonstrates apprentice level competency. Students demonstrate learning objective knowledge and skill competency through a minimum of 15 months of supervised performance. Awarded proficiency credit is CCAF degree-applicable credit.

Program managers 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 (PR) is an internal worksheet reflecting a student's record, including credits applied toward degree completion and cannot be used as an official education record.

Registered student is an individual currently registered in a CCAF degree program.

Reporting Identifier (RI) is an alphanumeric occupational specialty code for an enlisted occupational specialty not included in the AFSC structure.

Residency is the requirement that at least 16 semester hours of CCAF credit be applied toward a CCAF degree.

RF, radio frequency

RIP, report on individual personnel

SACS, Southern Association of Colleges and Schools

TERMS & ACRONYMS

SATCOM, satellite communications

Separated student is an individual who has been withdrawn from a degree program due to commissioning, retirement or separation.

SH, semester hour

SOON, Solar Observing Optical Network

Special Duty Identifier (SDI) 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.

TACAN, tactical air navigation

Technical core are those courses directly related to a student's field of study.

Technical elective is a course that is beneficial but not essential toward a student's field of study.

Transcript is the official educational record of a student.

USAF, United States Air Force

VFR, visual flight rules

Withdrawn applies to a student who has been removed from active student status because of administrative reasons or a personal request.

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