

# AEROSPACE STUDIES

## Air Force ROTC (AFROTC)

The Department of Aerospace Studies offers programs leading to an officer's commission in the Air Force in conjunction with an undergraduate or graduate degree.

Aerospace science courses are designed to supplement a regular degree program by offering practical leadership and management experience. The Aerospace Studies Program at Colorado School of Mines (MINES) is offered in conjunction with the University of Colorado at Boulder (CUB).

## Four-Year Program

The four-year program consists of two phases: the general military course (freshman and sophomore years) and the professional officer course (junior and senior years). This program is designed for incoming freshmen or any student with four years remaining until degree completion. It consists of three parts: the General Military Course (GMC) for lower division (normally freshmen and sophomore) students; the Professional Officer Course (POC) for upper division students (normally juniors and seniors); and Leadership Laboratory (LLAB-attended by all cadets). Completion of a four-week summer training course is required prior to commissioning.

## Leadership Lab

All AFROTC cadets must attend Leadership Lab (two hours per week). The laboratory involves a study of Air Force customs and courtesies, drill and ceremonies, career opportunities, and the life and work of an Air Force officer.

## General Military Course (GMC)

The basic course covers Air Force history and organization as well as military leadership and management. Laboratory sessions provide the opportunity to apply leadership skills while learning basic military skills. Enrollment in the basic course incurs no military obligation except for Air Force scholarship recipients.

## Professional Officer Course (POC)

The advanced course covers military officership, leadership and unit operations, training techniques, military law, and professional ethics, and includes a leadership practicum each semester. A Field Training encampment provides challenging leadership training and is a prerequisite for commissioning. Advanced course students must have completed the basic course and obtain permission from the Professor of Aerospace Studies (PAS) to enroll in the POC.

## Three-Year Program

The three-year program consists of the first two years of GMC courses taken concurrently in one year. The student then attends a Field Training encampment, and completes two years of advanced POC courses.

## Scholarship Programs

Two-year, three-year, and four-year college scholarships are available to eligible high school seniors who apply before December 1 of their senior year. Scholarship students receive tuition assistance and mandatory laboratory fees, a book allowance, and a monthly stipend. Students interested in the scholarship program should contact the AFROTC Unit Admissions Officer no later than the beginning of the spring semester to

apply for the following academic year. A complete listing of all available AFROTC scholarships is available at [www.afrotc.com](http://www.afrotc.com).

## Registration and Credits

Air Force ROTC serves as free elective credit in most departments. Elective course credit toward your degree for AFROTC classes will be determined by your individual academic advisor. Students who wish to register for Air Force ROTC classes do so through the normal course registration process at Mines. AFROTC classes begin with the AFGN prefix. For more information about AFROTC, contact the Detachment 105 Air Force ROTC Unit at 303-492-8278, or the department on campus directly at 303-273-3380. The department is located in the Military Science building at 1020 19th Street.

## Other AFROTC Programs

Other programs are frequently available based on current Air Force needs. Contact a Detachment 105 representative at 303-492-8278.

The Mines guidelines for Minor/ASI can be found in the Undergraduate Degree Information & Graduation Information section of the Mines Catalog.

## Aerospace Studies Minor

Air Force ROTC cadets desiring to receive a minor in Aerospace Studies must complete at least 20 credits of Aerospace Studies courses as follows:

AFGN101	HERITAGE AND VALUES I	1.5
AFGN102	HERITAGE AND VALUES II	1.5
AFGN201	TEAM AND LEADERSHIP FUNDAMENTALS I	1.5
AFGN202	TEAM AND LEADERSHIP FUNDAMENTALS II	1.5
AFGN301	LEADING PEOPLE AND EFFECTIVE COMMUNICATION I	3.5
AFGN302	LEADING PEOPLE AND EFFECTIVE COMMUNICATION II	3.5
AFGN401	NATIONAL SECURITY, LEADERSHIP RESPONSIBILITIES, COMMISSIONING PREPARATION I	3.5
AFGN402	NATIONAL SECURITY, LEADERSHIP RESPONSIBILITIES, COMMISSIONING PREPARATION II	3.5
<b>Total Semester Hrs</b>		<b>20.0</b>

### AFGN101. HERITAGE AND VALUES I. 1.5 Semester Hr.

This course provides an introduction to the Air Force, encourages students to pursue an AF career or seek additional information to be better informed about the role of the USAF. The course allows students to examine general aspects of the Department of the Air Force, AF Leadership, Air Force benefits, and opportunities for AF officers. The course also lays the foundation for becoming an Airman by outlining our heritage and values. Weekly Leadership Lab for this course (to be taken in conjunction with AFGN101 and 102) is a weekly laboratory that touches on the topics of Air Force customs and courtesies, health and physical fitness, and drill and ceremonies.

### AFGN102. HERITAGE AND VALUES II. 1.5 Semester Hr.

A continuation of AFGN101. This course provides a historical perspective including lessons on war and the US military, AF operations, principles of war, and airpower. This course also provides students with an understanding for the employment of air and space power, from an

institutional, doctrinal, and historical perspective. The students are introduced to the Air Force way of life and gain knowledge on what it means to be an Airman. Weekly Leadership Lab for this course (to be taken in conjunction with AFGN101 and 102) is a weekly laboratory that touches on the topics of Air Force customs and courtesies, health and physical fitness, and drill and ceremonies.

**AFGN201. TEAM AND LEADERSHIP FUNDAMENTA. 1.5 Semester Hr.**

This course is designed to provide a fundamental understanding of both leadership and team building. This course teaches students that there are many layers to leadership, including aspects that are not always obvious. Such things include listening, understanding themselves, being a good follower, and problem solving efficiently. Weekly Leadership Laboratory (LLAB) for this course (to be taken in conjunction with AFGN201 and 202) provides you with the opportunity to demonstrate fundamental management skills and prepares you for Field Training.

**AFGN202. TEAM AND LEADERSHIP FUNDAMENTALS II. 1.5 Semester Hr.**

A continuation of AFGN201. This course is designed to discuss different leadership perspectives when completing team building activities and discussing things like conflict management. This course also provides students with the ability of demonstrating their basic verbal and written communication skills. Active cadets will apply these lessons at Field Training, which follows the AFGN200 level. Weekly Leadership Laboratory (LLAB) for this course (to be taken in conjunction with AFGN201 and 202) provides you with the opportunity to demonstrate fundamental management skills and prepares you for Field Training.

**AFGN301. LEADING PEOPLE AND EFFECTIVE COMMUNICATION I. 3.5 Semester Hrs.**

This course is designed to build on the leadership fundamentals taught in the AFGN200 level. The cadets will have the opportunity to utilize their skills as they begin a broader leadership role in the detachment. The goal is for cadets and students to have a more in-depth understanding of how to effectively lead people and provide them with the tools to use throughout their detachment leadership roles. Weekly Leadership Laboratory (LLAB) for this course (to be taken in conjunction with AFGN301 and 302) provides you the opportunity to develop your fundamental management skills while planning and conducting cadet activities.

**AFGN302. LEADING PEOPLE AND EFFECTIVE COMMUNICATION II. 3.5 Semester Hrs.**

A continuation of AFGN301. This course is designed to help cadets hone their writing and briefing skills. The course continues into advanced skills and ethics training that will prepare them for becoming an officer and a supervisor. Weekly Leadership Laboratory (LLAB) for this course (to be taken in conjunction with AFGN301 and 302) provides you the opportunity to develop your fundamental management skills while planning and conducting cadet activities.

**AFGN401. NATIONAL SECURITY, LEADERSHIP RESPONSIBILITIES, COMMISSIONING PREPARATION I. 3.5 Semester Hrs.**

This course is designed to address the basic elements of national security policy and process. The cadet will comprehend the air and space power operations as well as understand selected roles of the military in society and current domestic and international issues affecting the military profession. Weekly Leadership Laboratory (LLAB) for this course (to be taken in conjunction with AFGN401 and 402) provides you with the opportunity to use your leadership skills in planning and conducting cadet activities. It prepares you for commissioning and entry into the active-duty Air Force.

**AFGN402. NATIONAL SECURITY, LEADERSHIP RESPONSIBILITIES, COMMISSIONING PREPARATION II. 3.5 Semester Hrs.**

A continuation of AFGN401. This course is designed to prepare cadets for life as a second lieutenant. Cadets should comprehend the responsibility, authority, and functions of an Air Force commander and selected provisions of the military justice system. Weekly Leadership Laboratory (LLAB) for this course (to be taken in conjunction with AFGN401 and 402) provides you with the opportunity to use your leadership skills in planning and conducting cadet activities. It prepares you for commissioning and entry into the active-duty Air Force.