# **AEROSPACE STUDIES**

## **Air Force ROTC**

The Air Force Reserve Officer Training Corps (ROTC) program is administered by the Department of Aerospace Studies. The mission of Air Force ROTC is to develop quality leaders for the Air Force. It is the Air Force's largest officer commissioning source. Air Force ROTC offers a number of opportunities for Missouri S&T students who wish to become commissioned officers by offering professional, academic, and military training. Leadership, communication, and basic military skills are the focus of the ROTC program. In addition to helping a student succeed during college, Air Force ROTC also fosters self-confidence and self-discipline.

Opportunities in the Air Force are excellent, with more than 100 possible career fields available. Career field availability depends on academic discipline, medical condition, desires of the individual, and needs of the Air Force. As newly commissioned Second Lieutenants on active duty, Air Force ROTC graduates can serve worldwide, performing challenging and rewarding duties in highly technical, scientific, and operational areas. A few of these include developmental engineer, pilot, combat systems operator, remote pilot, scientist, cyber operations, intelligence operations, space operations, civil engineer, logistics, acquisitions, and maintenance.

Although Air Force ROTC is set up as a four-year program, students can choose a four, three and a half, or three year course of study. The first two years of the program, called the General Military Course (GMC), cover basic introductory military topics as well as communication and leadership. The final two years of the program, called the Professional Officer Course (POC), cover topics such as leadership, management, doctrine, international events, communication, and officership. In addition to the academic ROTC class, all cadets attend a two hour leadership laboratory each week and two hours of physical training. Leadership laboratory provides cadets with the knowledge and practical command and staff leadership experience in preparation for active duty as Air Force officers. It is largely cadet planned, directed, and centered.

Air Force ROTC scholarships, which generally cover full tuition and fees, are available to qualified cadets. A monthly stipend is given during the academic year to each cadet on scholarship and contracted members of the POC. Scholarship recipients also receive a \$450 book allowance each semester. ROTC scholarship recipients are eligible to receive other Missouri S&T scholarships.

Cadets usually attend Field Training (FT) during the summer between their sophomore and junior year, before enrollment into the POC. Entrance into the POC is based on an extensive evaluation and selection process during the sophomore year, and is dependent on completion of Field Training. Cadets who complete the POC in good standing and earn their academic degree are commissioned as Second Lieutenants and serve on active duty for four or more years, depending on their assigned Air Force career field.

The Air Force ROTC unit at Missouri S&T is organized as an objective wing, with associated groups, squadrons, and flights. Freshmen and sophomore cadets receive instruction from POC cadets in basic military customs and courtesies, drill movements, and many other facets of Air Force operations. Additionally, they are offered the opportunity to visit Air Force bases and discuss career opportunities with Air Force members. Junior and senior cadets are assigned and rotated through various leadership positions, gaining experience in management procedures.

## **Military Aerospace Studies Minor**

Air Force Reserve Officer Training Corps (ROTC) is administered by the Department of Aerospace Studies. Although Air Force ROTC is set up as a four-year program, students can choose a four, three and a half, or three year course of study. The first two years of the program, called the General Military Course (GMC), cover basic introductory military topics as well as communication and leadership. The final two years of the program, called the Professional Officer Course (POC), cover topics such as leadership, management, doctrine, international events, quality, communication, and officership. To fulfill the requirements for the proposed Aerospace Studies minor, students will complete all of the following classes for a total of 12 credit hours.

MIL AIR 1110	Air Force Heritage and Values I	0.5
MIL AIR 1120	Air Force Heritage and Values II	0.5
MIL AIR 2110	Team and Leadership Fundamentals I	0.5
MIL AIR 2120	Team and Leadership Fundamentals II	0.5
MIL AIR 3110	Leading People & Effective Communication I	2.5
MIL AIR 3120	Leading People & Effective Communication II	2.5
MIL AIR 4110	National Security, Leadership Responsibilities & Commissioning Preparation I	2.5
MIL AIR 4120	National Security, Leadership Responsibilities & Commissioning Preparation II	2.5

**Capt. Keith Schiesz**, Lecturer BA Ashford University

Lt. Col. Daniel Willis, Lecturer MA, MS Missouri State University, Naval War College

**Capt. Lee Wise**, Lecturer MS Air Force Institute of Technology

### MIL AIR 1100 Leadership Laboratory (LAB 0.50)

The course involves a study of Air Force customs and courtesies, drill and ceremonies, career opportunities in the Air Force and the life and work of an Air Force junior officer. Students develop their leadership potential in a practical supervised training laboratory. All AFROTC cadets and students are required to enroll in this course.

### MIL AIR 1110 Air Force Heritage and Values I (LEC 0.50)

This course provides an introduction to the Air Force, hopefully encouraging students to pursue an AF career or at least 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. Prerequisites: Must be accompanied by MIL AIR 1100.

#### MIL AIR 1120 Air Force Heritage and Values II (LEC 0.50)

This course provides an introduction to the Air Force, hopefully encouraging students to pursue an AF career or at least 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. Prerequisites: Must be accompanied by MIL AIR 1100.

#### MIL AIR 2110 Team and Leadership Fundamentals I (LEC 0.50)

This course is designed to provide a fundamental understanding of both leadership and team building. It is imperative that cadets are taught from the beginning that there are many layers to leadership, including aspects that don't always jump to mind. Such things include listening, understanding themselves, being a good follower and problem solving. Prerequisites: Must be accompanied by MIL AIR 1100.

#### MIL AIR 2120 Team and Leadership Fundamentals II (LEC 0.50)

This course is designed to provide a fundamental understanding of both leadership and team building. It is imperative that cadets are taught from the beginning that there are many layers to leadership, including aspects that don't always jump to mind. Such things include listening, understanding themselves, being a good follower and problem solving. Prerequisites: Must be accompanied by MIL AIR 1100.

#### MIL AIR 3110 Leading People & Effective Communication I (LEC 2.5)

This course is designed to build on the leadership fundamentals taught in AS200. Cadets will have the opportunity to utilize their skills as they begin more of a leadership role in the detachment. The goal is for cadets to have a more in-depth understanding of how to effectively lead people, and provide them with the tools to use in their leadership roles. Prerequisites: Must be accompanied by MIL AIR 1100.

#### MIL AIR 3120 Leading People & Effective Communication II (LEC 2.5)

This course is designed to build on the leadership fundamentals taught in AS200. Cadets will have the opportunity to utilize their skills as they begin more of a leadership role in the detachment. The goal is for cadets to have a more in-depth understanding of how to effectively lead people, and provide them with the tools to use in their leadership roles. Prerequisites: Must be accompanied by MIL AIR 1100.

# MIL AIR 4110 National Security, Leadership Responsibilities & Commissioning Preparation I (LEC 2.5)

The AS400 cadet should comprehend the basic elements of national security policy and process. The student should 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. Prerequisites: Must be accompanied by MIL AIR 1100.

# MIL AIR 4120 National Security, Leadership Responsibilities & Commissioning Preparation II (LEC 2.5)

The AS400 cadet should comprehend the basic elements of national security policy and process. The student should 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. Prerequisites: Must be accompanied by MIL AIR 1100.