

# Military Science

## Army ROTC-AROTC

The Department of Military Science offers programs leading to an officer's commission in the active Army, Army Reserve, or National Guard in conjunction with an undergraduate or graduate degree. Military science courses are designed to supplement a regular degree program by offering practical leadership and management experience. The Military Science Program at the Colorado School of Mines (Mines) is offered in conjunction with the University of Colorado at Boulder (CU-B). Students attend classes at the Colorado School of Mines in Golden.

## Four-Year Program

The four-year program consists of two phases: the basic course (freshman and sophomore years) and the advanced course (junior and senior years).

### Basic course (MS I and MS II)

The basic course offers a 2 credit course each semester, covering Army 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 Army scholarship recipients.

### Advanced course (MS III and MS IV)

The advanced course offers a 3 credit course each semester, covering leadership, tactics and unit operations, training techniques, military law, and professional ethics, and includes a leadership practicum each semester. A 33-day Cadet Summer Training at Fort Knox, Kentucky, 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 Military Science (PMS).

## Two-Year Program

The two-year program consists of the advanced course, preceded by attending the Cadet Summer Training at Ft. Knox, Kentucky. Veterans or Active Army Reserve/Army National Guard Soldiers or students who have participated in three years of Junior ROTC or Civil Air Patrol may be eligible to enroll in the advanced course without attendance at basic camp or completion of the basic course. Advanced course students must obtain permission from the Professor of Military Science (PMS) at 303-492-6495.

## Scholarship Programs

Three-year and four-year college scholarships are available to eligible high school seniors, who apply before January (approximate date) of their senior year. Competition for two- and three- year scholarships is open to all university students. Scholarship students receive full tuition and mandatory laboratory fees, a book allowance, and an allowance of \$420 per month during the academic year. Students interested in the scholarship program should contact the AROTC Enrollment and Scholarship Officer at 303-492-3549 no later than the beginning of the spring semester to apply for the following academic year.

## Simultaneous Membership Program

Students currently in the Army Reserves or Army National Guard and entering either the second year of the basic course or the advanced

course may participate in the Simultaneous Membership Program (SMP). Students participating in this program will receive \$420 monthly stipend plus their unit pay at the E-5 grade. SMP participants may be eligible for Army Reserve or Army National Guard tuition assistance benefits.

## Leadership Laboratories

Leadership labs provide cadets with practical leadership experience and performance-oriented, hands-on instruction outside the classroom. Diagnostic evaluations of cadets in leadership roles are frequently administered. Leadership labs are compulsory for enrolled cadets. Physical training is conducted three times a week with the purpose of developing muscular strength, endurance, and cardio-respiratory endurance.

## Veterans

Veterans who have served on active duty or in the Army Reserve/ National Guard are also eligible for the ROTC program. Although veterans are not required to take the Basic Course, they are encouraged to do so. A minimum of 60 credit hours are required prior to enrolling in the Advanced Course.

## Registration and Credits

Army ROTC serves as free elective credit in most departments. Elective course credit toward your degree for AROTC classes will be determined by your individual academic advisor. Students who wish to register for Army ROTC classes do so through the normal course registration process at CSM. AROTC classes begin with the MSGN prefix.

For more information about AROTC, contact:

the Army ROTC Enrollment and Scholarship Officer at:  
303-492-3549

or the department on campus directly at:  
303-273-3380

The department is located in the Military Science building, 1020 19th Street

You can also go to <https://rotc.mines.edu/>

For information about ROTC at MINES, call 303-273-3380 or 303-273-3398.

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

## Military Science Minor

Army ROTC cadets desiring to receive a minor in Military Science must complete at least 22 credits of Military Science courses as follows:

MSGN103	ADVENTURES IN LEADERSHIP I	2.0
MSGN104	ADVENTURES IN LEADERSHIP II	2.0
MSGN203	METHODS OF LEADERSHIP AND MANAGEMENT I	2.0
MSGN204	METHODS OF LEADERSHIP AND MANAGEMENT II	2.0
MSGN301	MILITARY OPERATIONS AND TRAINING I	3.0
MSGN302	MILITARY OPERATIONS AND TRAINING II	3.0
MSGN303	LEADERSHIP LABORATORY	0.5

MSGN304	LEADERSHIP LABORATORY	0.5
MSGN401	OFFICER LEADERSHIP AND DEVELOPMENT I	3.0
MSGN402	OFFICER LEADERSHIP AND DEVELOPMENT II	3.0
MSGN403	LEADERSHIP LABORATORY	0.5
MSGN404	LEADERSHIP LABORATORY	0.5
<b>Total Semester Hrs</b>		<b>22.0</b>

Note: In order to Commission as a 2nd Lieutenant in the US Army, completion of a Military History Course (HASS365) is also required.

**MSGN103. ADVENTURES IN LEADERSHIP I. 2.0 Semester Hrs.**

(I) Introduces fundamentals of leadership and the United States Army. Examines its organization, customs, and history as well as its current relevance and purpose. Students also investigate basic leadership and management skills necessary to be successful in both military and civilian settings. Includes fundamentals of Army leadership doctrine, teambuilding concepts, time and stress management, an introduction to cartography and land navigation, marksmanship, briefing techniques, and some basic military tactics. Lab fee. 1 hour lecture, 2 hours lab, 3 hours PT, and 80 hours field training; 2 semester hours. (Fall).

**MSGN104. ADVENTURES IN LEADERSHIP II. 2.0 Semester Hrs.**

(II) Continues the investigation of leadership in small organizations. Covers selected topics such as basic troop leading procedures, military first aid and casualty evacuation concepts, creating ethical work climates, an introduction to Army organizations and installations, and a further examination of basic military tactics. Introduces students to effective military writing styles. Lab fee. 1 hour lecture, 2 hours lab, 3 hours PT, and 80 hours field training; 2 semester hours. (Spring).

**MSGN198. SPECIAL TOPICS IN MILITARY SCIENCE. 1-6 Semester Hr.**

(I, II) Pilot course or special topics course. Topics chosen from special interests of instructor(s) and student(s). Usually the course is offered only once. Prerequisite: none. Variable credit; 1 to 6 credit hours. Repeatable for credit under different titles.

**MSGN199. INDEPENDENT STUDY. 1-6 Semester Hr.**

(I, II) Individual research or special problem projects supervised by a faculty member, also, when a student and instructor agree on a subject matter, content, and credit hours. Prerequisite: "Independent Study" form must be completed and submitted to the Registrar. Variable credit; 1 to 6 credit hours. Repeatable for credit.

**MSGN203. METHODS OF LEADERSHIP AND MANAGEMENT I. 2.0 Semester Hrs.**

(I) Comprehensively reviews advanced leadership and management concepts including motivation, attitudes, communication skills, problem solving, human needs and behavior, and leadership self development. Students continue to refine effective written and oral communications skills and to explore topics such as the basic branches of the Army, and officer and NCO duties. Students conduct classroom and practical exercises in small unit light infantry tactics and are prepared to perform as midlevel leaders in the cadet organization. Lab fee: 1 hour lecture, 2 hours lab, 3 hours PT, and 80 hours field training; 2 semester hours.

**MSGN204. METHODS OF LEADERSHIP AND MANAGEMENT II. 2.0 Semester Hrs.**

(II) Focuses on leadership and management functions in military and corporate environments. Studies various components of Army leadership doctrine to include the four elements of leadership, leadership principles, risk management and planning theory, the be-know-do framework, and the Army leadership

evaluation program. Continue to refine communication skills. Lab fee. 1 hour lecture, 2 hours lab, 3 hours PT, and 80hours field training; 2 semester hours. (Spring).

**MSGN298. SPECIAL TOPICS IN MILITARY SCIENCE. 1-6 Semester Hr.**

(I, II) Pilot course or special topics course. Topics chosen from special interests of instructor(s) and student(s). Usually the course is offered only once. Prerequisite: none. Variable credit; 1 to 6 credit hours. Repeatable for credit under different titles.

**MSGN299. INDEPENDENT STUDY. 1-6 Semester Hr.**

(I, II) Individual research or special problem projects supervised by a faculty member, also, when a student and instructor agree on a subject matter, content, and credit hours. Prerequisite: "Independent Study" form must be completed and submitted to the Registrar. Variable credit; 1 to 6 credit hours. Repeatable for credit.

**MSGN299. INDEPENDENT STUDY. 1-6 Semester Hr.**

**MSGN301. MILITARY OPERATIONS AND TRAINING I. 3.0 Semester Hrs.**

(I) Further explores the theory of managing and leading small military units with an emphasis on practical applications at the squad and platoon levels. Students examine various leadership styles and techniques as they relate to advanced small unit tactics. Familiarizes students with a variety of topics such as cartography, land navigation, field craft, and weapons systems. Involves multiple, evaluated leadership opportunities in field settings and hands-on experience with actual military equipment. Students are given maximum leadership opportunities in weekly labs. Prerequisite: none. Lab Fee. 3 hours lecture; 3 semester hours. (Fall).

**MSGN302. MILITARY OPERATIONS AND TRAINING II. 3.0 Semester Hrs.**

(II) Studies theoretical and practical applications of small unit leadership principles. Focuses on managing personnel and resources, the military decision making process, the operations order, and oral communications. Exposes the student to tactical unit leadership in a variety of environments with a focus on preparation for the summer advance camp experience. Prerequisite: none. Lab Fee. 3 hours lecture; 3 semester hours. (Spring).

**MSGN303. LEADERSHIP LABORATORY. 0.5 Semester Hrs.**

(I) Development of military leadership techniques to include preparation of operation plans, presentation of instruction, and supervision of underclass military cadets. Instruction in military drill, ceremonies, and customs and courtesies of the Army. Must be taken in conjunction with MSGN301. Prerequisite: none. Lab Fee. 2 hours lab, 3 hours PT, 80 hours field training; .5 semester hour. (Fall).

**MSGN304. LEADERSHIP LABORATORY. 0.5 Semester Hrs.**

(II) Continued development of military leadership techniques with the major emphasis on leading an Infantry Squad. Training is "hands-on." Practical exercises are used to increase understanding of the principles of leadership learned in MSGN302. Must be taken in conjunction with MSGN302. Prerequisite: none. Lab Fee. 2 hours lab, 3 hours PT, 80 hours field training; .5 semester hour. (Spring).

**MSGN398. SPECIAL TOPICS IN MILITARY SCIENCE. 1-6 Semester Hr.**

(I, II) Pilot course or special topics course. Topics chosen from special interests of instructor(s) and student(s). Usually the course is offered only once. Prerequisite: none. Variable credit; 1 to 6 credit hours. Repeatable for credit under different titles.

**MSGN399. INDEPENDENT STUDY. 1-6 Semester Hr.**

(I, II) Individual research or special problem projects supervised by a faculty member, also, when a student and instructor agree on a subject matter, content, and credit hours. Prerequisite: "Independent Study" form must be completed and submitted to the Registrar. Variable credit; 1 to 6 credit hours. Repeatable for credit.

**MSGN401. OFFICER LEADERSHIP AND DEVELOPMENT I. 3.0 Semester Hrs.**

(I) Examines management and leadership concepts and techniques associated with planning and executing military training and operations at company and higher echelons. Includes analyses of professional ethics and values, effective training principles and procedures, subordinate counseling, and effective staff officer briefing techniques. Also investigates other subjects such as counter terrorism, modern peacekeeping missions, and the impact of the information revolution on the art of land warfare. Conducted both in and out of classroom setting and with multiple practical leadership opportunities to organize cadet training and activities.

Prerequisite: none. Lab Fee. 3 hours lecture; 3 semester hours. (Fall).

**MSGN402. OFFICER LEADERSHIP AND DEVELOPMENT II. 3.0 Semester Hrs.**

(II) Continues MSGN401 study of management and leadership concepts and techniques, providing practical leadership experiences in the classroom and during multiple cadet-run activities. Also examines varied topics such as theory and practice of the military justice system, law of war, military-media relations, support mechanisms for soldiers and their families, operational security considerations, and historical case studies in military leadership in the context of 21st century land warfare. Prerequisite: none. Lab Fee. 3 hours lecture; 3 semester hours. (Spring).

**MSGN403. LEADERSHIP LABORATORY. 0.5 Semester Hrs.**

(I) Continued development of leadership techniques by assignment in the command and staff positions in the Cadet Battalion. Cadets are expected to plan and execute much of the training associated with the day-to-day operations within the cadet battalion. Utilizing the troop leading and management principles learned in previous classes, cadets analyze the problems which the battalion faces, develop strategies, brief recommendations, and execute the approved plan. Prerequisite: none. Lab Fee. 2 hours lab, 3 hours PT, and 80 hours field training; .5 semester hour. (Fall).

**MSGN404. LEADERSHIP LABORATORY. 0.5 Semester Hrs.**

(II) Continued leadership development by serving in the command and staff positions in the Cadet Battalion. Cadets take a large role in determining the goals and direction of the cadet organization, under supervision of the cadre. Cadets are required to plan and organize cadet outings and much of the training of underclassmen. Lab Fee. Prerequisite: none. Lab Fee. 2 hours lab, 3 hours PT, and 80 hours field training; .5 semester hour. (Spring).

**MSGN498. SPECIAL TOPICS IN MILITARY SCIENCE. 1-6 Semester Hr.**

(I, II) Pilot course or special topics course. Topics chosen from special interests of instructor(s) and student(s). Usually the course is offered only once. Prerequisite: none. Variable credit; 1 to 6 credit hours. Repeatable for credit under different titles.

**MSGN499. INDEPENDENT STUDY. 1-6 Semester Hr.**

(I, II) Individual research or special problem projects supervised by a faculty member, also, when a student and instructor agree on a subject matter, content, and credit hours. Prerequisite: "Independent Study" form must be completed and submitted to the Registrar. Variable credit; 1 to 6 credit hours. Repeatable for credit.

**MSGN499. INDEPENDENT STUDY. 0.5-6 Semester Hr.**