

MILITARY SCIENCE

College of Letters & Science

Justin Ottenwalter, Major, Chairperson of the Department; term ends June 30, 2025.

Department Office

Reserve Officers' Training Corps (ROTC), Army; 125 Hickey Gymnasium; 530-752-5211; Faculty (<https://militaryscience.ucdavis.edu/people/>)

Program of Study

The Military Science Department is a classroom and hands-on leadership and management program. The program stresses the following Army Values: loyalty, duty, respect, selfless service, honor, integrity, and personal courage. We cover the basics of the Army, including Army ranks, organizational structure, basic skills, and tactics. We also discuss current events, national and international politics, military affairs, ethics, and human relations. Military skills (such as drill and ceremony, map reading, and squad tactics) are taught to the extent necessary to create an environment where students can enter leadership positions and apply theories taught in the classroom. The program assists students in all academic fields to prepare for positions of leadership in military or civilian careers.

The department offers two program tracks: (1) a purely academic track; (2) a pre-commissioning track for those desiring a commission as an Officer in the Active Duty U.S. Army, Army National Guard, or Army Reserves. The academic track entails no obligation to the military and is open to all students but is limited to MSC 012 and MSC 022B. Students pursuing the academic track do not wear a uniform or otherwise participate in extra-curricular activities designed as part of the pre-commissioning process.

Students who desire a commission in the U.S. Army participate in both the academic portion of the program and in the leadership laboratories and extra-curricular activities designed to enhance their military leadership and tactical and technical skills. They wear uniforms to leadership laboratories and selected classes and become ROTC cadets. Students may be cadets in the lower division courses without incurring a military obligation. Students must contract with ROTC to participate in the upper division pre-commissioning program and incur a military obligation. Extracurricular activities for cadets include an intercollegiate sports team (Ranger Challenge), the university color guard, a military honor society, and opportunities to participate in field training exercises.

Department Programs

Students are enrolled in Military Science under one of two programs.

Four-Year Program

There is no military obligation associated with attendance in lower division courses. Students are enrolled in the basic course (lower division) for the first two years on a voluntary basis. Admission to the advanced course (upper division) is by application from second-year lower division students who meet the academic, physical, and military aptitude requirements. Qualified veterans can enter the advanced course immediately based on their military service experience and graduation from Basic Training, upon approval by the Department Chairperson.

During the course, all Military Science textbooks, uniforms and equipment are provided without cost. Contracted students are given leadership

development experience at the ROTC Advanced Camp in Fort Knox, Kentucky, between their third and fourth years of the course. Emphasis is on military fitness, tactics, and leadership.

Two-Year Program

The two-year program is for students, including graduate students, who have not attended lower division Military Science classes. In lieu of lower division courses an applicant attends a six-week summer program, Basic Camp, which is voluntary and carries no military obligation. Basic Camp attendees are paid and transportation costs are covered. Applications are accepted at any time prior to the student's junior year; graduate students are also accepted, as long as they have two years of academics remaining.

Scholarship Program

There are three- and two-year scholarship opportunities available at the discretion of the Department Chairperson that covers full tuition and fees and \$1200 annually for books. Cadets also receive a \$420 monthly stipend.

Army Reserve Officers' Training Corps four-year Active Duty merit scholarships are awarded to qualified high school seniors in a national competition each year. As high school seniors, students compete for the scholarship by submitting a complete application at Army ROTC (<https://www.goarmy.com/careers-and-jobs/find-your-path/army-officers/rotc.html>).

If high school seniors are not awarded the four-year National Scholarship, there are still opportunities for campus-based three and two-year scholarships.

Leadership Laboratory

During the course of the school year, two hours per week are spent conducting practical exercises. Classes emphasize adventure activities including military offense, defense and patrolling, operations, weapons familiarization, rappelling, leadership scenarios, and land navigation. All cadets are required to attend leadership laboratories for practical leadership experience and to prepare for attendance at Advanced Camp.

Academic Credit

College of Agricultural & Environmental Sciences

The Bachelor of Science degree in agriculture requires the completion of 180 units. Military Science courses are counted in the unit allowance for electives.

College of Biological Sciences

The Bachelor of Science degree requires the completion of 180 units. Military Science courses are counted in the allowance for electives.

College of Engineering

Military Science units are acceptable toward the requirements for the Bachelor of Science degree to the extent of the unrestricted elective units available in the curriculum being followed.

College of Letters & Science

The Bachelor of Arts and Bachelor of Science degrees require the completion of 180 units. Military Science courses are counted in the allowance for electives.

School of Veterinary Medicine

The number of Military Science units acceptable toward the Bachelor of Science degree in Veterinary Medicine is on an individual program basis approved by the Dean of the School. Graduates with the D.V.M. degree

may apply for a direct commission in the United States Army Veterinary Corps.

Aerospace Studies (Air Force)

The Air Force Reserve Officer's Training Corps (AFROTC) is an educational program providing training in leadership, management, communications and military proficiency on college and university campuses. It also provides an opportunity to obtain a commission as a second lieutenant in the Air Force and enter the active-duty forces after you complete a bachelor's or a graduate degree. The skills you acquire will become valuable assets for any subsequent career you choose.

The program is normally four years long, but a flexible design allows students to complete the curriculum in as little as two years. Undergraduate scholarships are available, but are not necessary for participation. Until you accept a scholarship or enter your junior year of the program, you have no obligation to join the Air Force. There are no costs for AFROTC uniforms, books, or classes.

UC Davis students have the option of taking the Air Force program on the UC Berkeley or CSU Sacramento campus.

Qualifications

Freshmen/Sophomore applicants must:

- Be full-time college students in good academic standing
- Have good moral character
- Be in strong physical condition
- Be at least 14 years old

Additionally, Juniors/Seniors/Scholarship recipients must:

- Be United States citizens or in the process of applying for citizenship
- Be 18 years old (or 17 years old with the consent of parent or guardian)
- Pass the Air Force Officer Qualifying Test
- Pass a medical examination
- Be under the age of 31 at time of graduation (may be waived)

Scholarships

Opportunities for four-year and three-year undergraduate scholarships are better than ever. Scholarships cover the full cost of tuition, books and required fees at the University of California and are available for eligible high school seniors. It also includes \$300-\$500 monthly stipend during the school year. If you are a junior or senior in high school and plan on attending a college or university in Northern California, you can write, call or visit the local AFROTC detachments for a scholarship application. Applications are also available from local Air Force recruiters or your high school guidance counselors.

All scholarships are merit-based and consider a variety of factors: cumulative GPA, class standing, SAT/ACT scores, academic awards/achievements, leadership ability, athletic involvement, extracurricular activities, community service and letters of recommendation. A personal interview with an Air Force officer is also part of the application process. Prior to activating a scholarship, students must meet AFROTC medical and physical fitness standards. All scholarships must be used at an accredited college or university that offers AFROTC on campus or through cross-registration. The program is available at more than 1,000 universities and colleges nationwide.

If you are already in college, contact our office directly and apply for enrollment into AFROTC as a cadet. Three- and two-year full-tuition scholarships are available for all academic majors, especially scientific and technical majors such as engineering, atmospheric science, math, computer science, and physics. GPA Scholarship requirements for nontechnical majors are slightly higher. Applicants are primarily evaluated on their leadership ability and academic performance.

Challenging Careers

All commissioned officers enter the Air Force as second lieutenants for a 4-year active duty service commitment. Pilots and navigators serve longer commitments, based on training requirements. Once on active duty, you'll be given instant responsibility in one of 32 primary career fields. Opportunities to fly are better than ever. Whether you are piloting the F-22 fighter, supervising 150 aircraft maintainers on the flightline, or caring for sick personnel in the emergency room, you will be rewarded knowing that you are making a difference.

Air Force ROTC is offered through the Aerospace Studies departments at California State University Sacramento and U.C. Berkeley. Scholarships (including tuition, book allowance, and stipend) are available for qualified students. Students may enroll and attend one course per semester at the U.C. Berkeley or CSU Sacramento campus at no cost. Topics covered in AFROTC courses include Heritage and Values of the United States Air Force (1-credit), Team and Leadership Fundamentals (1-credit), Leading People and Effective Communication (3-credits), and U.S. National Security Affairs and Preparation for Active Duty (3-credits). Additional components of the AFROTC program include 2 hours per week of fitness activities, 2 hours per week of Leadership Lab, and a 2-week Summer Field Training between the sophomore and junior years. Upon completion of the program and granting of 4-year degree, students will commission as Second Lieutenants in the United States Air Force. To be eligible for AFROTC, applicants should be a full time student and meet additional fitness, GPA, testing, and other requirements. Interested students, please contact their department of choice:

- CSU Sacramento ROTC (<https://www.csus.edu/academic-affairs/air-force-rotc/>); 916-278-7315 or 916-278-7449; email (sacramento@afrotcadmissions.com)
- UC Berkeley Air Force ROTC (<http://airforcerotc.berkeley.edu>); 510-642-3572; email (airforce@berkeley.edu)

Department of Naval Science

152 Hearst Gymnasium; UC Berkeley, Berkeley, CA 94270-3640; 510-642-3551; UC Berkeley Naval ROTC (<http://nrotc.berkeley.edu>)

UC Davis students may participate in the Navy and Marine Corps ROTC program at UC Berkeley. The program is 4 years long and includes courses and weekly professional development laboratories (drill) at UC Berkeley. Students normally compete for national scholarships as high school seniors, although interested students may enroll as freshmen or sophomores and compete for scholarships based on successful participation in the program. A student who satisfactorily completes an ROTC program and is awarded a degree from UC Davis receives an active duty commission as a Second Lieutenant in the U.S. Marine Corps or an Ensign in the U.S. Navy.

Navy option students take the following courses:

Freshman Year

- NS 1 Introduction to Naval Science
- NS 2 Sea Power and Maritime Affairs

Sophomore Year

- NS 3 Leadership and Management
- NS 10 Naval Ship Systems I

Junior Year

- NS 12A Navigation and Naval Operations I
- NS 12B Navigation and Naval Operations II

Senior Year

- NS 401 Naval Ship Systems II
- NS 412 Leadership and Ethics

In lieu of NS401, NS10, NS12A and NS12B, Marine Corps students participate in Marine Seminars and complete MA154, History of Littoral Warfare and MA20, Evolution of Warfare (or a designated equivalent).

Scholarship students are required to complete a number of other courses at Davis, including one year each of calculus, physics, and English, and one quarter each of computer science, and military history or national security policy.

Interested students should contact the Department of Naval Science at UC Berkeley at the address above to obtain information and apply.

Military Science (MSC)

MSC 011 – U.S. Army Leadership & Personal Development (1 unit)

Course Description: United States Army, its organization, customs, courtesies, and rank structure. Surveys personal development skills needed for effective leadership such as critical thinking, time management, and health and fitness. Familiarization with the Army ROTC program.

Prerequisite(s): Lower division standing.

Learning Activities: Lecture 1 hour(s).

Grade Mode: Letter.

MSC 012 – Introduction to Tactical Military Leadership (1 unit)

Course Description: Military leadership fundamentals to include setting direction, problem-solving, presenting briefs, and using effective writing skills. Basic military tactics, orienteering and land navigation. Dimensions of leadership values, attributes, skills, and actions.

Prerequisite(s): Lower division standing.

Learning Activities: Lecture 1 hour(s).

Grade Mode: Letter.

MSC 013 – Introduction to Basic Military Operations (1 unit)

Course Description: Basic military tactical theories and their application at the individual and squad level. Military tactical operations and basic military first aid.

Prerequisite(s): Lower division standing.

Learning Activities: Lecture 1 hour(s).

Grade Mode: Letter.

MSC 014A – Introduction to Military Leadership Skills (0.5 units)

Course Description: Personal and organizational leadership skills introduced in leadership laboratory. Extensive supervised leadership experiences conducted in a military environment. Basic military skills necessary to function in a leadership role.

Prerequisite(s): Consent of instructor; lower division standing.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 014B – Introduction to Military Leadership Skills (0.5 units)

Course Description: Continuation of development of leadership and military skills introduced in MSC 014A. Emphasis on the role of the individual, the basic organizational element of the Army, the squad. Supervisory controls reduced as students gain capabilities.

Prerequisite(s): Consent of instructor; lower division standing.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 014C – Introduction to Military Leadership Skills (0.5 units)

Course Description: Development of skills required for promotion to junior non-commissioned officer level. Chain of command from company through individual levels. Interrelationship of squad and platoon organizations.

Prerequisite(s): Consent of instructor; lower division standing.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 021 – Military History, Study of Battles (2 units)

Course Description: Application of the nine Principles of War to key battles in American and World history. Tactics on a strategic and operational level. Evaluation of leadership and decision-making processes of key leaders.

Prerequisite(s): MSC 022B; or consent of instructor.

Learning Activities: Lecture 2 hour(s).

Grade Mode: Letter.

MSC 022A – Innovative Team Leadership (2 units)

Course Description: Leadership values, attributes and theories. Use of basic military skills such as land navigation and squad operations to enhance understanding of the Army. Types of military briefings. Practice in interpersonal skills. Presentation of a briefing.

Prerequisite(s): Lower division standing or consent of instructor.

Learning Activities: Lecture 2 hour(s).

Grade Mode: Letter.

MSC 022B – Foundations of Tactical Leadership (2 units)

Course Description: Leadership of tactical teams in complex operating environment. Self-assessment of leadership style. Basic military skills: terrain analysis, patrolling and operations orders. Dynamics of adaptive leadership in the context of military operations.

Prerequisite(s): MSC 022A; or consent of instructor.

Learning Activities: Lecture 2 hour(s).

Grade Mode: Letter.

MSC 024A – Individual Military Leadership Skills (0.5 units)

Course Description: Develop and practice personal military leadership skills in extensive supervised leadership labs. Cadets perform basic military skills, improve on troop leading procedures and lead subordinates in tactical situations. Begin with drill and ceremony, land navigation and individual movement techniques.

Prerequisite(s): MSC 014A; MSC 014B; MSC 014C; MSC 022A (can be concurrent); or consent of instructor. MSC 022A required concurrently.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 024B – Individual Military Leadership Skills (0.5 units)

Course Description: Development and practice of personal military leadership skills in extensive supervised leadership labs. Performance of basic military skills, improvement on troop-leading procedures, leadership of subordinates in tactical situations.

Prerequisite(s): MSC 014A; MSC 014B; MSC 014C; MSC 022B (can be concurrent); or consent of instructor. MSC 022B required concurrently.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 024C – Individual Military Leadership Skills (0.5 units)

Course Description: Develop and practice personal military leadership skills in extensive supervised leadership labs. Begin with drill and ceremony, land navigation and individual movement techniques. Cadets perform basic military skills, improve on troop leading procedures and lead subordinates in tactical situations.

Prerequisite(s): MSC 014A; MSC 014B; MSC 014C; MSC 021 (can be concurrent); or consent of instructor; MSC 021 required concurrently.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 131 – Military Leadership & Management (2 units)

Course Description: Leadership and management in organizational context. Team dynamics, leadership styles, professional ethics, development of a leadership framework. Management skills for planning, decision making, and organizing developed through definition of problems, development of courses of action, implementation of solutions.

Prerequisite(s): Consent of instructor; upper division standing.

Learning Activities: Lecture 2 hour(s).

Grade Mode: Letter.

MSC 132A – Advanced Military Operations (2 units)

Course Description: Military small unit tactical theory as the basis for leadership development. Principles of war, contemporary operating environment, Geneva Law of Land Warfare, military offensive and defensive operations. Emphasis on development of critical thinking, problem solving, and communication skills.

Prerequisite(s): MSC 131; or consent of instructor; upper division standing.

Learning Activities: Lecture 2 hour(s).

Grade Mode: Letter.

MSC 132B – Applied Leadership (2 units)

Course Description: Military small unit tactical theory and application as basis for leadership development. Application of leadership styles and skills to complete problem-solving exercises and the development of an adaptable framework applicable to a variety of shifting environments and situations.

Prerequisite(s): MSC 132A; or consent of instructor; upper division standing.

Learning Activities: Lecture 2 hour(s).

Grade Mode: Letter.

MSC 134A – Adaptive Tactical Leadership (0.5 units)

Course Description: Small unit tactical operations serve as the basis for enhancement of leadership performance through tactical application. Assessment of leadership attributes, skills, and actions through participation in a variety of leadership roles in problem-solving exercises.

Prerequisite(s): MSC 131; or consent of instructor; upper division standing.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 134B – Adaptive Tactical Leadership (0.5 units)

Course Description: Small unit tactical operations as the basis for enhancement of leadership performance through tactical application. Assessment of leadership attributes, skills, and actions through participation in a variety of leadership roles in problem-solving exercises.

Prerequisite(s): MSC 132A; or consent of instructor; upper division standing.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 134C – Adaptive Tactical Leadership (0.5 units)

Course Description: Small unit tactical operations are taught, serve as basis for students exploration, development. Serve in variety of leadership roles in which leadership attributes, skills, actions are closely assessed and developed while they are faced with series of problem solving exercises.

Prerequisite(s): MSC 132B; or consent of instructor; upper division standing.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 141 – Ethical Leadership (2 units)

Course Description: Direct influence of leaders on individual motivation and group processes. The complexities of balancing moral, legal, and ethical obligations while applying fundamental business principles in determining the best possible outcome from competing solutions.

Prerequisite(s): Consent of instructor; upper division standing.

Learning Activities: Lecture 2 hour(s).

Grade Mode: Letter.

MSC 142 – Military Law (2 units)

Course Description: The United States Constitution and the Military Justice System. Basic law of war, with an emphasis on issues that might arise on the battlefield or during a national emergency.

Prerequisite(s): MSC 141; or consent of instructor; upper division standing.

Learning Activities: Lecture 2 hour(s).

Grade Mode: Letter.

MSC 143 – U.S. Army Management Systems (2 units)

Course Description: Leadership and management, focusing on four management systems: planning, organizing, leading and controlling. Practical methodologies for assessing management decisions while balancing competing ethical, economic, infrastructure and future growth trade-offs.

Prerequisite(s): MSC 142; or consent of instructor; upper division standing.

Learning Activities: Lecture 2 hour(s).

Grade Mode: Letter.

MSC 144A – Military Training Leadership Skills (0.5 units)

Course Description: Enhancement of student leadership performance through practical application. Small unit military tactical operations as the basis for the student exploration and development.

Prerequisite(s): MSC 141; or consent of instructor; upper division standing.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 144B – Military Training Leadership Skills (0.5 units)

Course Description: Enhancement of student leadership performance through practical application. Small unit military tactical operations serve as the basis for student exploration and development.

Prerequisite(s): MSC 142; or consent of instructor; upper division standing.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 144C – Military Training Leadership Skills (0.5 units)

Course Description: Enhancement of student leadership performance through practical application. Small unit military tactical operations as the basis for student exploration and development.

Prerequisite(s): MSC 143; or consent of instructor; upper division standing.

Learning Activities: Laboratory 2 hour(s).

Grade Mode: Pass/No Pass only.

MSC 191 – Special Studies in Military Science (2 units)

Course Description: Intensive examination of one or more special problems in military science. Possible areas of study include leadership dimensions, principles of war, air-land battle imperatives, military strategy, the operational art and professional ethics.

Prerequisite(s): MSC 131; MSC 132A; MSC 132B; MSC 141; MSC 142; MSC 143; consent of department chair.

Learning Activities: Independent Study 6 hour(s).

Repeat Credit: May be repeated 2 time(s) when topic differs.

Grade Mode: Pass/No Pass only.