Military training has existed at MIT ever since the Institute opened its doors in 1865. More than 12,000 officers have been commissioned from MIT, of whom more than 150 have reached the rank of general or admiral. Students who are United States citizens or who have applied for citizenship, are of good moral character, and are medically qualified for military service, may enroll in the programs for leadership training. Non-citizens who fulfill naturalization requirements for citizenship prior to graduation may enroll and participate in the Army or Naval ROTC two-year non-scholarship programs. Any full-time MIT student may participate in the Army or Naval ROTC programs for leadership training.

All three programs—Air Force, Army, and Naval ROTC—have the following characteristics in common:

- Application is voluntary.
- Admission is selective.
- All admit men and women.
- Enrollment as a non-scholarship first-year student or sophomore does not involve a military service obligation.
- Most students enter the program at the beginning of their first year. However, entry up to the middle of the sophomore year is available. (For Army ROTC, students may enter at any time as long as they have four full semesters remaining until undergraduate or graduate degree completion).
- To be eligible for a commission as an officer in the Armed Forces, students must complete the Reserve Officers' Training Corps (ROTC) program, including summer training, and earn their bachelor's degree. (Army ROTC students who are pursuing a graduate degree must complete the ROTC program, including summer training, and earn their graduate degree).
- Upon request by the student, any required summer employment financial aid contribution can be waived if summer training makes such employment impossible.
- Non-scholarship students may compete for ROTC scholarships, many of which cover full tuition and fees, and range from one to four years for the Army, Air Force, and Navy.
- Enrollment as a scholarship recipient beyond the first year generally creates an obligation of four years of active duty service in the Navy or Air Force, or four years of active duty or eight years of reserve duty in the National Guard or Reserve for the Army.

Aerospace Studies (AS), Military Science (MS), and Naval Science (NS) subjects are not included in a student's grade point average, and the credits do not count toward a degree. These subjects can be applied toward the Physical Education and Wellness Requirement. In some cases, the ROTC programs may include departmentally approved subjects that provide academic credit.

Students who accept a contract to become an officer must maintain acceptable levels of academic performance and physical fitness.