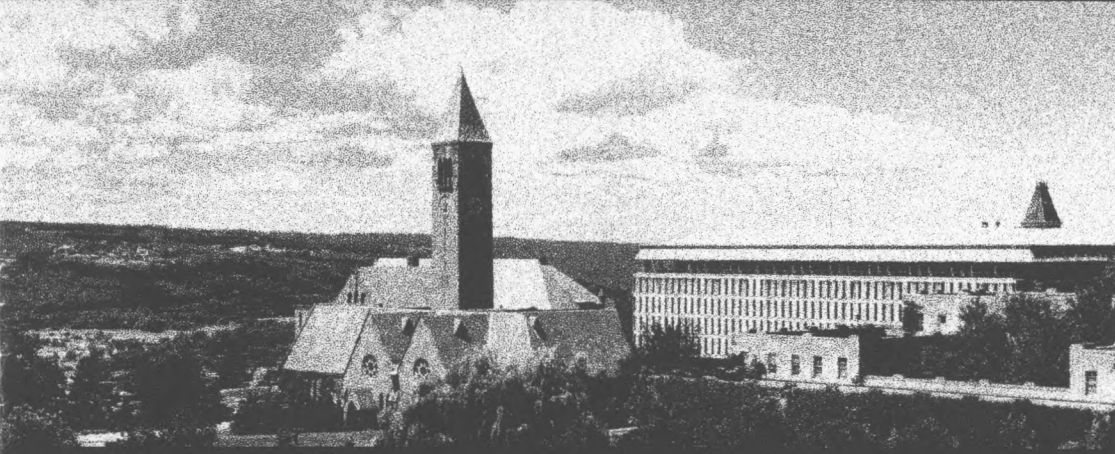


**Cornell
University
Announcements**



**Officer
Education**

Cornell University Announcements

Officer Education

1987-88

The Departments of Military Science, Naval Science, and Aerospace Studies

Cornell University Announcements (ISSN 0744-4605)

Volume 79 of the Cornell University Announcements consists of nine catalogs, of which this is number two, dated March 20, 1987. Issued twice in March, once in June, three times in July, once in August, once in September, and once in October. Published by the Office of Publications Services, Cornell University, East Hill Plaza, Ithaca, New York 14850-2805. Second-class postage paid at Ithaca, New York.

Postmaster: Send address changes to the Undergraduate Admissions Office, Cornell University, 410 Thurston Avenue, Ithaca, New York 14850-2488.

Cornell Academic Calendar 1987-88

Fall Semester

Registration begins	Thursday, August 27
Registration ends	Friday, August 28
Instruction begins	Monday, August 31
Fall recess begins	Sunday, October 18
Instruction resumes	Wednesday, October 21
Thanksgiving recess begins	Wednesday, November 25, 1:10 p.m.
Instruction resumes	Monday, November 30
Last day of instruction	Wednesday, December 9
Study period begins	Thursday, December 10
Study period ends	Sunday, December 13
Final examinations begin	Monday, December 14
Final examinations end	Wednesday, December 23

Spring Semester

Registration begins	Thursday, January 21
Registration ends	Friday, January 22
Instruction begins	Monday, January 25
Spring recess begins	Sunday, March 20
Instruction resumes	Monday, March 28
Last day of instruction	Saturday, May 7
Study period begins	Sunday, May 8
Study period ends	Wednesday, May 11
Final examinations begin	Thursday, May 12
Final examinations end	Saturday, May 21
Commencement	Sunday, May 29

This calendar is subject to modification and is not legally binding.

In enacting this calendar, the university has scheduled classes, laboratories, and examinations on religious holidays. It is the intent of the university that students who miss those activities because of religious observances be given adequate opportunity to make up the missed work.

Announcement

Contents

2	Cornell Academic Calendar
5	Cornell University Officer Education
7	United States Army Program
13	United States Naval Program
19	United States Air Force Program
25	Extracurricular Organizations
27	Register
29	Index
31	Information Form

The courses and curricula described in this Announcement, and the teaching personnel listed herein, are subject to change at any time by official action of Cornell University.



Cornell University

Officer Education

Military instruction began at Cornell University in 1868 under the provisions of the Morrill Act of 1862. Since that time officer education has been highlighted by the construction of Barton Hall in 1914 (accompanying photo), establishment of a formal Reserve Officers Training Corps (ROTC) unit in 1916, and the evolution of a program that de-emphasizes drill and formations and places greater stress on the development of leadership and managerial skills. Throughout the years, Cornell's program of officer education has provided many outstanding civilian and military leaders well equipped for success as a result of knowledge and skills gained from their involvement in the Officer Education Program while pursuing undergraduate and graduate degrees.

The programs of officer education allow the student to prepare for a commission as an officer in either the United States Army, Navy, Marines, or Air Force. Each service program is headed by a senior military officer who also serves as a full professor on the Cornell faculty. More-detailed information about the programs offered by the Departments of Military Science, Naval Science, and Aerospace Studies is contained in subsequent portions of this Announcement.

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The university is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

A brochure describing services for the handicapped student may be obtained by writing to the Office of Equal Opportunity, Cornell University, 234 Day Hall, Ithaca, New York 14853-2801. Other questions or requests for special assistance may also be directed to that office.

Eligibility

The military services are also committed to a policy of equal opportunity. Therefore, any student accepted by any school or college at Cornell may enroll in an officer education program as long as specific medical, academic, and related requirements of the particular program are met. Additionally, any student enrolled in a nearby college or university may enroll in an officer education program at Cornell University with the objective of gaining a commission. Such nonresident enrollment is accomplished through Cornell's Division of Summer Session, Extramural Study, and Related Programs, and a nominal fee is charged for registration in military-taught courses.

Special Opportunity Programs

Cornell University administers a variety of special opportunity programs designed to provide financial assistance and other forms of assistance to (1) minority students and (2) low-income students meeting program guidelines. The emphasis of these special programs is to aid in increasing representation to students from minority groups present in New York State who have historically been underrepresented in higher education. However, participation is also available to those residing outside New York State. For details, prospective students should consult the *Guide for Candidates*, which accompanies each undergraduate application or will be sent on request by the Undergraduate Admissions Office, 410 Thurston Avenue, Ithaca, New York 14850-2488.

Scheduling Procedures

Once an applicant has determined the program in which he or she desires to register, preregistration should be accomplished by notifying the Cornell college or school. This should be done as early as possible to preclude conflicts and inconvenience on registration day. All interested students are advised to visit the appropriate office in Barton Hall before registration.



Cornell University

United States Army Program

The primary objective of the Army Officer Education Program at Cornell is to develop and commission men and women who have the qualifications and potential for service as officers in the reserve and active components of the United States Army. Intermediate objectives are to provide students with an understanding of the fundamentals of responsibility, integrity, and self-discipline, as well as an appreciation of the citizen's role in national defense. The application of the decision-making process to a variety of situations is given major emphasis as a valuable aid in developing leadership potential.

These objectives are achieved through a program normally covering four years. However, a two-year program is available and is discussed in a later section. The program includes specific courses in military science, more-general academic subjects that assure a well-rounded education, practical training in leadership through participation in the Cadet Corps (including attendance at one six-week summer camp at an Army installation), and the opportunity to participate in a number of extracurricular activities such as those described on pages 11 and 25. The combination prepares the student for commissioning and effective performance in most of the many branches of the Army. The student's academic major, academic performance, leadership ability, and personal desires, and the needs of the Army, determine the branch of the Army in which he or she is commissioned on graduation.

Requirements for Enrollment

Applicants must be citizens of the United States. (Non-citizens may enroll and will receive certificates acknowledging completion of the course but do not receive commissions.)

An applicant's vision must be correctable to a minimum of 20/20 in one eye and 20/400 in the other eye. Height must be at least sixty inches for men and fifty-eight inches for women, and no more than eighty inches for men and seventy-two inches for women, although exceptions will be considered. The weight requirement varies according to height and sex. Overall sound mental and physical condition is essential, and students are required to undergo periodic physical examinations. Enrollment in the program is subject to the approval of the professor of military science.

Enrollment in specific courses by students not formally enrolled in the program must be approved by course instructors.

Four-Year Program

The Four-Year Program is open to students in their freshman year or, with the approval of military and university authorities, to sophomores in a five-year degree program. Veterans of the Armed Forces of the United States and students entering Cornell with AROTC credit from secondary or military schools (Junior Division AROTC) may receive advanced standing.

Under the Four-Year Program students pursue the Basic Phase (Mil S I and II) during the first two years and the Advanced Phase (Mil S III and IV) during the next two years. A total of twelve credits of military subjects is required. In addition, a number of academic-enrichment courses are required in such fields as communication arts, psychology, management, political science, and foreign languages. Specific requirements are determined by the student and his or her adviser after initial enrollment. Throughout the four years, cadets spend an additional two hours each week each semester in practical leadership training for which there is no academic credit but which satisfies the physical education requirement. All cadets attend a six-week camp, with pay, between the junior and senior years.

Basic Phase (Mil S I and Mil S II)

Students in the first year of the Basic Phase take one classroom course in military science in the fall and spring semesters, for which they receive academic credit. These courses include study of the United States organization for defense and principles and techniques of leadership and management.

Students also participate in leadership modules that include rappelling, orienteering, drill and ceremony, physical training, winter survival, and map and compass use. These modules are designed to promote personal development and enrichment. While these activities do not provide academic credit, students do receive physical education credit. Typical freshman participation in Army officer education is 48½ program-related hours.

During fall of the second year, the student takes a three-credit class in military history, including the evolution of warfare and armed conflict in society. In spring the student takes a one-credit course in map reading and spends approximately two hours a week in practical leadership training, land navigation, and military skills.

Advanced Phase (Mil S III and Mil S IV)

The Advanced Phase of the Four-Year Program is open to students who have successfully completed the Basic Phase and are accepted by the professor of military science for further enrollment. It is also open to students who have gained appropriate advanced standing through either successful completion of basic summer programs (see the description of the Two-Year Program) or prior military training. Any student entering the Advanced Phase must have two years of academic work remaining at Cornell or another degree-granting institution. The student must pass such physical and aptitude tests as may be prescribed. In addition, the past performance and desire of each student is evaluated to determine if he or she has the potential for eventual commissioning.

When students are accepted for the Advanced Phase, they execute a written contract with the United States government. Under terms of the contract, they agree to complete the Advanced Phase and to accept a commission if tendered. Concurrently with the signing of the contract, students enlist in the United States Army Reserve for control purposes.

Classroom study in the Advanced Phase includes one military science course each semester on such subjects as leadership and management, small-unit tactics, and command and staff organization and functions. The two hours per week of practical leadership training continue, and between the junior and senior years all cadets attend a six-week advanced summer camp currently conducted at Fort Bragg, North Carolina.

Two-Year Program

The Two-Year Program consists of the last two years (the Advanced Phase) of the regular Four-Year Program. In order to qualify for the Two-Year Program, a student must successfully complete a basic six-week summer camp or receive placement credit for prior military service.

The Two-Year Program is open to selected students who have two years of academic study remaining at Cornell or any other degree-granting institution. Applications are accepted from October to April of the sophomore year. Selectees complete the basic six-week camp before registering in the Advanced Phase the following fall. They must also meet specified physical requirements and execute the same written contract as those students who enter the Advanced Phase after completing the regular Basic Phase.

Scholarships

Scholarships are awarded on the basis of merit and are available for two, three, or four years. AROTC scholarships are also awarded each year to outstanding basic-

camp participants and students in the freshman and sophomore classes. Cadets who are awarded scholarships continue to receive support until graduation as long as they fulfill the requirements. The active-duty requirement for all scholarship students is four years. Scholarship cadets receive funding for university tuition, required fees, textbooks, and classroom materials for the duration of their scholarship. Scholarship cadets and advanced course cadets also receive \$100 a month for up to ten months a year.

Commissioning

All students who successfully complete the Advanced Phase, including the advanced summer camp, are commissioned as second lieutenants in the United States Army Reserve or the Regular Army upon graduation.

Distinguished Military Graduates

Selected senior cadets demonstrating high academic achievement and outstanding military qualities are designated Distinguished Military Graduates after fulfilling all obligations for a baccalaureate degree. All cadets, scholarship and nonscholarship, are eligible to compete for this distinction.

Service Obligations

A variety of active duty and reserve combinations are available. Non-scholarship cadets may spend either three years on active duty and five more years in an inactive Reserve status, or three to six months on active duty followed by membership in Reserve units for six years. The manpower requirements of the Army determine the proportion of officers who serve in each category.

An officer beginning three years active duty first attends the Basic Officer Course (normally eight to twelve weeks) of the assigned branch. Upon completion of this course the officer is assigned to a unit and location that is determined by the desires of the individual and the requirements of the Army. Those officers selected for three to six months attend the Basic Officer Course, after which they are released to Reserve status.

Non-scholarship cadets accepting a Regular Army commission usually serve a minimum of three years on active duty followed by five years in a Reserve status.

Scholarship cadets, whether commissioned in the Regular Army or the Reserve, generally serve four years on active duty and four years in Reserve status; however, some may serve eight years on Reserve duty.

Choice of Branch

Cadets in the second year of the Advanced Phase (normally the senior year) may specify the branch of the Army—such as Infantry, Corps of Engineers, Armor, Signal Corps, Artillery, Air Defense, Ordnance, Chemical, Adjutant General, Judge Advocate General, Finance, Medical Service, Military Intelligence, or Military Police—in which they prefer to serve. They are notified

in the spring, before commissioning, of the branch to which they are assigned. The likelihood of appointment in a chosen branch depends upon the student's academic and officer education performance, degree area, and the needs of the Army at that time.

Graduate Study

Active duty deferments may be granted to individuals who want to attend graduate school at their own expense. Requests will be considered on the basis of the needs of the service. Admission to graduate school is the student's responsibility.

Benefits

Each cadet in the Advanced Phase (Mil S III and Mil S IV) receives \$100 a month for up to ten months a year. While attending the advanced summer camp (between the junior and senior years), each cadet receives approximately \$600 and an allowance for travel to and from camp. Uniforms, textbooks, and supplies required for AROTC instruction are provided by the Army.

A cadet in the Two-Year Program receives the same payments as a cadet in the Advanced Phase and, in addition, receives approximately \$450 and a travel allowance for basic summer camp attendance before entering the Advanced Phase.

Curriculum

Military Science Courses

All cadets take one course and a laboratory module each semester in military science. The number of hours a week spent in the classroom varies from semester to semester, as does the credit received for each course. Students in the Four-Year Program are required to take courses as noted below. Students in the Two-Year Program are required to take all of the courses listed for the junior and senior year and the military history course.

Freshman Year (Mil S I)

Mil S 101 United States Organization for Defense

Fall. 1 credit. Required.

Staff.

Students examine the United States defense apparatus in terms of organization, mission, personnel, and relationships among military forces and between the military forces and various branches and departments of the government. The United States Army force structure is examined at all levels. The complexities and magnitude of operating the defense organization are studied to provide a framework for subsequent instruction.

Mil S 102 Leadership Theory

Spring. 1 credit.

Required.

Staff.

This course allows the student to develop a basic understanding and appreciation of the theories of social and organizational psychology and behavior as they

apply to the military setting. Attention is given to leader types, the source and exercise of authority, and the impact of varying styles of leadership on motivation and organization effectiveness. The student is introduced to the concepts of integrity, ethics, and professionalism.

Sophomore Year (Mil S II)

Mil S 211 Armed Conflict and Society

Fall. 3 credits. Required.

3 classes each week. Presentation by Army, Air Force, Marine Corps, and Navy instructors with guest lecturers, primarily from government and history departments.

A study of modern warfare that examines the relationship of military strategy to geography, economics, sociology, technology, and national political realities and values; the evolution of warfare, including principles of war, weapons, and associated equipment; and the effects of nuclear weapons and guerrilla warfare on traditional concepts of national strategy.

Mil S 221 Mapping: Land Navigation

Spring. 1 credit. Required.

Staff.

This course provides practical knowledge of the various forms of topographic representation. Students interpret and use maps in terrain association and land navigation. Knowledge of topography is complemented by an orientation on significant environmental influences from physical, social, and climatic factors. Portions of the course offer practical experience in land navigation and orienteering.

Junior Year (Mil S III)

Mil S 332 Theory and Dynamics of the Military Team

Fall. 2 credits. Required.

Staff.

After an initial introduction to techniques of presenting briefings, the student is provided with a broad understanding of the principles and application of teamwork in military organizations. Particular emphasis is given to leadership responsibilities of the commander as the team coordinator. Additionally, the student has an opportunity to develop an understanding of the roles and contributions of the various branches of the Army in support of the military team.

Mil S 322 Leadership in Small-Unit Operations

Spring. 2 credits. Required.

Staff.

This course provides an understanding of the nature of decision making and the tactical application of the military team. Through the use of conferences and extensive practical exercises, students develop familiarity with the factors influencing the leader's decisions; the processes of planning, coordinating, and directing the operations of military units to include troop-leading procedures; and development of operation plans and orders.



Senior Year (Mil S IV)

Mil S 424 Contemporary Military Environment I

Fall. 2 credits. Required.

Staff.

An overview of the functions, responsibilities, and inter-relationships between the small-unit leader, commander, and staff using a combat-arms battalion as a typical organizational structure. Detailed discussions focus on actions of the small-unit leader, communication skills, the military justice and legal system, the threat environment, and the logistical support of the army in the field.

Mil S 461 Contemporary Military Environment II

Spring. 2 credits. Required.

Staff.

A continuation of Mil S 424. Students examine the leadership environment of an Army officer. Conferences and seminars examine the techniques of effective military leadership with special attention given to professionalism and ethical considerations in the armed forces during peacetime and armed conflict.

Practical Leadership Training

All Army Officer-Education Students

The leadership laboratory emphasizes practical exercises and firsthand experience. Types of practical laboratory activities include an introduction to rifle marksmanship, mountaineering, physical training, land navigation and orienteering, signal communications, tactics, and orientation and training exercises at military installations.

As with many laboratory periods, no credit is given, and participation is required for successful completion of the AROTC program. Students will receive physical education credit for the laboratory. Students register as follows:

Mil S I Leadership Laboratory I

Fall

Spring

Mil S 141

Mil S 142

Mil S I cadets select either rappelling-drill and physical training, or ranger training. In the spring, class choices are winter survival—land navigation or ranger training. These interesting and challenging activities do not provide academic credit but may be used for physical education credit if adequate hours have been accrued.

Mil S II Leadership Laboratory II

Fall

Spring

Mil S 241

Mil S 242

Cadets meet for two hours each week as members of the cadet organization to participate in practical leadership exercises. Types of practical activities include familiarization in rifle marksmanship, orienteering, drill and ceremonies, signal communications, physical fitness training, and tactics and field exercises.

Mil S III Leadership Laboratory III

Fall

Spring

Mil S 341

Mil S 342

Cadets meet for 1½ hours a week to prepare for a six-week summer camp that follows the junior year. Emphasis is on the development of individual skills in leader-

ship techniques and practical skills. Cadets rotate among leadership positions to develop an ability to apply decision-making processes to a myriad of situations. They also acquire technical expertise and proficiency in signal communications, physical fitness, drill and ceremonies, rappelling, orienteering, tactics, water survival, and other military skills.

Mil S IV Leadership Laboratory IV

Fall

Spring

Mil S 441

Mil S 442

Senior cadets plan and operate the leadership laboratory programs for Mil S I–III cadets. The development of planning and supervisory skills is emphasized. Cadets have an opportunity to practice leadership skills developed during previous ROTC training and summer camp experiences.

Consolidated Drill

All Advanced Phase AROTC students and Basic Phase students belong to a cadet organization for the purpose of participation in practical leadership experiences. The cadet organization meets formally for two hours each month as part of the leadership laboratory program.

The rationale for the form and content of the program is that continued exposure to leadership situations that are both mentally and physically challenging will develop poise and self-confidence. The practical result for the individual participant is the ability to apply the decision-making process intelligently and creatively to a variety of complex situations while simultaneously supervising the performance of others.

Training of this nature enables students to learn how to communicate effectively with peers, subordinates, and superiors. Most importantly, the program helps instill in each participant a heightened awareness of the roles that character traits such as integrity, cooperation, devotion to duty, and professionalism play in the smooth operation of any organization.

Extracurricular Activities

The Army ROTC cadet at Cornell is afforded numerous activities. During the academic year cadets participate in an off-campus trip to an Army installation for tactical and adventure training. In February cadets are offered the opportunity to take part in a winter training exercise including skiing, snowshoeing, cold weather injury instruction, and shelter building. Other optional activities include intramural sport teams, formal and informal social activities, and additional ranger and field training.

Cadets may qualify for specialized military schools during college breaks. Airborne and Air Assault schools, Cadet Flight Training, and Mountain Warfare schools are available to qualified cadets.

Further Information

Additional information regarding the Army Officer Education Program may be obtained by mailing the form at the back of this book or by contacting the enrollment officer at the Army Officer Training Program in Barton Hall (telephone: 607/255-4000).



Cornell University

United States Naval Program

Objective

The objective of the Naval Officer Education Program is to prepare selected students for service as commissioned officers in the United States Navy or United States Marine Corps by supplementing their undergraduate education with instruction in essential concepts of naval science and fostering development of the qualities of leadership, integrity, and dedication to their country and the naval service. The program is compatible with most undergraduate major fields of study, including five-year baccalaureate degree programs.

The objective is achieved through a broad program, normally covering four years, that combines specific courses in naval science and specified academic subjects to supplement weekly laboratory sessions in which the practical aspects of naval science and leadership procedures are stressed. It also includes at least one summer-at-sea period.

Non-naval officer education students. Though the Navy program has been designed to prepare future officers, Navy courses are open to all students at Cornell University as space limitations allow.

Requirements for Enrollment

An applicant for Naval ROTC at Cornell must be a citizen of the United States. Applicants must have reached their seventeenth birthday by June 30 of the entering year and be less than twenty-five years of age on June 30 of the calendar year in which they are commissioned. Waivers of the upper age limit, up to age twenty-nine on June 30 of the year in which the applicant is commissioned, may be granted on an individual basis by the Chief of Naval Personnel. Applicants must also meet physical and medical requirements. Interested students should visit the Naval Officer Education Unit in Barton Hall.

Programs

There are two types of Navy programs: the Scholarship Program and the College Program. They differ primarily in benefits to the student and type of commission earned.

Scholarship Program

The Naval Officer Education Program provides eight thousand scholarships in over sixty-four universities nationwide to selected students who want to serve in the Navy or Marine Corps. Financial support is provided students during college preceding the award of the baccalaureate degree.

Benefits

The program provides uniforms, full tuition, most instructional fees, textbooks, nonconsumable supplies, and \$100 a month for a maximum of forty months. Successful completion of the Scholarship Program leads to a regular commission in the Navy or Marine Corps. At Cornell University over 90 percent of naval students have a scholarship. In the past, of those students who have entered the Cornell program without a scholarship, more than 90 percent have been successful in obtaining one.

Entering the Scholarship Program

There are three ways to enter the Scholarship Program:

First, by applying for the national competition each year. This entails filling out and sending an appropriate application; being interviewed; having a physical examination; and applying to, and being accepted by, one of the NROTC colleges or universities throughout the country.

Second, by enrolling in the College Program at Cornell and being recommended by the professor of naval science for a scholarship after at least one semester in the program.

Third, by entering through the Two-Year Scholarship Program.

College Programs

There are two College Programs available. Both lead to a commission in the Naval or Marine Corps Reserve and three years of active duty.

Each of these programs provides textbooks for naval professional courses, uniforms, and a subsistence allowance of \$100 a month from the beginning of the junior year.

The regular College Program is three to four years long. Academic requirements for students in this program are somewhat less than those for scholarship students, as noted in the curriculum section of this booklet.

The Two-Year College Program begins the summer before the junior year, when students attend a required program with pay at the Naval Science Institute in Newport, Rhode Island.

Summer Training

Each summer students in the Scholarship Program spend approximately four to six weeks on a Navy ship, the unit sail-training vessel *Vindicator*, or with a naval activity anywhere in the world for on-the-job training. College Program students attend at least one summer training session of the same duration between the junior and senior years. While attending summer training sessions, midshipmen are paid approximately \$500 a month.

Active Duty Requirements

As required by Section 2107, Title 10, United States Code, selected applicants must enlist in the United States Naval Reserve for six years in pay grade E-1 (seaman recruit) before being appointed midshipman, USNR, and receiving compensation. Students that are disenrolled from the NROTC Navy-Marine Corps Scholarship Program for reasons beyond their control will, upon disenrollment, be discharged from their enlisted status. It should be understood that two years' active enlisted service and/or restitution of benefits received may be required of those students who default on the terms of their NROTC contract after the beginning of their sophomore year.

Officers commissioned in the Regular Navy or Marine Corps serve on active duty for a minimum of four years. Those commissioned in the Naval or Marine Corps Reserve serve three years on active duty. Specialized training following commissioning adds additional active duty requirements in some cases.

Choice of Assignment

Graduates have an opportunity to request the duty they prefer upon graduation. These requests are given careful consideration, and every effort is made to assign the newly commissioned officer the duty of his or her choice.

Among the types of assignments are duty in nuclear-power engineering for surface ships and submarines, naval aviation, and large and small surface ships.

Marine Corps Options

The United States Marine Corps is an integral part of the Naval Service and is commanded by the Commandant of the Marine Corps. One-sixth of the NROTC scholarship students may be Marine selectees who will be designated Marine-option midshipmen. Upon suc-

cessful completion of the program they will be appointed second lieutenants in the United States Marine Corps.

Marine-option midshipmen will follow the same program as other NROTC midshipmen for the first two years. Beginning with the junior year, Marine-option midshipmen will be taught Marine courses by a Marine officer instructor. For the first class summer-cruise (after the junior year), known as the Bulldog Cruise, Marine-option students will travel to Quantico, Virginia, where they will undergo six weeks of intensive training. Upon commissioning the following year as second lieutenants, they will be assigned to the Basic School at Quantico, Virginia. After the Basic School, the Marine officer is assigned duty in a variety of occupational fields. Among the duties available are Infantry, Aviation, Artillery, Tracked Vehicles, Engineers, Communications, Electronics, Supply, Administration, and Computer Science. The officer may serve on board naval vessels or at shore installations of the Marine Corps or Navy, in this country or overseas.

The Marine Corps has a postgraduate educational system similar in objectives and organization to that of the Navy. Marine officers selected for aviation receive flight training at the Naval Air Station, Pensacola, Florida, along with their Navy counterparts.

Curriculum

A student has three categories of requirements to fulfill as a midshipman in the Naval Officer Education Program. The first of these requirements is a weekly naval professional laboratory each semester. The second requirement is a naval science course each semester. The last set of requirements consists of other required courses prescribed by the Navy to meet the growing need for more and better technically educated junior officers.

Naval Professional Laboratories

Nav S 141-142, 241-242, 341-342, or 441-442

All students in the naval program participate in one ninety-minute laboratory session each week. The session is held from 2:30 until 4:00 on Wednesday afternoon. This period is planned and implemented for the most part by the midshipman officers in the battalion organization and consists of both drill and professional information briefings and underway training aboard the unit's sixty-foot seagoing sail-training yawl or five small sailboats. Students gain experience in actual leadership situations and at the same time learn the fundamentals of seamanship, military formations, movements, commands, discipline, courtesies, and honors. During information briefings special emphasis is given to applied leadership as it relates to the administrative and managerial aspects of a Navy or Marine Corps officer's duties.

Naval Science Courses

All Navy and Marine midshipmen take one naval science course together each semester during their freshman and sophomore years. Navy-option students con-

tinue to take a naval science course each semester during their junior and senior years. Marine-option students are required to take only the amphibious warfare course in either their junior or senior year, depending on when the course is offered. The number of hours a week spent in the classroom varies from semester to semester, as does the credit received for each course.

Freshman Year

Nav S 101 Fundamentals of Naval Science Fall.
No credit.

One-hour class each week (lecture-recitation), Navy staff.

A study of fundamental aspects of naval science, including its conceptual contributions to sea power, factors involved in the physical development of naval forces, resources that must be managed, and prospects for the future.

Nav S 102 (also Mechanical and Aerospace Engineering 101) Naval Ship Systems Spring.
3 credits.

Three lecture-recitation classes each week.
R. L. Wehe, Navy staff.

An introduction to primary ship-systems and their inter-relationship. Basic principles of thermodynamics, propulsion, mechanical operation, internal communications, electronics, ship structure, and other marine systems are considered.

Nav S 157 Principles of Sailing Fall and spring.
Physical education credit.

One class each week. Navy staff.

Instruction in basic sailing skills and safety principles. Students sail small and large boats on Cayuga Lake, weather permitting. Focus is U.S. Navy Class B inshore skipper certification.

Sophomore Year

Nav S 201 Naval Weapons Systems Fall.
3 credits. Prerequisites: Mathematics 111 or 191.
Lecture-recitations, M W F Navy staff.

The principles and theories used in the development of naval weapons systems are examined. Initially, extensive study is made of sensing and detection systems, especially radar and sonar, followed by discussions of ancillary systems for computing, tracking, stability, and weapons control and delivery. The latter part of the course covers the formal derivation of the fire-control problem and specific U.S. Naval weapons.

Nav S 202 Seapower—The Historical Utilization of Naval Forces in Foreign Diplomacy Spring.
3 credits.

Three seminars each week. Navy staff.
Discussions examine the history of the U.S. Navy as a force in diplomacy. Relationships between Congress and the military for determining the national defense policy are also explored. The last section of the course concentrates on the balance between the superpower navies today. An integrated examination of current events and issues gives a historical perspective throughout the course.

Junior Year (Navy)

Nav S 301 (also Agricultural Engineering 305) Principles of Navigation Fall. 4 credits.

Four classes each week (lecture-recitation—project work).

The course covers coordinate systems, chart projections, navigational aids, instruments, compass observations, tides and currents, and soundings. It also includes celestial navigation, time, spherical trigonometry, motion of the stars and sun, star identification, position fixing, use of the nautical almanac, electronic navigation systems, and air navigation.

Nav S 302 Naval Operations Spring. 3 credits.
Three lectures each week. Navy staff.

The course covers rules of the road, maneuvering board, and surface-ship operations, including capabilities and the tactical disposition of forces. Topics in ship handling are also discussed.

Senior Year (Navy)

Nav S 401 (also Hotel Administration 414) Organizational Behavior and Small-Group Processes Fall. 3 credits.

Current research is examined to provide a conceptual framework for understanding group processes within organizations. In addition, students participate in experiential laboratories aimed at enhancing their effectiveness as members or leaders of groups. Topics include stages of group development, leadership, decision making, motivation, individual versus group needs, organizational communication, power, and organizational change.

Nav S 402 Naval Administration Topics Spring.
No credit.

A variety of topics important to the naval officer for both professional and managerial development are reviewed. The material is directed at the midshipman for his own understanding of naval administration and for use in the role of the division officer in counseling his subordinates. Through the use of lectures, situation problems, and role playing, the student will learn about the various aspects of Navy management and administration.

Additional Required Course

This course may be taken at any time during a student's undergraduate academic career.

Nav S 310 Armed Conflict and Society Fall.
3 credits.

3 classes each week. Presentations by Marine Corps and Navy instructors with guest lecturers, primarily from government and history departments.

A study of modern warfare that examines the relationship of military strategy to geography, economics, sociology, technology, and national political realities and values; the evolution of warfare, including principles of war, weapons, and associated equipment; and the effects of nuclear weapons and guerrilla warfare on traditional concepts of national strategy.

Junior or Senior Year (Marines)

Nav S 410 Amphibious Warfare Spring. 3 credits.

Three lectures-recitations each week. Marine Corps staff.

The history of the development, theory, techniques, and conduct of amphibious operations in the twentieth century. Special emphasis will be on amphibious operations conducted in the central Pacific during World War II.

Other Required Courses

Navy Option

In order to receive commissions in the United States Navy, midshipmen must complete all the requirements for a baccalaureate degree as well as certain academic requirements specified by the Navy. Most majors leading to a baccalaureate degree and having a direct applicability for the unrestricted line are permitted with the approval of the professor of naval science. Examples of academic fields of interest to the Navy for educating officers of the unrestricted line are:

Asian studies	management
chemistry	mathematics
computer science	oceanography
economics	operations analysis
engineering	physical sciences
European studies	physics
foreign affairs	public administration
history	Soviet studies
Latin American studies	

Although there are few restrictions placed on Navy-option College Program students (or any Marine-option students) with respect to academic majors, it is important to understand the vital need for mathematics and science in the modern Navy. College Program students who want to be most competitive for a scholarship are encouraged to select majors in those fields listed above.

Other required courses depend on the commissioning program in which the Navy-option midshipmen are enrolled and are given in the following sections.

Scholarship Program Navy-Option Students

All Navy-option scholarship students must complete two semesters of science-level calculus (six credits minimum) by the end of the sophomore year and two semesters of calculus-based physics (six credits minimum) by the end of the junior year.

Scholarship Program Navy-option students who do not major in chemistry, engineering, mathematics, physics, computer science, oceanography, operations analysis, or the physical sciences must also select technical courses for 50 percent of all electives not required by the university academic program or by the NROTC program.

College Program Navy-Option Students

College Program students who desire entry into the Navy-option Scholarship Program should fulfill all of the requirements applicable to Navy-option scholarship students to be eligible and competitive for a Professor of Naval Science (PNS) scholarship.

Marine Option

Any Navy midshipman, in either the Scholarship Program or the College Program, who completes all of Cornell University's degree requirements in any academic major is eligible for a commission in the United States Marine Corps or United States Marine Corps Reserve. Marine-option students take the same naval science courses and naval professional laboratories as Navy-option students for the freshman and sophomore years. During the junior and senior years, Marine-option students meet with the Marine officer instructors one hour each week and take two naval science courses. In addition, two semesters of any courses (a minimum of three hours each) in the following subject areas are required, the intent being to broaden the base of knowledge of the individual. The specific course chosen must be approved by a Marine officer instructor (MOI).

anthropology
behavioral sciences
communication methods
computer science (upper level)
economics
geography
languages
management engineering
philosophy
political science
sociology
world history

University Courses

A wide range of courses satisfy Naval ROTC science and engineering electives or social sciences and humanities requirements. Students should consult their naval science instructor or adviser concerning appropriate course selections. A partial list of those Cornell University courses that meet academic requirements of the program follows.

Calculus

Math 111, and 112 or 122 Calculus
Math 191, 192, or 193 Calculus for Engineers

Physics

Phys 112, and 213 or 217
Phys 207–208 Fundamentals of Physics

Chemistry

Chem 103–104 Introduction to Chemistry
Chem 207–208 General Chemistry
H Adm 171–172 Food Chemistry

Computer Science

Engr 100 Introduction to Computer Programming
Com S 101 The Computer Age
Com S 102 Introduction to Microcomputer Applications

Com S 211 Computers and Programming
Com S 314 Introduction to Computer Systems and
Organization
M&AE 489 Computer-aided Design
Com S 436 Introduction to Computers in Planning
H Adm 174 Information Systems I
Ag En 151 Introduction to Agricultural Engineering
and Computing
Ag En 153 Engineering Drawing
I&LR 211 Economic and Social Statistics

Extracurricular Activities

The Navy ROTC student at Cornell is offered a broad range of activities in which to participate. Each summer, as an optional part of their summer training, midshipmen sail aboard the unit sail-training vessel *Vindicator* to distant ports of call. Back at Cayuga Lake, a highly respected sail-training program offers instruction, both in small sailboats and in large-boat sailing on board *Vindicator*, to all who want to participate. The unit offers a comprehensive sports program in which most midshipmen participate. The Navy unit has won the Independent Division All Sports Trophy for seven of the last eight years. Midshipmen participate in a myriad of social events, including the annual Navy ball, the Tri-Service military ball, and traditional naval mess nights.

Further Information

Further information regarding the Naval Officer Education Program may be obtained by mailing the form on the last page or contacting the Naval Officer Education unit in Barton Hall (telephone: 607/255-4202).



Cornell University

United States Air Force Program

The objective of the Air Force officer education program at Cornell is to prepare men and women for positions as officers in the United States Air Force. The program is designed to provide the student with a background of aerospace knowledge and to further develop qualities of leadership, integrity, and self-discipline. These objectives are achieved through the Four-Year and Two-Year programs. These programs include specific courses in aerospace studies and practical laboratories.

Entering students are assigned to one of four categories: flying (pilot-navigator), missile, engineering-science, and nontechnical. These assignments are based on the student's preferences, qualifications, and academic field of study and the needs of the Air Force.

Requirements for Enrollment

The Air Force officer education program is open to any undergraduate or graduate student enrolled in any major field of study. The student's academic course of study is often a prime factor in determining the kind of career pursued in the Air Force. (See Air Force Careers, p. 21)

Applicants must be United States citizens. Noncitizens may enroll and will receive certificates acknowledging completion of the course but cannot receive a commission.

Applicants who are interested in flying (as pilot or navigator) or missile duty should make their request known at the time they enter the program.

All applicants receive physical examinations at no cost and, to be accepted, must meet the physical requirements listed below.

Though the program is designed to prepare future Air Force officers, Department of Aerospace Studies courses are open to all students at Cornell.

Physical Requirements

Every applicant must be free from any limiting physical infirmity and must have normal hearing, blood pressure, and heartbeat. Weight must be normal for height and age.

Following are the additional specific requirements for nonflying categories.

Vision: bilateral distant vision without corrective lenses, at least 20/400

Height: for men, at least sixty but not more than eighty inches; for women, at least fifty-eight but not more than seventy-two inches

Allergy: no history of asthma since twelfth birthday

Dental health: good

Those students who are interested in qualifying for flying categories (pilot or navigator) must meet the following specific requirements:

Vision: (for pilot candidates) 20/20 bilateral near and far vision without corrective lenses; (for navigator candidates) bilateral near vision at least 20/20 without corrective lenses and bilateral far vision at least 20/70 without correction, providing it is correctible to 20/20 with lenses

Color vision: normal

Height: at least sixty-four but not more than seventy-six inches; sitting height not more than thirty-nine inches

Allergy: no history of allergy or hay fever since twelfth birthday

Dental health: good

Four-Year Program

The Four-Year Program is open to all freshmen. Sophomores may enter the program but require departmental approval. Students in a five-year degree program may enroll in their freshman or sophomore year.

Veterans of the United States armed forces and students entering Cornell from military schools may receive advanced standing subject to approval by the professor of aerospace studies.

The Four-Year Program consists of the General Military Course (GMC) and the Professional Officer Course (POC). The first year of the GMC carries no military commitment, and students may withdraw at any time.

General Military Course

Students in the General Military Course take one credit of classroom work offered by the Department of Aerospace Studies each semester. During the freshman

year the student examines the organization and mission of the United States Air Force and the role United States military forces play in the contemporary world. In the sophomore year the student studies the history and development of military aviation and American air power. In both years we emphasize officership, professionalism, and human rights in the United States Air Force.

Students also spend 1½ hours a week in a leadership laboratory, which includes classroom instruction in responsibilities and the environment of the junior officer and instruction and practice in basic drill and ceremonies. In addition, all students participate in summer field training for four weeks between their sophomore and junior years.

Professional Officer Course

The Professional Officer Course (POC) is a two-year advanced course of instruction. Students who are accepted for the POC must have successfully completed or validated the basic course and must meet the academic and physical standards. Each cadet accepted into the POC must sign an agreement to complete the program and accept, if tendered, a commission in the Air Force Reserve on graduation.

Classroom study in the POC requires three hours a week each semester. In the junior year cadets study Air Force leadership and management at the junior officer level. During the senior year cadets study the elements of national security and the place of the military in American society. Leadership laboratory requires a minimum of 1½ hours a week in the junior and senior years. In the leadership laboratory the cadet is exposed to advanced leadership experiences and applies principles of management learned in the classroom.

Two-Year Program

The Two-Year Program consists of the last two years (Professional Officer Course) of the regular Four-Year Program plus a six-week summer training course preceding enrollment. (Details of the Professional Officer Course are given above.)

The Two-Year Program is open to male and female students with two years of academic study remaining at Cornell (graduate or undergraduate) or at schools under crosstown or consortium agreement. Applications are accepted from October through April of the year preceding the applicant's planned entry into the program. Selectees are then required to successfully complete a six-week summer field training program at government expense.

Scholarships

Air Force ROTC offers four-year scholarships on a competitive basis to high school seniors and graduates who major in selected scientific and technical areas such as engineering, mathematics, meteorology, and computer science. Scholarship information can be obtained from a high school counselor, from Air Force ROTC officers at a campus offering Air Force ROTC, or from AFROTC/RROO, Maxwell AFB, AL 36112-6663. The deadline for

submission of applications is December 1 of the year preceding the academic year in which the student wants to enter the program. *Students should apply early.*

Scholarships for 3½, 3, 2½, and 2 years are also available to college students. There are also two- and three-year scholarships for qualified men and women who are pursuing selected medical and nursing degrees.

All scholarships help pay college expenses plus provide a \$100 monthly nontaxable allowance during the school year.

Applications for these scholarships should be made to the professor of aerospace studies during the freshman or sophomore years of college. Appropriate application information is furnished by the professor of aerospace studies at the Air Force ROTC detachment. Selections are based on scores achieved on the Air Force Officer Qualifying Test, the overall grade point average, and the rating from an interview board composed of institutional officials and Air Force ROTC staff officers.

Fees

A uniform deposit of \$30 a year is required. Students are also encouraged to contribute to a cadet activities fund to cover the cost of most of their social activities.

Benefits

All cadets in the advanced program (POC) receive a \$100-a-month, nontaxable subsistence allowance for the academic year. During the four- or six-week summer field training (see below), each cadet receives pay allowance authorized by current directives, plus an allowance for travel to and from the field site. Most textbooks and supplies required for Department of Aerospace Studies courses are provided.

All cadets are eligible to participate in field trips made to Air Force bases throughout the country. Scholarship and advanced cadets (POC) are entitled to space-available travel on Air Force aircraft flying within the continental United States.

Field Training

There are three types of field training: a four-week course for cadets in the Four-Year Program, a six-week course for Two-Year Program applicants, and a special five-week course for pilot candidates. Students in any of these programs normally attend field training between their sophomore and junior years. Field training is hosted each summer by several active Air Force installations.

Field training is designed to stimulate the development of military leadership and skills through meaningful experiences. The curriculum consists of aircraft, aircrew, and survival orientation; junior officer training; physical training; small-arms training; a social-actions program; and supplemental training. Special emphasis is placed on career orientation and interaction with other young officers in fields of interest to the student. The six-week

training program is unique because it has an additional sixty hours of academic course work similar to that taken during the freshman and sophomore years. The five-week pilot program includes, in addition to the four-week curriculum, flight instruction consisting of ground school and flight training in a light aircraft. Ground school provides a basic understanding of aircraft systems, aerodynamics, flight instruments, air navigation (including radio navigation), meteorology, weather services, the national airspace system, federal aviation regulations, medical factors affecting flight, flight preparation, airport operations, and emergency procedures. On completion of this flight-training program a cadet may continue training at his or her own expense for a private pilot's license through the Federal Aviation Administration.

In addition to field training, Army airborne training (parachute jumping instruction) is available as an extracurricular activity to selected volunteer cadets.

Advanced Training Program

This program allows selected cadets to go to active duty Air Force bases for a two- or three-week period during the summer following their junior year. As "third lieutenants," cadets receive specialized career orientation and an opportunity to experience leadership, human relations, and management challenges encountered by Air Force junior officers. Cadets have an opportunity to become familiar with the Air Force great way of life. They also receive pay and allowances while attending advanced training.

Commissioning Obligations

All students who successfully complete the AFOTC advanced program (POC) and who are awarded a baccalaureate degree are commissioned as second lieutenants in the Air Force.

Second lieutenants commissioned in nonflying categories are required to serve on active duty for four years. Pilot trainees are required to serve on active duty for eight years after completing flying training and receiving their aeronautical rating. Navigator trainees serve five years after completing training. Some newly commissioned officers are allowed to postpone active service to earn advanced degrees.

Air Force Careers

Air Force policy has been to assign new officers to a career field appropriate to their educational background. Students in the engineering-scientific category may be assigned to practice in their specialty in research and development, communications, aeronautics, astronautics, design and development, the biological sciences, computer design and maintenance, meteorology, or various other engineering and scientific fields. They will try out with highly qualified people and have access to the latest scientific facilities and equipment.

Any undergraduate major is suitable for those who are interested and qualified to be pilots or navigators. After completion of flying training they are assigned primary duties flying various kinds of aircraft.

Officers who elect missile duty will train and be assigned to one of the operational missile bases as a crew member. This type of assignment provides an opportunity for a young officer to obtain command experience and also enjoy the extra option of enrolling in a graduate program.

Those graduating in the nontechnical category can anticipate assignments in manpower management, administration, logistics, police and investigation, intelligence, personnel, transportation, information, and numerous other career fields. They will use their educational backgrounds in positions of responsibility and be given the opportunity to develop further their managerial and administrative skills.

Curriculum

Students in the Four-Year Program are required to take all courses listed below. Students in the Two-Year Program are required to take all of the courses listed for the junior and senior years.

Freshman Year

Air S 161 United States Military Forces Fall. 1 credit.

One class each week.

A study of current United States military forces with emphasis on the analysis of the doctrine and mission of the United States Air Force. Army and Navy operations, as contributions to the total national defense, are reviewed. Current factors affecting today's professional military officers are considered.

Air S 162 Aerospace Operations Spring. 1 credit.

One class each week plus a field trip to a local military installation.

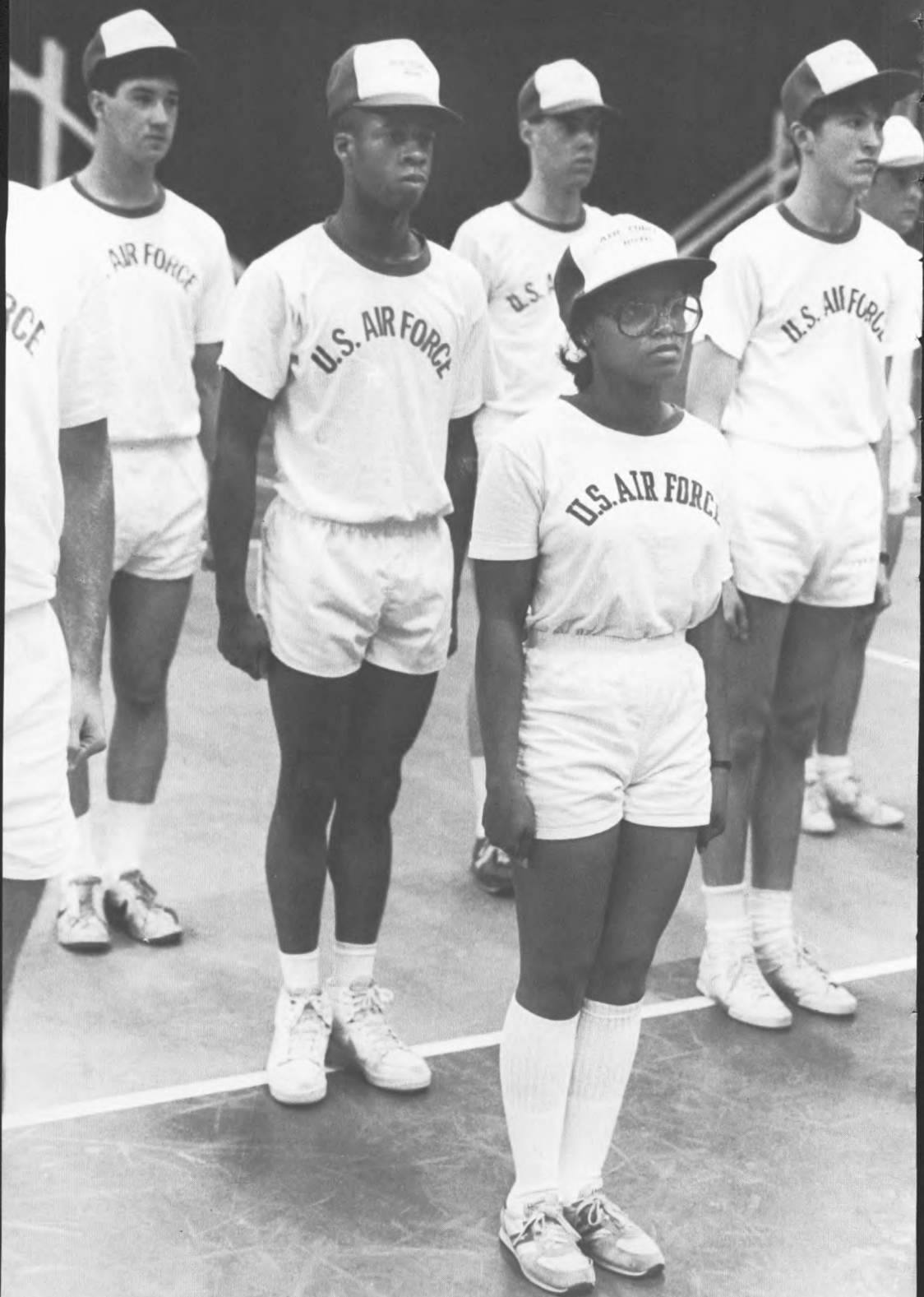
The aerospace forces of the United States are studied with emphasis on the organization and resources of the United States Air Force. The elements of strategic offensive and defensive general-purpose and aerospace support forces throughout the world are also studied.

Sophomore Year

Air S 211 Development of Military Aviation Fall. 1 credit.

One class each week.

Factors leading to the development of aviation, and the concepts and doctrine for the employment of air power are studied. Topics to be reviewed and analyzed include the history of manned flight, the effects of World War I on the uses of aviation, and the development of pre-World War II aircraft and the political struggles for an independent United States air arm. The role of air power in World War II, including strategic bombing, tactical air power, and the role of air superiority in warfare, is examined.



Air S 212 American Air Power since 1947 Spring. 1 credit.

One class each week.

The employment of the Air Force since World War II in military and nonmilitary operations to support national objectives is discussed. Effects of technology on defense policy and strategy are reviewed. The part played by the air forces in activities such as the Berlin airlift and national and international relief missions is discussed. The role of air power in the Korean conflict, the Cuban crisis, and the Vietnam War is examined from the viewpoint of technology and tactical doctrine.

Junior Year**Air S 331 Leadership and Communicative Skills** Fall. 3 credits.

Three classes each week.

The course is divided into three major parts. Part one provides an introduction to the principles and techniques used in the development of effective communication skills through the use of the interpersonal communication model. Part two explores the impact that both individual and group behavior have on organizational goals, with special emphasis on management theories that have evolved to explain human motivation. Part three deals with leadership as a function of the management principle of directing. Attention is given to the impact that various leadership styles have on human motivation and organizational effectiveness. Current leadership research and theory and the responsibilities of command are considered. Case-study exercises and oral and written assignments are required.

Air S 332 Management Spring. 3 credits.

Three classes each week.

Introductory course that deals with the basic principles of management, including planning, organizing, staffing, and controlling. Students will study quantitative and systems management techniques used to enhance the decision-making process. The role of management in the development of corporate strategy, tactics, and the use of power is considered. Case studies, problem sets, and oral and written assignments are required.

Senior Year**Air S 461 Armed Conflict and Society** Fall. 3 credits.

Three classes each week. Presentations by military instructors with guest lecturers primarily from government and history departments.

A study of modern warfare that examines the relationship of military strategy to geography, economics, sociology, technology, and national political realities and values; the evolution of warfare, including principles of war, weapons, and associated equipment; and the effects of nuclear weapons and guerrilla warfare on traditional concepts of national strategy.

Air S 462 National Security Forces in Contemporary American Society I Fall. 3 credits.

Two or three classes each week.

The functions and roles of the professional officer in a democratic society and how they relate to the socialization processes, prevailing public attitudes, and value

orientations associated with professional military service are examined. Changes within the military are analyzed, including such topics as the all-volunteer service, race relations, and the impact of women in the armed forces. The essential features of the military justice system as it functions to protect basic human rights and organizational order are reviewed. The formation and implementation of defense policy, including political, economic, and social constraints, is studied.

Leadership Laboratory Courses

All Air Force cadets spend at least 1½ hours a week throughout the academic year in a leadership laboratory, for which no academic credit is given. Occasionally laboratories are held at times other than the normally scheduled period (such as the fall Veterans Day parade and the spring Military Awards Ceremony). All cadets are also expected to participate in an evening dining-in and meet minimum physical fitness and weight standards each semester.

Air S 141–142 Initial Military Experiences

Introduction to the responsibilities, life, and work of an Air Force officer. Basic knowledge of drill and ceremonies, military courtesies, and the wearing of the uniform. Field trip to a local military installation.

Air S 241–242 Intermediate Military Experiences

Develops skills in giving commands for drill and ceremonies. Introduction to the Air Force base environment in which the Air Force officer functions. Includes a look at career areas available based on academic majors. Students experience and participate in leadership situations through military drills and ceremonies. Field trip to a local military installation.

Air S 341–342 Junior Officer Leadership

Cadets assume leadership responsibilities similar to those of a junior officer. Emphasis is on comprehending the importance of applying effective human relations in dealing with superiors, peers, and subordinates. Relationship between Air Force specialty codes and academic majors. The importance of basic health habits to leadership.

Air S 441 Advanced Leadership Experiences

Command leadership in operating a military organization. Cadets apply effective leadership and managerial techniques with individuals and groups and participate in self-analysis of leadership and managerial abilities.

Air S 442 Precommissioning Laboratory

Factors that facilitate transition from civilian to military life are reviewed. The need for military security, base services and activities, personal finances, travel regulations, and social obligations are introduced.

For more information about the Air Force ROTC without obligation, call, write, or visit AFROTC Detachment 520, Cornell University, Ithaca, New York 14853-1701 (telephone: 607/255-4004).



Cornell University

Extracurricular Organizations and Activities

Cornell Brigade

Cadets and midshipmen of the three services conduct a number of joint activities through the student brigade. Members of each service program meet regularly to plan and participate in various activities such as Red Cross blood drives, Christmas activities for underprivileged children, area parades, awards ceremonies, a formal military ball, and Tri-Service intramural sports and athletic field days.

Officer Education Honor Societies

Scabbard and Blade

The national society of Scabbard and Blade is represented at Cornell by Company C, 1st Regiment. Its purpose is to raise the standard of military education in colleges and universities, to unite the military departments in a closer relationship, to encourage and foster the essential qualities of good and efficient officers, and to promote friendship and good fellowship among all cadets.

Semper Fidelis Society

The Semper Fidelis Society is the Marine Corps honorary society. Those eligible for membership are Cornell students enrolled in a program leading to a commission as an officer in the United States Marine Corps.

The objective of this society is to prepare its members for their responsibilities as officers of the United States Marine Corps. This is accomplished by the dissemination of information pertinent to a better understanding of officers' duties, by the stimulation and protection of the high tradition and ideals of the United States Marine Corps, by the promotion of good fellowship, and by the cultivation of social virtues among the members.

Arnold Air Society

The Arnold Air Society is a national honor society named for the late General Henry H. "Hap" Arnold of the Air Force. It was organized to further the purpose, mission, tradition, and concept of the United States Air Force as a means of national defense, to promote American citizenship, and to create a close and more efficient relationship among the Air Force cadets. Membership is offered to a limited number of Air Force cadets.

Other Organizations and Activities

Cornell Rangers

The Cornell Rangers are dedicated to fostering skills that increase individual confidence and help create effective leaders. The organization's long-range objectives are to help members realize the value of staying in good physical condition, to achieve proficiency in Ranger operations, and to promote enthusiasm for the officer education programs. Membership is open to any Cornell student.

Rifle Teams

The Army and Navy programs sponsor rifle teams that compete for national and intercollegiate honors through postal matches and direct matches. The Cornell rifle range is managed by a Navy program staff member.

Cornell Mariners

The Cornell Mariners is a social organization founded to increase the technical competence of NROTC midshipmen interested in sailing and seamanship. Vehicles for this function include six eighteen-foot sloops and a sixty-foot yawl that operate on nearby Cayuga Lake.

Drill Teams

The Air Force and Navy programs sponsor drill teams that work to perfect military drill skills and compete in numerous regional drill competitions. Participation is voluntary.

Society of American Military Engineers

The Society of American Military Engineers formed a chapter at Cornell University in 1986 to promote engineering excellence and professional issues. The society provides a forum for discussion of engineering issues related to the national defense. Membership is open to any student expressing an interest in engineering and is not limited to engineering students.



Cornell University

Register

University Administration

Frank H. T. Rhodes, president
Robert Barker, provost
Thomas H. Meikle, Jr., provost for medical affairs
William G. Herbster, senior vice president
Joseph M. Ballantyne, vice president for research and advanced studies
John F. Burness, vice president for university relations
William D. Gurowitz, vice president for campus affairs
Robert M. Matyas, vice president for facilities and business operations
James E. Morley, Jr., vice president and treasurer
Richard M. Ramin, vice president for public affairs
James A. Sanderson, chief investment officer
João R. Egner, associate provost
Barry B. Adams, vice provost for undergraduate education
Kenneth M. King, vice provost for computing
James W. Spencer, vice provost
Walter J. Relihan, Jr., university counsel and secretary of the corporation
Joseph B. Bugliari, dean of the University Faculty

Faculty and Staff

Department of Military Science

Lieutenant Colonel Clarence R. Buchwald, Jr., Field Artillery, United States Army, Professor of Military Science and Commanding Officer, US Army ROTC *Excelsior* Battalion
Major Ken C. Williams, Infantry, Army National Guard
Major John M. Graham, Medical Services, United States Army Reserve
Captain Steven A. Barrows, Field Artillery, United States Army
Captain John M. Keefe, Engineer, United States Army
Captain Octavia L. Parker, Adjutant General, United States Army

Department of Naval Science

Captain Edward W. Colbert, Jr., United States Navy, Professor of Naval Science and Commanding Officer, Naval ROTC Unit
Commander Max R. Tea, United States Navy
Major Ronald V. Dutil, United States Marine Corps
Lieutenant Martin R. Ledger, United States Navy
Lieutenant Michael Kurtz, United States Navy

Department of Aerospace Studies

Colonel Robert W. Sample, United States Air Force, Professor of Aerospace Studies and Commander, Air Force ROTC Detachment 520
Major Paul D. Decker, United States Air Force
Major Harold L. Reem, United States Air Force
Captain Cheryl R. Andrews, United States Air Force
Captain Mark E. Mielke, United States Air Force



Cornell University

Index

- Active duty requirements: Army, 8; Navy, 14; Air Force, 21
- Administration, university, 27
- Advanced Program: Army, 8; Navy, 15; Marine Corps, 16
- Aerospace studies courses, 21
- Air Force careers, 21
- Air Force Program, 19
- Army Program, 7
- Arnold Air Society, 25
- Benefits: Army ROTC Program, 9; Naval ROTC Program, 13; Air Force ROTC Program, 20
- Brigade, Tri-Service, 25
- Calendar, Cornell University academic, 2
- Careers, Air Force, 21
- College Program, Naval ROTC, 13
- Commissioning: Army 8; Navy, 14; Air Force, 21
- Curriculum: Army Program, 7; Naval Program, 13; Air Force Program, 19
- Eligibility, 5
- Enrollment requirements: Army Program, 7; Naval Program, 13; Air Force Program, 19
- Extracurricular organizations and activities, 11, 17, 25
- Faculty and staff, 27
- Four-Year Program: Army ROTC, 7; Naval ROTC, 13; Air Force ROTC, 19
- Graduate study deferments: Army Program, 9; Air Force Program, 21
- Information form, 31
- Laboratory: practical leadership training (Army Program), 11; Naval Professional Laboratories (Naval Program), 14; leadership laboratory (Air Force Program), 23
- Marine Corps option, 14
- Military science courses, 9
- Naval Program, 13
- Naval science courses, 14
- Officer education honor societies, 25
- Physical requirements: Army ROTC Program, 7; Naval ROTC Program, 13; Air Force ROTC Program, 19
- Professional Officer Course, Air Force Program, 20
- Rangers, Cornell, 25
- Register, 27
- Requirements for enrollment: Army Program, 7; Naval Program, 13; Air Force Program, 19
- Rifle teams, 25
- Scabbard and Blade, 25
- Scheduling, 5
- Scholarships: Army ROTC Program 8; Marine Corps, 13; Naval ROTC Program, 13; Air Force ROTC Program, 20
- Semper Fidelis Society, 25
- Service obligations: Army Program, 8; Naval Program, 14; Air Force Program, 21
- Special opportunity programs, 5
- Two-Year Program: Army ROTC, 8; Naval ROTC, 14; Air Force ROTC, 20
- University courses, required: Marine Corps, 16; Naval ROTC, 16

Further information regarding admission to the officer education programs at Cornell may be had by filling out and mailing this form.

Program of Military Science (Army Program)
Professor of Naval Science (Naval Program)
Professor of Aerospace Studies (Air Force Program)

I would like to receive more information about the following officer education program:

Attach an additional sheet if you have specific questions about the program in which you are interested.

signature

Cornell University Announcements
ISSN 0744-4605
Undergraduate Admissions Office
Cornell University
410 Thurston Avenue
Ithaca, NY 14850-2488

Second-class postage
paid at Ithaca, New York