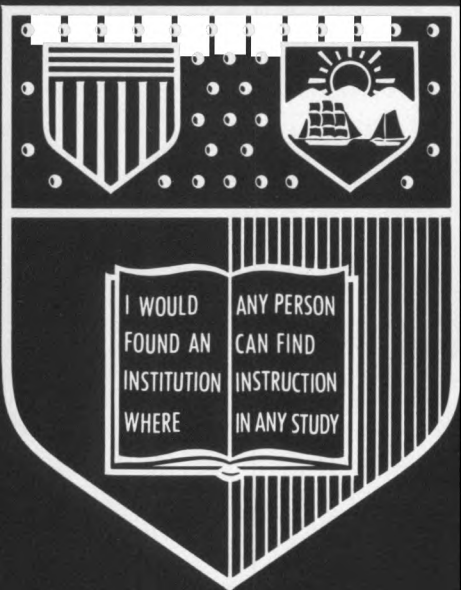
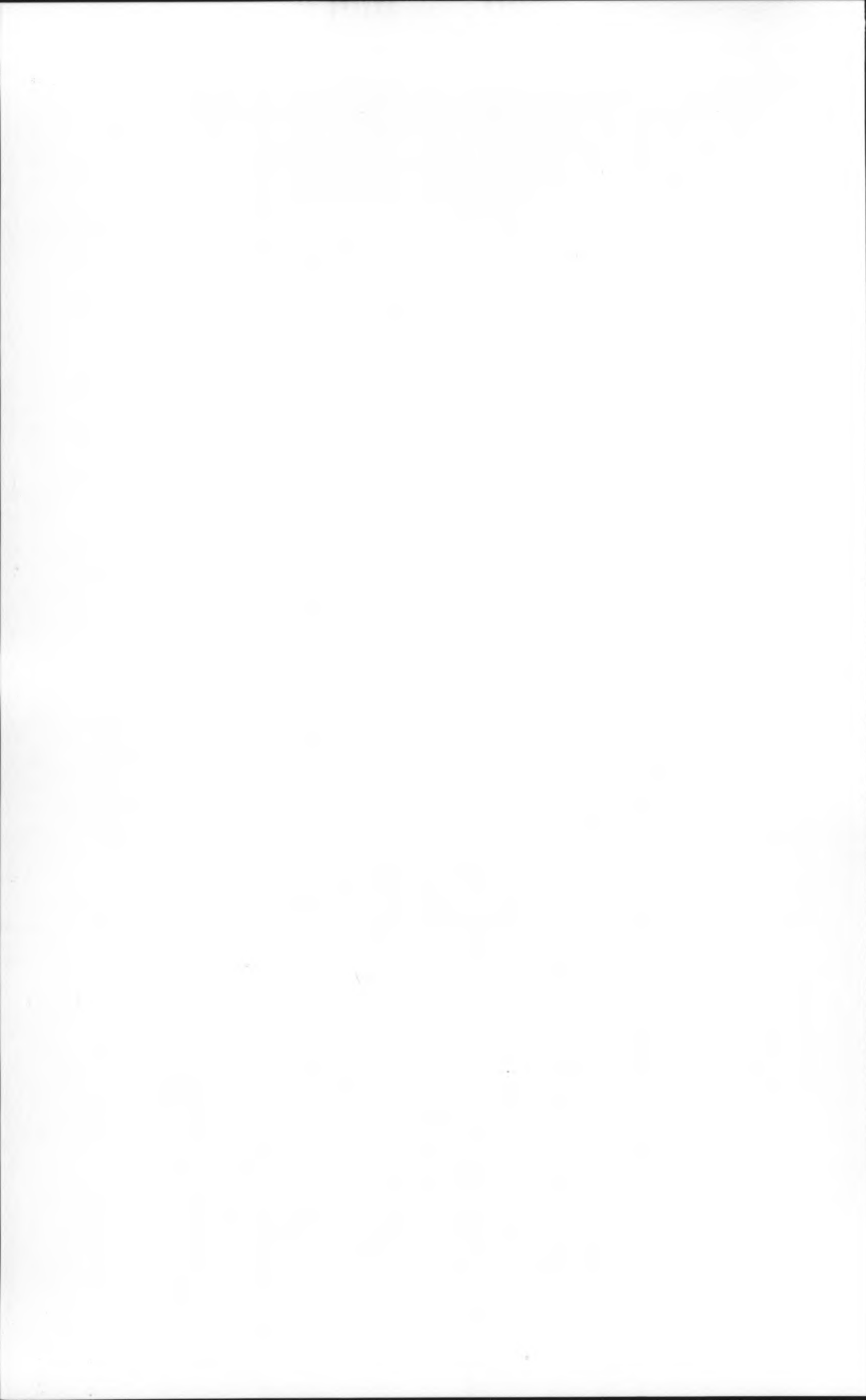


# Cornell University Announc





# **Cornell University**

## **Officer Education**

**1977-78**

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

#### **Cornell University Announcements**

Volume 69 of the Cornell University Announcements consists of sixteen catalogs, of which this is number 3 dated April 4, 1977. Publication dates: sixteen times a year (five times in August; twice in June and October; once in January, March, April, May, July, September, and December). Publisher: Cornell University, Sheldon Court, 420 College Avenue, Ithaca, New York 14853. Second-class postage paid at Ithaca, New York.

## Cornell Academic Calendar

**1977-78**

Registration, new students  
Registration, continuing and rejoining students  
Fall term instruction begins  
Thanksgiving recess:  
    Instruction suspended, 1:10 p.m.  
    Instruction resumed  
Fall term instruction ends, 1:10 p.m.  
Final examinations begin  
Final examinations end  
Registration, new and rejoining students  
Registration, continuing students  
Spring term instruction begins  
Spring recess:  
    Instruction suspended, 1:10 p.m.  
    Instruction resumed  
Spring term instruction ends, 1:10 p.m.  
Final examinations begin  
Final examinations end  
Commencement Day

Thursday, September 1  
Friday, September 2  
Monday, September 5  
  
Wednesday, November 23  
Monday, November 28  
Saturday, December 10  
Thursday, December 15  
Friday, December 23  
Thursday, January 19  
Friday, January 20  
Monday, January 23  
  
Saturday, March 18  
Monday, March 27  
Saturday, May 6  
Monday, May 15  
Tuesday, May 23  
Monday, May 29

The dates shown in the Academic Calendar are subject to change at any time by official action of Cornell University.

In enacting this calendar, the University Senate has scheduled classes on religious holidays. It is the intent of Senate legislation that students missing classes due to the observance of religious holidays be given ample opportunity to make up work.

## **Announcement**

## **Contents**

2	Cornell Academic Calendar
5	Cornell University Officer Education
7	United States Army ROTC Program
15	United States Naval ROTC Program
23	United States Air Force ROTC Program
27	Extracurricular Organizations
29	Register
31	Index
32	List of Announcements
32	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 under the provisions of the Morrill Act of 1862 in 1868. 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 Unit (ROTC) in 1916, and the evolution of a program that de-emphasizes drill and formations and places greater concern 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 ROTC 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 reserves or regular military services of the United States. The Army, Navy, Marines, and Air Force offer such opportunities with each service program headed by a senior military officer who also serves as a full professor on the Cornell faculty. More detailed information about the program offered by the Departments of Military Science, Naval Science, and Aerospace Studies are contained in subsequent portions of this *Announcement*.

All academic courses of the University are open to students of all races, religions, ethnic origins, ages, sexes, and political persuasions. No requirement, prerequisite, device, rule, or other means shall be used by any employee of the University to encourage, establish, or maintain segregation on the basis of race, religion, ethnic origin, age, sex, or political persuasion in any academic course of the University.

### Eligibility

It is the policy of Cornell University actively to support equality of educational opportunity. No student shall be denied admission to the University or be discriminated against otherwise because of race, color, creed, religion, national or ethnic origin, or sex. The military services are also committed to a

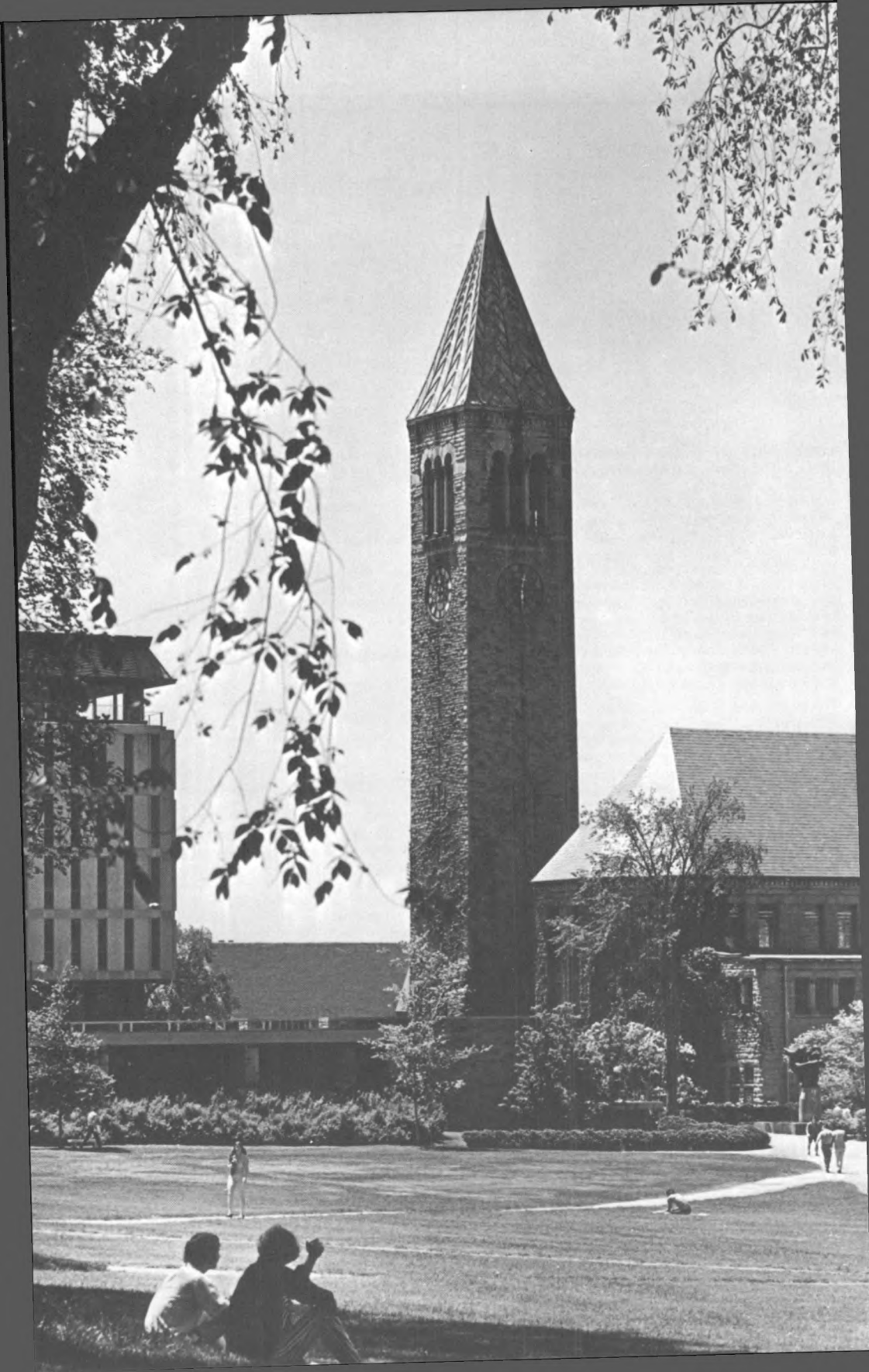
policy of equal opportunity. Therefore, any student accepted by any school or college at Cornell may enroll in ROTC so long as specific medical, academic, and related requirements of the particular program are met. Additionally, any student enrolled in one of the other area colleges or universities may enroll in an ROTC program at Cornell University with the objective of gaining a commission. Such non-resident enrollment is accomplished through Cornell's Extramural Division with a nominal fee 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 of students from minority groups present in New York State who historically have 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 upon request by the Office of Admissions, 410 Thurston Avenue, Ithaca, New York 14853.

### 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 and the military department concerned. This should be done as early as possible to preclude conflicts and inconvenience on registration day. Military departments can be informed by returning the form provided on the last page of this *Announcement*. Students are advised to visit the appropriate ROTC office in Barton Hall before formal registration day.





## Cornell University

# United States Army ROTC Program

The primary objective of the Army ROTC (AROTC) program at Cornell is to develop and commission as junior officers, men and women who have the qualifications and potential for service as officers in the reserve and active components of the United States Army. Opportunities are also available to those men and women desiring a career in the military. Intermediate objectives are to provide AROTC 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 later. 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 a six-week summer camp at an Army installation), and the opportunity to participate in a number of extracurricular activities such as those described on page 27. The combination prepares the student for commissioning and effective performance in any of the several branches of service of the Army. The student's academic major, academic performance, leadership ability, personal desires, and the needs of the Army determine the branch of the Army in which he or she is commissioned upon graduation.

## Requirements for Enrolling

Applicants must be citizens of the United States. (Noncitizens 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 60 inches for men, 58 inches for women, and no more than 80 inches for men and 72 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 generally subject to the approval of the professor of military science. Enrollment approval for specific courses for students not formally enrolled in the program will be left with course instructors. Students not enrolled formally in the AROTC program will not be allowed to participate in the practical leadership laboratory.

## 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 who otherwise meet the enrollment criteria presented earlier. 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 also enroll and may receive advanced standing.

Under the Four-Year Program, students pursue the Basic Phase (MS I and II) during the first two years and during the next two years the Advanced Phase (MS III and IV). A total of eleven credit hours of professional military subjects is required. In addition, a number of non-ROTC academic enrichment subjects are recommended. These enrichment courses are in such fields as communication arts, psychology, sociology, political science, mathematics, and philosophy. Specific requirements are determined by the student and his or her adviser after initial enrollment. Throughout the four years, cadets spend an additional hour each week each semester in practical leadership training for which there is no academic credit. All cadets attend a six-week camp, with pay, between the junior and senior years.

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

Students in the first year of the Basic Phase take one classroom course in military science in the fall semester for which they receive academic credit. This course includes study of the United States organization for defense, principles and techniques of leadership and management, the evolution of warfare and the nature of armed conflict in society,

and military topography. In addition, students spend one hour biweekly in practical leadership training where the principles taught in the classroom are applied. These leadership modules, which include mountaineering, orienteering, and rifle marksmanship, are designed to stress personal development and enrichment. These activities do not receive academic credit and thus require less time and effort than credit courses, allowing the student to devote more hours to the pursuit of a regular academic program. In addition, the modules are based on a thirty-hour semester so that those who elect to receive physical education credit for them may do so. In the spring, the only student requirement is to participate in the practical leadership training, based on the adventure-oriented modules mentioned above. The typical freshmen participating in AROTC spends forty-eight and a half hours per year in the program.

During the fall of the second year, the student takes a one-hour class in map reading and chooses a one-hour class in either military history or management and leadership. Each of these courses carries academic credit of one hour. In the spring, the student spends one hour a week in practical leadership training as preparation for entrance into the Advanced Phase. This department strives to ensure that the cadet maintains a proper academic balance and the average student is involved in AROTC during the sophomore year for a period of fifty-one hours.

Students in the Basic Phase also are required to take six credit hours of University academic course work in communication arts. Frequently these courses can be taken as electives to meet other University or degree requirements. With proper planning, the enrichment requirement usually does not entail work beyond normal degree requirements. Details concerning the academic portion of the curriculum are discussed shortly.

### Advanced Phase (MS III and MS 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 either through successful completion of basic summer programs (see Two-Year Program) or through prior military training or service. Any student entering the Advanced Phase must have two years of academic work remaining at Cornell or another area degree-granting institution, and must ordinarily be of an age that will allow qualification for a baccalaureate degree and commissioning before the age of twenty-eight. The student must also pass such physical and aptitude tests as may be prescribed. In addition, the past performance and desire of each student will be examined 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. Concurrent 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. A student must also complete six credit hours of University advanced-level enrichment courses. As with the Basic Phase requirement, these hours may generally be applied toward the student's degree requirement hours. They should normally be outside the student's degree field and should include advanced courses in such areas as the social and behavioral sciences or mathematics. The one and one-half hours a week of practical leadership training continues, and, between the junior and senior years, all cadets attend a six-week advanced summer camp.

### 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 an intensive three-week, on-campus summer officer education program. (See MS 299, *Summer Session Announcement*.)

The Two-Year Program is open to selected students who have two years of academic study remaining at Cornell or any other area degree-granting institution. Applications are accepted from December to April, and selected students are notified in May. Selectees are then required to complete the basic six-week camp or the three-week summer officer education program before registering in the AROTC Advanced Phase the following fall. They must also pass specified physical requirements and execute the same written contract as those students who enter the Advanced Phase after completing the regular Basic Phase.

### Commissioning

All students who successfully complete the AROTC Advanced Phase, including the advanced summer camp, and who are awarded baccalaureate degrees, are, upon graduation, commissioned as second lieutenants; most are commissioned in the United States Army Reserve. (A few are commissioned in the Regular Army: see Distinguished Military Graduates, below.) AROTC graduates commissioned in the United States Army Reserve will be ordered to active duty within one year of graduation unless deferred for graduate study.

### Distinguished Military Graduates

Some senior AROTC cadets with high academic achievement and outstanding military qualities are designated as Distinguished Military Graduates (DMG). All AROTC cadets, scholarship and non-scholarship, are eligible to compete. DMG's may be commissioned in the Regular Army rather than the Reserve; those who are so commissioned enter the

Army on the same basis as graduates of the United States Military Academy at West Point.

## Service Obligations

A variety of active duty and reserve combinations are available. Nonscholarship cadets must spend either three years on active duty and three more years with a Reserve unit, or three to six months on active duty followed by membership in Reserve units for seven and one-half years. The manpower requirements of the Army determine the proportion of officers who serve in each category. Current trends indicate that most requests for active duty for three years by nonscholarship, nonregular Army officers will be approved. Similarly, requests for limited active duty (three to six months for training only) are also likely to be approved. Recent graduating classes have had much choice in their service obligations. An officer beginning three years active duty first attends the Basic Officers Course (normally eight to twelve weeks) of the assigned branch. Upon completion of this course, the officer is assigned in the United States Army, influenced by the desires of the individual and the availability of openings in units. Those officers selected for three to six months attend their Basic Officers Course, after which they are released to Reserve status.

Nonscholarship cadets accepting a Regular Army commission serve a minimum of three years on active duty followed by three years in Reserve status.

Every scholarship cadet (whether commissioned in the Regular Army or the Reserve) serves four years on active duty and two years in Reserve status.

## 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, Quartermaster, Finance, Ordnance, Chemical, Adjutant General, Judge Advocate General, Artillery, Medical Service, Military Intelligence, 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 ROTC performance, degree area, and the needs of the Army at that time. (Additional information about the correlation of degree fields and branches of the Army is available through the AROTC offices.)

## Graduate Study

Active duty deferments may be granted to individuals who wish to attend graduate school at their own expense after commissioning. Current policy is to approve all requests for active duty deferment for graduate school for two years (three years for law school). Requests for longer deferments will be considered on an individual basis. In addition, fully funded graduate programs are available to selected cadets accepting Regular Army commissions.

## Benefits

Each cadet in the Advanced Phase receives \$100 per month for ten months a year. While attending the advanced summer camp (between the junior and senior years), each cadet receives approximately \$550 plus an allowance for travel to and from camp. Uniforms, textbooks, and supplies required by AROTC are provided by the Army.

A cadet in the Two-Year Program receives the same payments as other cadets in the Advanced Phase and, in addition, receives approximately \$500 and travel allowance for the basic summer camp prior to entry into the Advanced Phase.

## Scholarships

Scholarships are awarded on the basis of merit and are available for one, two, three, or four years. Four-year AROTC scholarships are awarded to selected high school seniors. Additional scholarships are awarded each year to outstanding AROTC students in the freshman, sophomore, and junior classes. Cadets who are awarded scholarships continue to receive scholarship support until graduation as long as they fulfill the requirements.

The minimum active duty requirement for all scholarship students is four years.

Scholarship cadets receive full payment of all University tuition, fees, textbooks, and classroom materials for the duration of their scholarship. In addition to the benefits provided to them while enrolled in the Advanced Phase, they also receive \$100 per month for ten months of each year in the Basic Phase.

## Curriculum

### Military Science Courses

All cadets take one course and/or a module each semester in military science. The number of hours per 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 the courses so noted below. Students in the Two-Year Program are required to take all of the courses listed for the junior and senior years.

### Freshman Year (MS I)

#### MS 101 United States Organization for Defense

Fall. Credit one hour. Required. AROTC staff.

This course allows the student an opportunity to examine the United States defense apparatus in terms of organization, mission, personnel, and inter-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 from the policymaking level in Washington to the role of the officer education programs on college and university campuses.



The complexities and magnitude of operating the defense organization are dealt with, providing a framework for subsequent instruction.

### Sophomore Year (MS II)

**MS 221 Mapping: Land Navigation** Fall. Credit one hour. Required. AROTC staff.

The course provides the student with a practical knowledge of the various forms of topographic representation. The student develops, interprets, and utilizes maps in terrain association and land navigation. The student's knowledge of topography is complemented by an orientation on significant environmental influences from political, social, and climatic factors. Portions of the course emphasize practical experiences in land navigation and orienteering.

**MS 201 American Military History** Fall.

Credit one hour. Optional. AROTC staff.

The student is introduced to the origin and growth of the United States Army as an institution maintained by the nation to protect its interests, secure its way of life, and, when necessary, to implement foreign policy. The principles and theories of war are examined and their application illustrated by examples drawn from American military history. Also explored are the foreign and military policies of the United States and the basic causes that have led to the various conflicts in which the United States has participated.

**MS 231 Social and Organizational Psychology in the Military Environment** Fall. Credit one hour. Optional. AROTC 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.

### Junior Year (MS III)

**MS 332 Theory and Dynamics of the Military Team** Fall. Credit two hours. Required. AROTC staff.

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

**MS 322 Leadership in Small Unit Operations**

Spring. Credit two hours. Required. AROTC staff. This course provides the student with 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, the student develops a 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 (MS IV)

**MS 424 Contemporary Military Environment I**

Fall. Credit two hours. Required. AROTC staff.

A detailed examination of the functions and activities of military organizations, their commanders, and their staff. Discussion focuses on students' past experiences and future expectations in examining such aspects of the military environment as the chain of command, decision making, command and staff relations/actions, and the various elements of small unit administration.

**MS 461 Contemporary Military Environment II**

Spring. Credit two hours. Required. AROTC staff.

As a continuation of the material presented in MS 424, the student is provided the opportunity to examine carefully the leadership environment of an Army officer. Conferences and seminars are used to examine the techniques of effective military leadership, the sociological and psychological environment of the present military, the nature of military law, and above all, the professional ethics, responsibilities, and obligations of an Army officer.

## Practical Leadership Training

### All AROTC Students

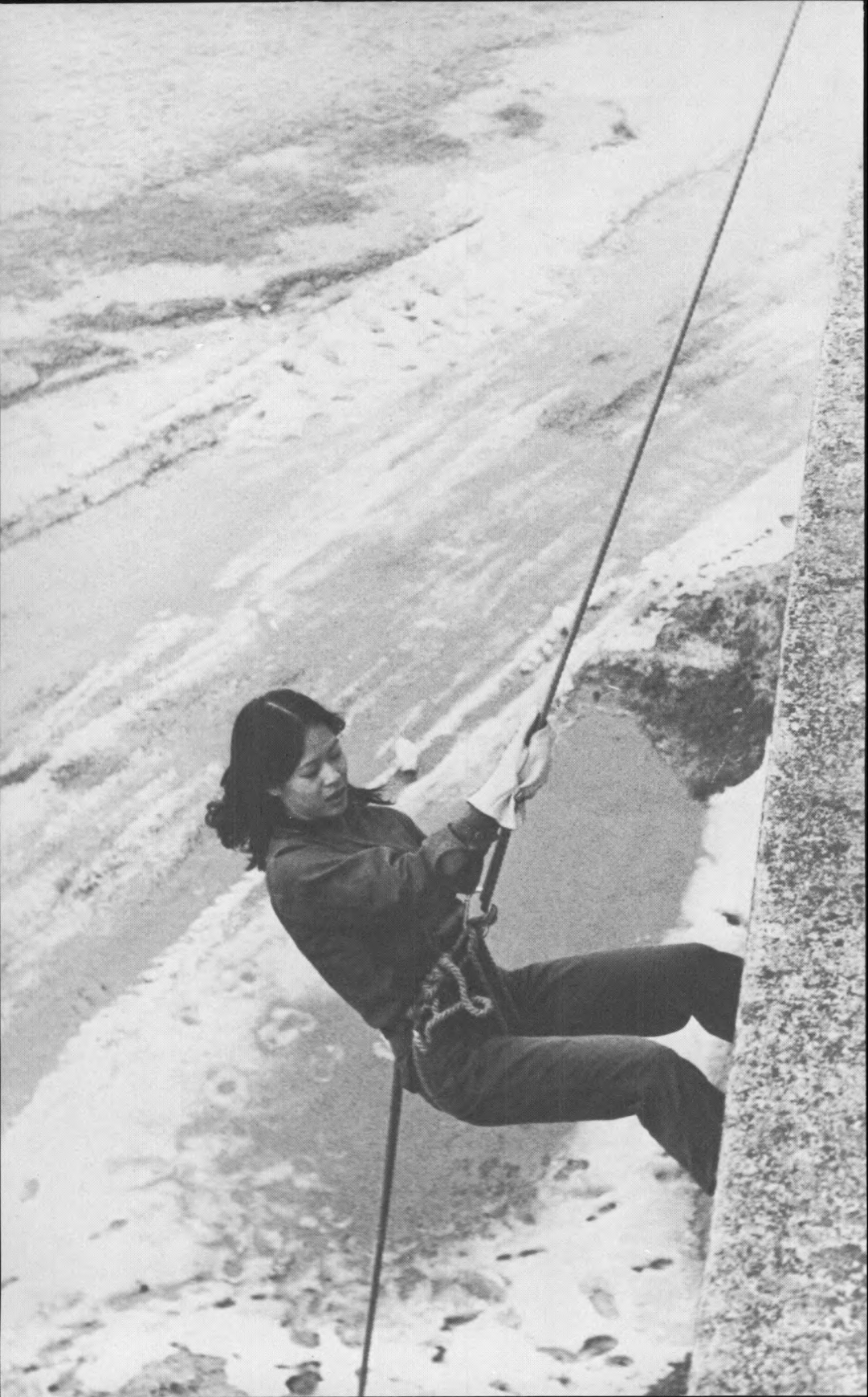
All Advanced Phase AROTC students and Basic Phase students belong to a cadet organization for the purpose of participation in practical leadership experiences. The cadet organization meets formally for one and one-half hours each week as part of the leadership laboratory program.

The rationale for the form and content of the program is the demonstrated fact that continued exposure to leadership situations that are both mentally and physically challenging leads to the development of poise and self-confidence. The practical result for the individual participant is a continually developing ability to apply intelligently and creatively the decision-making process to a variety of complex situations, while simultaneously supervising the performance of other men and women.

Training of this nature also is intended to stimulate additional interest in the Army ROTC program as a whole and, ultimately, in the United States Army itself. Additionally, it serves to provide the individual student with the opportunity to learn how to communicate effectively and efficiently with peers, subordinates, and superiors alike. And most important of all, the program helps instill in each participant a heightened awareness of the vital roles of integrity, cooperation, devotion to duty, and professionalism in the smooth operation of a military organization.

In the Leadership Laboratory, all of these objectives





are accomplished by emphasizing practical exercises and first-hand experiences while keeping pure lecture hours to an absolute minimum.

Types of practical laboratory activities include an introduction to rifle marksmanship, mountaineering, physical training, 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 register as follows:

#### **MS I Leadership Laboratory I**

<i>Fall</i>	<i>Spring</i>
MS 141	MS 142

MS I cadets select one of the following subjects: rifle marksmanship, orienteering, or rappelling, subjects designed to stress personal development and enrichment. These interesting and challenging activities do not receive academic credit but may be used for physical education credit if adequate hours are accrued.

#### **MS II Leadership Laboratory II**

<i>Fall</i>	<i>Spring</i>
Not Offered	MS 242

Cadets meet for one and one-half hours each week as a member 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, tactics and field exercises.

#### **MS III Leadership Laboratory III**

<i>Fall</i>	<i>Spring</i>
MS 341	MS 342

The cadets meet for one and one-half hours per week to prepare for a five week summer camp which follows the junior year. Emphasis is placed on the development of individual skills in leadership techniques and practical skills. Cadets rotate among leadership positions to develop an ability to apply an intelligent and creative decision-making process to a myriad of situations and tasks. Cadets also acquire technical expertise and proficiency in signal communications, physical fitness, drill and ceremonies, rappelling, orienteering, tactics, water survival, and other military skills.

#### **MS IV Leadership Laboratory IV**

<i>Fall</i>	<i>Spring</i>
MS 441	MS 442

Senior cadets plan and operate the Leadership Laboratory programs for MS I-MS III cadets. Emphasis is placed on the development of planning and supervisory skills. Cadets have an opportunity to practice leadership skills developed during previous ROTC training and summer camp experiences.

# U S NAVAL ROT C UNI





## Cornell University

# United States Naval ROTC Program

## Objective

The objective of the Naval ROTC 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 in the qualities of leadership, integrity, and dedication to their country and the naval service. The NROTC 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, which 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. The program also includes at least one summer-at-sea period.

## Non-NROTC 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 30th of the entering year and be less than twenty-five years of age on June 30th of the calendar year in which commissioned. Waivers of the upper age limit may be granted on an individual basis by the Chief of Naval Personnel up to age twenty-seven and one-half on June 30th of the year in which commissioned. Applicants must also meet physical and medical requirements. Interested students should visit the Naval ROTC unit in Barton Hall.

## Programs

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

### Scholarship Program

The Naval ROTC program provides 6,000 scholarships in over 55 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.

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

### Methods of Entering Scholarship Program

There are three ways of entering the Scholarship Program.

*First*, by making application for the national competition each year. This entails filling out and sending an appropriate application, a subsequent interview, a physical examination, and application to and acceptance by one of the NROTC colleges or universities throughout the country.

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

*Third*, by entering through one of the NROTC Two-Year College Programs.

## College Program

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

These two College Programs provide textbooks for naval professional courses, uniforms, and a subsistence allowance of \$100 per month from the beginning of the junior year.

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

*The Second* is a two-year program which begins in the junior year. The Two-Year College Program requires attendance at the Naval Science Institute in Newport, Rhode Island, with pay, during the summer for six weeks prior to the junior year.

## Summer Training

Each summer, students in the Scholarship Program spend approximately six weeks on a Navy ship or with a naval activity 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.

## Active Duty Requirements

As required by Section 2107, Title 10, U.S. Code, selected applicants must enlist in the United States Naval Reserve for six years in pay grade E-1 (seaman recruit) prior to being appointed midshipman, USNR, and receiving compensation. If you are disenrolled from the NROTC Navy-Marine Corps Scholarship Program for reasons beyond your control, you shall upon disenrollment be discharged from your enlisted status. It should be understood that two years active enlisted service will be required of those students who default from the terms of their NROTC contract after the beginning of their junior year. Additionally, two years active enlisted service is incurred at any time for those individuals who are released from active duty specifically to participate in the NROTC scholarship program and do not complete such training.

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 duty are nuclear power training, large and small surface ships, naval aviation, submarines, civil engineer corps, supply corps, and various other assignments.

## Marine Corps Option

The U.S. 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 as Marine option midshipmen. Upon successful completion of the program, they will be appointed second lieutenants in the U.S. 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, Track Vehicles, Engineers, Communications, Electronics, Supply Administration, and Computer Science. He may serve on board naval vessels or 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 ROTC 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 technically educated junior officers.

## Naval Professional Laboratories

### NS 141-142, 241-242, 341-342, or 441-442

All students in the NROTC program participate in one ninety-minute laboratory session each week. The sessions are held from 2:30 until 4:00 on either Wednesday or Thursday afternoon. These periods, planned and implemented for the most part by the midshipmen officers in the battalion organization, consist of both drill and professional information briefings. Students gain experience in actual leadership situations and at the same time learn the fundamentals of 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 naval officer's duties. Students register as follows:

	<i>Fall</i>	<i>Spring</i>
4/C FR	NS 141	NS 142
3/C SOPH	NS 241	NS 242
2/C JR	NS 341	NS 342
1/C SR	NS 441	NS 442

## Naval Science Courses

All midshipmen, both Navy and Marine options, take one naval science course together each semester during their freshman and sophomore years. Navy option students continue 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 per week spent in the classroom varies from semester to semester, as does the credit received for each course.

### Freshman Year

#### NS 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 which must be managed, and prospects for the future.

#### M & AE 101 Naval Ship Systems Spring.

Credit three hours. Three classes each week (lecture-recitation). R. L. Wehe.

The course is an introduction to primary ship systems and their interrelationship. Basic principles of propulsion, control, internal communications, structure, and other marine systems are considered.

### Sophomore Year

#### NS 211 Armed Conflict and Society Fall.

Credit three hours. Three classes per week. Presentation by Marine Corps and Navy instructors with guest lecturers, primarily from government and history departments.

A study of modern warfare which 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.

#### NS 201 Seapower-Maritime Affairs Spring.

Credit one hour. One seminar weekly. Navy staff. The seminar discussions explore the meaning and modern applicability of seapower concepts, including

such components as naval power, ocean science, ocean industry, ocean commerce, and international law.

### Junior Year (Navy)

#### Ag Eng 305 Principles of Navigation Fall.

Credit four hours. 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.

#### NS 321 Naval Operations Spring. No credit.

One hour class each week. Times to be arranged. Navy staff.

The course covers the execution of naval operations and the examination of sensors, weapons, and supportive elements as they apply to naval operations. The student will study the theory of sound propagation in water and electromagnetic wave propagation in air and the application to naval operations. Topics in ship handling will also be discussed.

### Senior Year (Navy)

#### NS 451 Naval Weapons System Fall. Credit

three hours. Three classes each week (lecture-recitation). Times to be arranged. Navy staff.

A technically oriented course covering the development and solution of the naval fire control problem for air, surface, and subsurface targets. Emphasis is given to such topics as interior and exterior ballistics, target motion, missile guidance systems, ship motion, and stabilization corrections. Following the development of the fire control problem, the course examines the theory, use, and design of radars, sonars, analog and digital computers, gyroscopes, synchro and servo mechanisms, and various components of naval weapons.

#### NS 431 Naval Organization and Management

Spring. No credit. One hour class each week (seminar). Navy staff.

Discussions cover scientific principles and functions of management relevant to the naval environment and the structure of naval organization. Theories and findings from the behavioral sciences relevant to leadership are explored, with particular emphasis on self-development and individual responsibility.

### Junior or Senior Year (Marines)

#### NS 311 Amphibious Warfare Spring. Credit

three hours. Three classes each week (lecture-recitation). Times to be arranged. Marine Corps staff.

The course covers the history of the development, theory, techniques, and conduct of amphibious operations during the twentieth century. Special emphasis is placed upon amphibious operations conducted in the Central Pacific during World War II.



## Other Required Courses

### Navy Option

In order to receive a commission in the U.S. Navy, midshipmen must complete all requirements for a baccalaureate degree as well as certain academic requirements specified by the Navy. Study in engineering and science fields is required for a majority of Navy option scholarship students. Specifically, sixty percent of the Navy option scholarship students in the classes of 1978, 1979, and 1980 must major in chemistry, engineering, mathematics, or physics.

Beginning with the Class of 1981, this Navy option scholarship requirement will increase to eighty percent. The remainder of the Navy option scholarship students are permitted to study other fields of interest to the Navy, but, certain academic majors are precluded for Navy option scholarship students for the unrestricted line portion of the Navy if they have no direct applicability. Because of changing terminology for academic fields of study, it is not practical to provide a complete list of majors not authorized, but typical of majors not authorized for Navy Option NROTC Scholarship Program students are:

Agronomy	Music
Animal husbandry	Nursing
Animal science	Pharmacy
Anthropology	Physical education
Art	Pre dental
Dairy husbandry	Premedicine
Dairy manufacturing	Pretheological
Dairy production	Preveterinary
Dramatics	medicine
Entomology	Real estate
Floriculture	Soil Conservation
Forestry	Soils
General agriculture	Theology
Horticulture	Veterinary medicine
Landscape architecture	Wildlife management

On the other hand, there are no restrictions placed upon Navy option College Program students (or any Marine option NROTC Program students) with respect to academic majors. College Program students who want to compete for a scholarship are encouraged to select majors in fields other than those listed above.

Other required courses depend on the commissioning program in which the Navy option midshipmen are enrolled and are as follows:

### Scholarship Program Navy Option Students

Two semesters of calculus (minimum six hours) to be completed by the end of the sophomore year.  
Two semesters of physics (minimum six hours) to be completed by the end of the junior year.  
One semester of behavioral science (minimum three hours) to be completed by the end of the first semester, senior year.

Scholarship Program Navy option students who do not major in mathematics, chemistry, physics, or engineering must also complete:  
One semester of chemistry; and

One semester of computer science, electricity, differential equations, or thermodynamics.

### College Program Navy Option Students

One semester of behavioral science (minimum three hours) to be completed by the end of the first semester, senior year.

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 highly competitive for a Professor of Naval Science (PNS) Scholarship.

### Marine Option

Any Naval ROTC midshipman, either Scholarship or College Program student, who completes all of Cornell University's degree requirements in any academic major is eligible for a commission in the U.S. Marine Corps or U.S. 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 take only one naval science course and are required to meet with the Marine officer instructors one hour per week each semester in lieu of any additional naval science courses. Other course requirements include two semesters (a minimum of three hours each) of any courses in the following subject areas. The specific course chosen must be approved by the Marine officer instructor (MOI).

- Anthropology
- Behavioral sciences
- Communication methods
- Computer sciences (upper-level)
- Economics
- Geography
- Languages
- Management engineering
- Philosophy
- Political science
- Sociology
- World history

### University Courses

A list of Cornell University courses that satisfy Naval ROTC academic requirements follows:

#### Physics

Phys 112, 213(217), 214(218) Physics, I, II, and III

Phys 101-102 General Physics

Phys 207-208 Fundamentals of Physics

#### Calculus

Math 191, 192(194) Calculus for Engineers

Math 105-106 Finite Mathematics and Calculus for Biologists

Math 107 Finite Mathematics for the Biological and Social Sciences

Math 108 Calculus with Applications to the Biological and Social Sciences

Math 109(111), 110(112 or 122) Calculus





*Chemistry*

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

*Computer Science*

Engr 105 Elements of Engineering  
Communication  
CS 101 Implications of Computer Technology  
CS 102 Introduction to FORTRAN Programming  
CS 211 Computers and Programming  
CS 314 Introduction to Computer Systems and  
Organization  
M & AE 389 Computer-Aided Design  
CS 436 Introduction to Computers in Planning  
H Adm 114 Information Systems I  
Ru Soc 314 (AGR) Introduction to Computer Uses  
in Data Analysis  
Ag Eng 151 Introduction to Agricultural  
Engineering Measurements and Graphics  
Ag Eng 152 Engineering Measurements and  
Graphics  
Bio Sci 460 Systems Ecology  
ILR 211 Economic and Social Statistics

*Behavioral Science*

NCE 540 Organization Theory and Behavior

Psych 206 Psychology in Business and Industry  
H Adm 211 Personnel Management  
ILR 151 Personnel Administration in Supervision  
ILR 360 Manpower and Organization Management  
ILR 627 Leadership in Organizations  
ILR 664 Management and Leadership Development  
ILR 665 Case Studies in Personnel Administration  
Ru Soc 322 Organizational Dynamics  
\*Ru Soc 100 Introduction to Sociology  
\*Ru Soc 345 Advanced Principles of Sociology  
\*Ed 110 Introduction to Psychology  
\*Psych 101 Introduction to Psychology  
\*Psych 128 Understanding Personality and  
Social Behavior  
\*Psych 281 Interpersonal Relations and Small  
Groups

\* Meets liberal elective requirements in the College  
of Engineering.

**Further Information**

Further information regarding the Naval ROTC  
programs may be obtained by mailing the slip on the  
back page or contacting the Naval ROTC unit in  
Barton Hall.





## Cornell University

# United States Air Force ROTC Program

The overall objective of the AFROTC program at Cornell is to prepare highly qualified 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.

The objectives are achieved through four-year and two-year programs. These programs include specific courses in aerospace studies, an academic course in management, and practical laboratories.

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

## Requirements for Enrollment

The Air Force ROTC program is open to male and female undergraduate or graduate students 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. 24).

Applicants who are interested in flying (as pilot or navigator) or missile duty make that 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. Overall sound physical and mental condition is essential.

### Physical

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 60 but not more than 80 inches; height for women: at least 58 but not more than 72 inches.

Allergy: no history of asthma since twelfth birthday.  
Dental health: good.

Those students who are interested in qualifying for flying categories (pilot/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 correctable to 20/20 with lenses.

Color vision: normal.

Height: at least 64 but not more than 76 inches; sitting height not more than 39 inches.

Allergy: no history of asthma or hay fever since twelfth birthday.

Dental health: good.

## Four-Year Program

The four-year program is open to male and female students in the first term of their freshman year. Students in a five-year degree program may, with the approval of the Department of Aerospace Studies, enroll in their sophomore year.

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

The four-year program consists of the basic program (first two years) and the Professional Officer Course (advanced program) during the junior and senior years. The basic program carries no military commitment and students may withdraw at any time during that period.

### Basic Program

Students in the basic program take one credit hour of classroom work in aerospace studies each semester. During the freshman year, the role of United States military forces in the contemporary world is examined with emphasis on the organization and mission of the United States Air Force. The functions of strategic offensive-defensive forces, general purpose forces, and aerospace support forces are covered.

## 24 United States Air Force ROTC Program

In the sophomore year, the student will study the history and development of airpower, and the employment of the air forces in both military and civil emergency missions.

Students also spend one hour a week in 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 the sophomore and junior years.

### Professional Officer Course

The Professional Officer Course (POC) is an advanced course of instruction in aerospace studies and leadership experiences during the junior and senior years. Students who are accepted for the POC must have successfully completed the basic course and must meet the academic and physical standards. Some students who were not in the basic program are also accepted if they meet certain requirements and attend a six-week training course during the summer before enrollment (see Two-Year Program, this page).

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 upon graduation.

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

### Flight Instruction Program

All cadets accepted for pilot training participate, in their senior year, in the Air Force ROTC flight instruction program at no cost.

This program consists of ground school and twenty-five hours of flying training in a light aircraft. Instruction is provided by a local civilian flying school. Upon completion of the program, a cadet may continue training for a private pilot's license through the Federal Aviation Agency.

### Choice of Service Career

Cadets in the first year of the POC are given the opportunity to specify the career field in which they would like to serve after graduation. (See Air Force Careers, this page.)

## Two-Year Program

The two-year program consists of the last two years (the Professional Officer Course) of the regular four-year program plus a six-week summer training

course preceding enrollment. (See this page for details of the Professional Officer Course.)

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 cross-town or consortium agreement. Applications are accepted from November through May of the year preceding the applicant's planned entry into the program. Selectees are then required to complete successfully a six-week summer training program at government expense.

## Benefits

Each cadet in the advanced program (POC) receives \$100 per month nontaxable subsistence allowance. For the four-week summer field training (between the sophomore and junior years), each cadet receives approximately \$296, plus an allowance for travel to and from the field training site. Uniforms, textbooks, and supplies required by AFROTC are provided by the Air Force.

A cadet in the two-year program receives the same payments as other cadets in the POC, and, in addition, receives approximately \$482 and travel allowance for the six-week summer field training session prior to entry into the POC.

## Scholarships

The Air Force awards 6,500 scholarships annually. Four-year AFROTC scholarships are awarded to selected high school seniors. Three- and two-year scholarships are awarded annually, on a competitive basis, to students enrolled in Air Force ROTC. One-year scholarships are sometimes awarded when necessary, to ensure that all 6,500 scholarships are activated. Applicants for the AFROTC two-year program are also eligible for scholarship consideration. Financial status or the award of other scholarships is not disqualifying with regard to AFROTC scholarship awards. Acceptance of an AFROTC scholarship does not commit an individual to serve any additional time on active duty with the Air Force.

A scholarship cadet receives a \$100 per month tax-free subsistence allowance, all tuition, fees, and reimbursement for the cost of textbooks for the duration of the scholarship.

## Commissioning

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

## 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 cate-

gory 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, weather, or various other engineering and scientific fields. They will work under the supervision of some of the most highly qualified people in their field 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 be sent to school for training in that field. Upon completion of school, they will 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 officers graduating under the general 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.

## Service Obligations

Second lieutenants commissioned from the AFROTC program in nonflying categories are required to serve on active duty for four years. Pilot and navigator trainees are required to serve on active duty for five years after completing flying training and receiving their aeronautical rating. Many newly commissioned officers are allowed to postpone their active service in order to remain in college and earn advanced degrees. (See Graduate Study Deferments below.)

## Graduate Study Deferments

Newly commissioned officers may request a delay in reporting for active duty in order to undertake graduate study at their own expense. Weather officer candidates may receive one postgraduate year of college at government expense with no additional service obligation. Adjusted promotion service credit is given to officers delayed for the purpose of pursuing advanced degrees.

## Curriculum

### Aerospace Studies Courses

Students in the four-year program are required to take all the 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

**AS 161 United States Military Forces in the Contemporary World** Fall and spring. Credit one hour. One class each week. W. C. McPeck. An introductory study of current United States military forces with emphasis on the analysis of the doctrine, mission, and organization of the United States Air Force. The Air Force's Strategic Air Command and the Navy's Fleet Ballistic Missile System are explored as elements of strategic offensive forces. Aircraft and missile defense is studied. A field trip to an Air Force SAGE Center is included.

**AS 162 United States Military Forces in the Contemporary World** Fall and spring. Credit one hour. One class each week. W. C. McPeck. A study of the general purpose of the aerospace support forces of the United States, with emphasis on the mission, resources, and operation of tactical air forces. Included is an overview of defense organization and sources of power.

### Sophomore Year

**AS 211 Development of Air Power** Fall and spring. Credit one hour. One class each week. W. C. McPeck.

The factors leading to the development of air power and the concepts and doctrine for the employment of air power studied. The course reviews the history of manned flight. The effects of World War I on the employment of airpower are studied and the struggle for the development of an independent air arm is analyzed. The course also examines the employment of airpower in World War II, including such topics as strategic bombing, tactical airpower, and the role of air superiority in warfare.

**AS 212 Development of Air Power** Fall and spring. Credit one hour. One class each week. W. C. McPeck.

The employment of the Air Force since World War II in military and nonmilitary operations to support national objectives is studied. The effects of technology on defense policy and strategy are analyzed. Quasi-military employment of the air arm in such activities as the Berlin Airlift and national and international relief missions in Asia, Africa, and the Americas is discussed. The role of airpower in the Korean conflict, the Cuban and Middle East crises, and the Vietnam War is examined from the viewpoint of technology and tactical doctrine.

### Junior Year

**AS 361 National Security Forces in Contemporary American Society** Fall and spring. Credit three hours. Three classes each week. W. R. Williamson.

The course will examine 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. Throughout the course the students will make oral presentations on topics of contemporary military interest.

The course will move to the study of the formulation of defense policy and will address political, economic, and social constraints. It will explore the requisites for maintaining adequate national security forces and assess the impact of technological and international developments upon strategic preparedness and the overall defense policymaking process.

**AS 362 National Security Forces in Contemporary American Society** Fall and spring. Credit three hours. Three classes each week. W. R. Williamson.

This course will investigate basic contemporary nuclear strategy: its evolution, control, and future. It will examine alternatives to nuclear war, including arms control, limited wars, wars of revolution, and insurgency. It will conclude by examining governmental processes and relationships that determine the contemporary military environment and provide a perspective for the future of defense policymaking in the United States.

#### Senior Year

**AS 431 Management and Leadership** Fall and spring. Credit three hours. Three classes each week. J. S. Levisky.

Air Force management at the junior officer level is studied with the goal of understanding the basic concepts of management and the decision-making process in relation to the duties of the Air Force junior officer. Management fundamentals as they apply to the role of the Air Force junior officer are emphasized, including human motivation, individual and group behavior, organizational structure, planning and policymaking, communicating, and controlling. Case studies relating to military situations are used. Cadets are required to present oral and written reports.

**AS 432 Management and Leadership** Fall and spring. Credit three hours. Three classes each week. J. S. Levisky.

Air Force leadership responsibilities at the junior officer level are studied in order to understand the responsibility, authority, and functions of the Air Force commander and his staff. Leadership research is emphasized covering the Trait Approach, the Situational Approach, the Interactional Approach, the Leader Variable, the Likert Leadership Model, the 3-D Leadership Model, and the Contingency Leadership Model. The function of the military law system as contained in the Uniform Code of Military Justice is covered, examining its similarities to and differences from civil law as they apply to the Air Force junior officer. Case study exercises are used to strengthen classroom learning for both the leadership and military law studies.

#### Leadership Laboratory

All AFROTC students spend one hour each week throughout the program in the leadership laboratory, for which there is no academic credit. The laboratories are conducted by AFROTC staff.

#### Freshman and Sophomore Years

**AS 141-142 and AS 241-242 Laboratory in Initial Military Experiences** Cadets are introduced to the responsibilities, life, and work of an Air Force officer. They gain experience in actual leadership situations and learn the fundamentals of military drill and ceremonies, the wearing of the uniform, military courtesy, discipline, and organization.

#### Junior and Senior Years

**AS 341-342 and AS 441-442 Laboratory in Advanced Leadership Experiences** A cadet military organization, the Cadet Squadron, is used as a vehicle to develop leadership potential. Cadets plan, organize, conduct, and supervise all activities in the Cadet Squadron and thus develop practical experience in the duties, functions, and responsibilities of Air Force commanders.

## Cornell University

# Extracurricular Organizations and Activities

## ROTC 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 closer relationship, to encourage and foster the essential qualities of good and efficient officers, and to promote friendship and good fellowship among all cadets.

### Narmid

The *Narmid* Society, the naval honorary society, is open to members of the junior and senior classes and second-term sophomores who stand high in their classes in aptitude for the service. *Narmid* acts as a service organization managing the extracurricular social, athletic, and journalistic activities program for midshipmen in the NROTC unit. The society also conducts its own social and fraternal program to promote the spirit of comradeship among the members. Because of its wide range of activities, the society enables its members to assume responsibilities early, and better prepares them for the duties required of officers in the United States Navy and Marine Corps.

### 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 in order 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 Reserve Officers Training Corps cadets. Membership is offered to a limited number of Air Force cadets. The society has more than 170 squadrons on campuses of various colleges and universities in the United States and Puerto Rico.

## Other Organizations and Activities

### Cornell Rangers

The Cornell Rangers is an organization dedicated to fostering skills that increase individual confidence and help create effective leaders. Its long-range objectives are to help members realize the value of staying in good physical condition, to achieve proficiency in Ranger operations, to promote enthusiasm for the ROTC program, and to motivate qualified students to seek careers in the Army. Membership is open to any Cornell student.

### Rifle Teams

The Army sponsors an ROTC rifle team that competes for national and intercollegiate honors through the medium of postal matches.

### Tri-Service Brigade

Cadets and midshipmen of the three services conduct a number of joint activities through the coordinating vehicle of a student brigade. Members of each service program meet regularly to plan and implement various activities, such as Red Cross blood drives, Christmas activities for less-privileged children, area parades and awards ceremonies, and a formal military ball.

### **Social and Intramural Sports Activities**

Students enrolled in ROTC may avail themselves of an active social and intramural sports program. Sports participants can enjoy team involvement in any of the numerous intramural events conducted

by Cornell. Teams are organized by students on a departmental basis. Social activities are planned and conducted by students and events such as parties, dinners, and dances highlight the school year.

## **Cornell University**

# Register

## University Administration

Dale R. Corson, President of the University  
David C. Knapp, University Provost  
William G. Herbster, Senior Vice President  
Mark Barlow, Jr., Vice Provost  
Constance E. Cook, Vice President  
for Land-grant Affairs  
W. Donald Cooke, Vice President for Research  
June M. Fessenden-Raden, Vice Provost  
William D. Gurowitz, Vice President for Campus  
Affairs  
Robert T. Horn, Vice President and Treasurer  
Samuel A. Lawrence, Vice President for  
Financial and Planning Services  
E. Hugh Luckey, Vice President for Medical Affairs  
Robert M. Matyas, Vice President for Facilities  
and Business Operations  
Paul L. McKeegan, Vice Provost  
Richard M. Ramin, Vice President for Public Affairs  
Byron W. Saunders, Dean of the University Faculty  
Neal R. Stamp, University Counsel and Secretary of  
the Corporation

## Faculty and Staff

### **Department of Military Science**

Lieutenant Colonel Gerard H. Luisi, United States  
Army, Professor of Military Science and Com-  
manding Officer, Army ROTC Unit

Captain Joseph A. Roussos, Signal Corps, United  
States Army  
Captain William W. Huling, Jr., Field Artillery,  
United States Army  
Captain John E. Lalli, Infantry, United States Army  
Captain Larry W. Matthews, Quartermaster Corps,  
United States Army

### **Department of Naval Science**

Captain T. H. Warren, United States Navy, Professor  
of Naval Science and Commanding Officer,  
Naval ROTC Unit  
Major J. P. T. Sullivan, United States Marine Corps  
Lieutenant Richard D. Casselman, United States Navy  
Lieutenant Robert E. Dolan, United States Navy  
Lieutenant Stormy T. W. Hicks, United States Navy  
Lieutenant Paul E. Huck, United States Navy

### **Department of Aerospace Studies**

Lieutenant Colonel William C. McPeck, United  
States Air Force, Professor of Aerospace Studies  
and Commander of the Air Force ROTC Detach-  
ment 520  
Major John S. Levisky II, United States Air Force  
Captain Wayne R. Williamson, United States Air Force





## Cornell University

## Index

- Active duty requirements: Army ROTC, 9; Naval ROTC, 16; Air Force ROTC, 25
- Administration, University, 30
- Advanced Program: Army, 8; Navy, 17; Marine Corps, 16
- Aerospace Studies courses, 25
- Air Force careers, 24
- Air Force ROTC Program, 23
- Announcements, List of, 32
- Army ROTC Program, 7
- Arnold Air Society, 27
- Benefits: Army ROTC Program, 9; Naval ROTC Program, 15, 16; Air Force ROTC Program, 24
- Brigade, Tri-Service, 27
- Calendar, Cornell University Academic, 2
- Careers, Air Force ROTC, 24
- College Program, Naval ROTC Program, 16
- Commissioning: Army ROTC, 8; Naval ROTC, 16; Air Force ROTC, 24
- Contents, 3
- Curriculum: Army ROTC Program, 9; Naval ROTC Program, 16; Air Force ROTC Program, 25
- Eligibility, 5
- Enrollment requirements: Army ROTC Program, 7; Naval ROTC Program, 15; Air Force ROTC Program, 23
- Extracurricular organizations and activities, 29
- Faculty and staff, 29
- Flight Instruction Program: Air Force ROTC, 24
- Form, information, 32
- Four-Year Program: Army ROTC, 7; Naval ROTC, 16; Air Force ROTC, 23
- Graduate study deferments: Army ROTC Program, 9; Naval ROTC Program, 16; Marine Corps, 16; Air Force ROTC Program, 25
- Information form, 32
- Laboratory: Practical Leadership Training (Army ROTC), 11; Naval Professional Laboratories (Naval ROTC), 16; Leadership Laboratory (Air Force ROTC), 26
- Management course: Air Force ROTC, 26
- Marine Corps option, 16
- Military Science courses, 9
- Narmid*, 27
- Naval ROTC Program, 15
- Naval Science courses, 17
- Physical requirements: Army ROTC Program, 7; Naval ROTC Program, 15; Air Force ROTC Program, 23
- Professional Officer Course, Air Force ROTC, 24
- Rangers, Cornell, 27
- Register, 29
- Requirements for enrollment: Army ROTC Program, 7; Naval ROTC Program, 15; Air Force ROTC Program, 23
- Rifle teams, 27
- ROTC honorary societies, 27
- Scabbard and Blade, 27
- Scheduling, 5
- Scholarships: Army ROTC Program, 9; Marine Corps, 15; Naval ROTC Program, 15; Air Force ROTC Program, 24
- Semper Fidelis Society, 27
- Service obligations: Army ROTC Program, 9; Naval ROTC Program, 16; Air Force ROTC Program, 25
- Social activities, 28
- Special Opportunity Programs, 5
- Sports, 28
- Two-Year Program: Army ROTC, 8; Naval ROTC, 16; Air Force ROTC, 24
- University courses, required: Marine Corps, 19; Naval ROTC, 19

## Further Information

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

Cross out all but the desired addressee. Check only one box (AROTC, NROTC, or AFROTC). Additional specific questions may be written on the reverse side.

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

Barton Hall  
Cornell University  
Ithaca, New York 14853

Dear Sir,

I would like to receive more information about

- ☐ AROTC  
☐ NROTC  
☐ AFROTC

Please preregister me for

- ☐ AROTC  
☐ NROTC  
☐ AFROTC

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip

\_\_\_\_\_  
Name of school or college I will be entering

\_\_\_\_\_  
School Now  
Attending

\_\_\_\_\_  
Graduation  
Date

\_\_\_\_\_  
Signature

## List of Announcements

Following is a list of *Announcements* published by Cornell University to provide information on programs, faculty, facilities, curricula, and courses of the various academic units.

Agriculture and Life Sciences at Cornell  
College of Architecture, Art, and Planning  
College of Arts and Sciences: Introduction  
Graduate School of Business and Public  
Administration  
Engineering at Cornell  
Graduate Study in Engineering and Applied Sciences  
General Information\*  
Graduate School  
School of Hotel Administration  
Human Ecology: College Choice  
School of Industrial and Labor Relations:  
ILR at Cornell  
Graduate Study at ILR  
Law School  
Medical College (New York City)  
Graduate School of Medical Sciences (New York City)  
Cornell University—New York Hospital School of  
Nursing (New York City)  
Officer Education (ROTC)  
Summer Session  
New York State College of Veterinary Medicine

\*The *Announcement of General Information* is designed to give prospective students pertinent information about all aspects and academic units of the University.

In addition to the *Announcements* listed above, the University publishes a master catalog of University courses, *Cornell University: Description of Courses*.

Requests for the publications listed above should be addressed to  
Cornell University Announcements  
Research Park #7  
Ithaca, New York 14853.  
(The writer should include a zip code.)

Office of University Publications  
477 3.5 M Hu