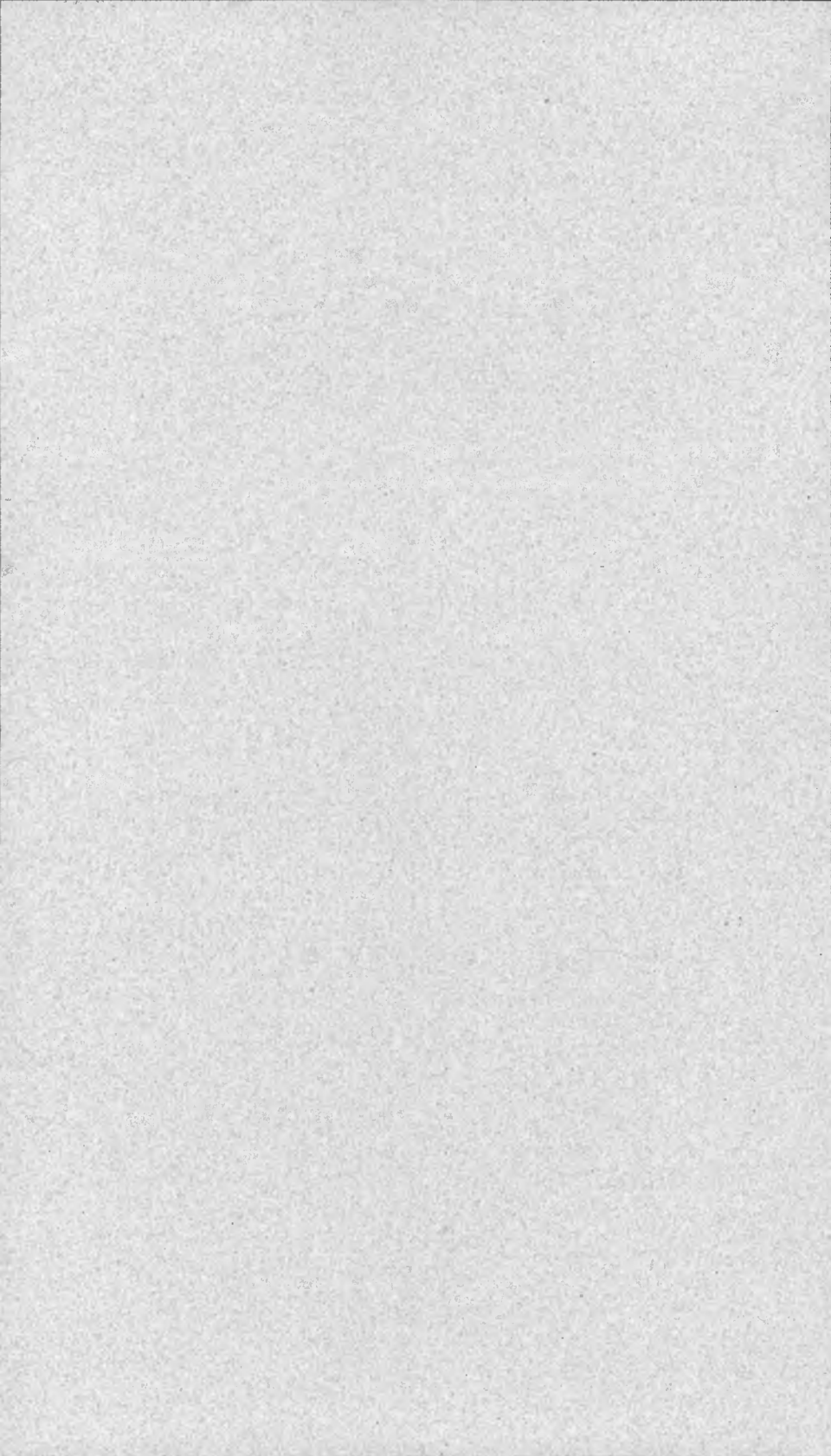




Cornell  
University  
ANNOUNCEMENTS

*Officer Education*

1968-69



Cornell University

*Officer Education*

1968-69

The Departments of  
Military Science,  
Naval Science, and  
Aerospace Studies (ROTC)

# Cornell Academic Calendar

1968-69\*

1969-70\*

Orientation, new students:		
Convocation, 2 P.M.	Th, Sept. 12	
Registration, new students	F, Sept. 13	F, Sept. 12
Registration, old students	S, Sept. 14	S, Sept. 13
Fall term instruction begins, 7:30 A.M.	M, Sept. 16	M, Sept. 15
Midterm grade reports due	S, Oct. 26	S, Oct. 25
Thanksgiving recess:		
Instruction suspended, 1:10 P.M.	W, Nov. 27	W, Nov. 26
Instruction resumed, 7:30 A.M.	M, Dec. 2	M, Dec. 1
Fall term instruction ends, 1:10 P.M.	S, Dec. 21	S, Dec. 20
Christmas recess:		
Independent study period begins	M, Jan. 6	M, Jan. 5
Final examinations begin	M, Jan. 13	M, Jan. 12
Final examinations end	T, Jan. 21	T, Jan. 20
Intersession begins	W, Jan. 22	W, Jan. 21
Registration, old students	F, Jan. 31	F, Jan. 30
Registration, new students	S, Feb. 1	S, Jan. 31
Spring term instruction begins, 7:30 A.M.	M, Feb. 3	M, Feb. 2
Deadline: changed or make-up grades	M, Feb. 10	M, Feb. 9
Midterm grade reports due	S, Mar. 15	S, Mar. 14
Spring recess:		
Instruction suspended, 1:10 P.M.	S, Mar. 29	S, Mar. 28
Instruction resumed, 7:30 A.M.	M, Apr. 7	M, Apr. 6
Spring term instruction ends, 1:10 P.M.	S, May 17	S, May 16
Independent study period begins	M, May 19	M, May 18
Final examinations begin	M, May 26	M, May 25
Final examinations end	T, June 3	T, June 2
Commencement Day	M, June 9	M, June 8
Deadline: changed or make-up grades	M, June 16	M, June 15

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

## CORNELL UNIVERSITY ANNOUNCEMENTS

Volume 59. Number 22. May 20, 1968. Published twenty-four times a year: twice in March, April, May, June, July, September, and November; four times in August and October; and once in January and December. Published by Cornell University at Sheldon Court, 420 College Avenue, Ithaca, New York 14850. Second-class postage paid at Ithaca, New York 14850.

# Contents

2	CORNELL ACADEMIC CALENDAR
4	ADMINISTRATION AND FACULTY
6	OFFICER EDUCATION AT CORNELL
6	Statement by the President
7	HISTORY OF THE ROTC
9	ROTC PROGRAM IN BRIEF
14	THE UNITED STATES ARMY ROTC PROGRAM
18	THE UNITED STATES NAVAL ROTC PROGRAM
24	THE UNITED STATES AIR FORCE ROTC PROGRAM
30	ROTC EXTRACURRICULAR ACTIVITIES
32	SELECTIVE SERVICE
33	REQUEST FOR FURTHER INFORMATION
35	LIST OF ANNOUNCEMENTS

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

## UNIVERSITY ADMINISTRATION

James A. Perkins, President of the University.  
Dale R. Corson, University Provost.  
Mark Barlow, Jr., Vice President for Student Affairs.  
John E. Burton, Vice President-Business.  
Lewis H. Durland, University Treasurer.  
W. Keith Kennedy, Vice Provost.  
Franklin A. Long, Vice President for Research and Advanced Studies.  
E. Hugh Luckey, Vice President for Medical Affairs.  
Thomas W. Mackesey, Vice President for Planning.  
Paul L. McKeegan, Director of the Budget.  
Robert D. Miller, Dean of the University Faculty.  
Steven Muller, Vice President for Public Affairs.  
Arthur H. Peterson, University Controller.  
Robert L. Sproull, Vice President for Academic Affairs.  
Neal R. Stamp, Secretary of the Corporation, and University Counsel.

## FACULTY

James A. Perkins, A.B., Ph.D., President of the University.  
Robert D. Miller, Ph.D., Dean of the Faculty.

## DEPARTMENT OF MILITARY SCIENCE

Colonel Claude E. Bailey, Jr., U.S. Army, Professor of Military Science,  
and Commanding Officer of the Army ROTC Unit.

### Associate Professor

[To be appointed.]

### Assistant Professors

Captain Richard A. Kidwell, Armor, U.S. Army.

## DEPARTMENT OF NAVAL SCIENCE

Captain Mortimer J. Prince, U.S. Navy, Professor of Naval Science  
and Commanding Officer of the Naval ROTC Unit.

## Associate Professor

Commander Willis B. Van Oss, U.S. Navy.

## Assistant Professors

Major Harper L. Bohr, U.S. Marine Corps.

Lieutenant John F. Bennett, U.S. Navy.

Lieutenant Harold C. Mabie, U.S. Navy.

## DEPARTMENT OF AEROSPACE STUDIES (ROTC)

Lieutenant Colonel William E. Kennedy, U.S. Air Force, Professor of Aerospace Studies (ROTC) and Commander, Air Force ROTC Detachment 520.

## Associate Professor

Major Donald G. Fisher, U.S. Air Force.

## Assistant Professor

Captain Donald C. Bunce, U.S. Air Force.

## OFFICER EDUCATION AT CORNELL

Through the years Cornell alumni have given outstanding—and often heroic—service in the military services of their nation. Since its founding, Cornell has provided instruction in military science to its students as a public service responsibility.

At present, this tradition of University cooperation in developing trained reserve officers embraces a voluntary program open to all students. In this way, Cornell, in cooperation with the military services, makes it possible for college students to prepare themselves to serve their country in positions of leadership while completing their college education.

Cornell is fortunate in having ROTC programs offered by the three military departments: the Army, the Navy, and the Air Force. These programs are alike in that each leads to a commission in the armed forces upon graduation.

Incoming students should give thoughtful consideration to the various offerings of this broad military program at Cornell, so that each can make a decision about his own future appropriate to his responsibility to himself and to the nation.

JAMES A. PERKINS  
President  
Cornell University



# Cornell University

## HISTORY OF THE ROTC

Cornell University, established as a land grant institution in 1865, has offered courses in the military arts since 1868, and military instruction has been an integral part of the Cornell experience, with few exceptions, since that early date.

Prior to World War I, military training was administered by an officer detailed by the War Department as a professor of military science and tactics, assisted by one or more noncommissioned officers of the regular Army. For some time subsequent to 1868, cadets lived under military conditions. The uniform was the accepted dress, and cadets moving in formation were a common sight.

The following is quoted from a military order of 1868 with respect to University policy:

It is granted that this great University was not founded for the purpose of educating soldiers, but it can imbue citizens with all that is good in soldiers and fit them to be soldiers in time of need. Who is to say that its results will not be commensurate with its high purpose, and its influence as beneficent, as the efforts to intend them are self-sacrificing and earnest?

History has shown that this high purpose has been and is being fulfilled. Andrew Dickson White, Cornell's first President, praised the results of the military training program in his autobiography. Cornelians served with distinction in World War I as leaders of men in combat and contributed greatly to the national effort. Cornell had more officers in the military service (during World War I) than did any other institution.

The National Defense Act of 1916 established the Reserve Officers' Training Corps. During the next two decades, the Corps produced numerous reserve officers who, when called to active duty during World War II, helped provide the national capability to expand the military forces and win the war. General George C. Marshall, Chief of Staff during World War II, stated that "the rapid mobilization and effective leadership provided our armed forces in World War II was made possible by the large number of officers trained in the ROTC programs." Without this capable and trained reserve, it is probable that the war

would have been much longer and more costly. Cornellians contributed greatly in this effort, many of them reaching positions of great responsibility and leadership.

In the post-World War II era, Navy and Air Force training was made available to the student. As a result, many Cornellians served their country as officers during the Korean conflict in all of the military forces. Many Cornellians have chosen to make careers of military service, a number having risen to general officer rank.

In his speech at the Industrial College of the Armed Forces, August 21, 1964, President Johnson said: "The next twenty years will demand more of America's military men, America's diplomats, and America's political leadership than the last 200 years. . . .

"The military career today demands a new order of talent and training and imagination and versatility. Our military men have these qualities and they have them in abundance."

For the officer corps to continue to meet these high standards, Cornell must continue her outstanding contribution.

# ROTC PROGRAMS IN BRIEF

## ENROLLMENT

**ARMY.** Freshman year; with approval, students in a five-year baccalaureate academic program may enter at the beginning of the sophomore year. Additionally, sophomores who volunteer and are selected, after attendance at a six-week basic summer camp, can enter advanced ROTC in the fall of the junior year.

**AIR FORCE.** Four-year program: freshman year. Two-year program: students may apply if they have two years of college, undergraduate or graduate, remaining.

**NAVY.** Four-year Contract Program: freshman year. Two-year Contract Program. Sophomores, juniors in a five-year program, or seniors and graduate students with two years remaining are eligible for enrollment. Regular Program: freshman year after earlier selection by nationwide competition.

**MARINES.** Marine option available at beginning of third year for selected NROTC students.

## PHYSICAL REQUIREMENTS

**ARMY.** Eyes: correctable to minimum of 20/20 in one eye and 20/400 in the other eye. Height: 78" maximum (exceptions considered). Weight according to height. Overall sound mental and physical condition.

**AIR FORCE.** Eyes without glasses: 20/20 for pilot candidates; 20/50 for navigators; 20/400 bilaterally for engineers and general service. Height: flying, 64" to 76"; commission, 64" to 80". Weight varies with height and age. Overall sound physical condition.

**NAVY.** Eyes: *Four-Year Contract*, 20/20 (waivers may be requested up to 20/40, or for science and engineering students 20/100, provided eyes will correct to 20/20). *Two-Year Contract*, 20/20 (waivers may be requested up to 20/100 for Surface, Law, and Marine Options, and 20/200 for Supply and Science and Engineering Options provided eyes will correct to 20/20). No waiver is considered for Naval Aviation; *Regular*, 20/20 without correction. Normal color perception for all programs except Marine Corps, Supply, and Science and Engineering Options. Height 64" to 78". Weight proportioned to height. Overall sound mental and physical condition.

**MARINES.** Same as Navy with one exception: eye requirement for Two-Year Contract 20/40 (waivers may be requested up to 20/100 provided eyes will correct to 20/40).

## CADET OR MIDSHIPMAN BENEFITS

**ARMY.** Pay: \$50.00 a month while in the advanced program; \$150.00 a month while attending advanced summer camp. Uniforms, texts, and supplies are provided by the Army.

**AIR FORCE.** Pay: all cadets while in the Professional Officer Course (junior and senior year), \$50.00 subsistence allowance a month. *Financial Assistance Grant Cadets:* all tuition, fees, \$75.00 per year toward cost of textbooks, and a subsistence allowance of \$50.00 a month. Summer Field Training pay of \$133.98 for six weeks, two-year program; \$149.80 for twenty-eight days, four-year program. Also, a travel allowance is paid to and from the field training site. Necessary uniforms and Air Force ROTC textbooks are furnished.

**NAVY.** Pay: Contract, \$50.00 retainer a month during last two years. Regular, all tuition, fees, cost of textbooks, and a subsistence allowance of \$50.00 a month during the entire program. Active duty pay of \$155.70 a month and traveling expenses are received during summer at sea training. Uniforms and books for Navy courses are furnished all midshipmen by the Navy.

**MARINES.** Same as Navy.

## CLASS AND LABORATORY HOURS REQUIRED EACH WEEK

**ARMY.** Freshman, two; sophomore, three; junior, first term, three; second term, four; and senior, first term, four; second term, three.

**AIR FORCE.** Freshman, two; sophomore, two; junior, four; senior, four; plus necessary personal preparation time.

**NAVY.** Freshman, five; sophomore, two or five; junior, five; senior, five; plus necessary personal preparation time.

**MARINES.** Same as Navy.

## BASIC PROGRAMS (First Two Years)

**ARMY.** Classroom study in military history, Army organization, map and compass reading, and small-unit tactics. Leadership laboratory instruction in the basics of marching and unit formations (conducted by advanced cadets). Field training in compass reading, terrain analysis, and individual marksmanship.

**AIR FORCE.** Classroom study of world military systems one hour a week. Corps Training: classroom instruction in responsibilities, education, and environment of the junior officer; instruction and practice in

basic drill and ceremonies. Summer field training for Financial Assistance Cadets: A four-week training session at the end of the sophomore year.

NAVY. Classroom study in naval orientation, naval history, and naval weapons. Laboratory instruction in ASW and drill sessions in the basics of marching and military bearing.

MARINES. Same as Navy.

## ADVANCED PROGRAM

ARMY. Juniors study military communications, platoon and company tactics, counterinsurgency, psychology of leadership, military teaching, and branches of the Army. Seniors study military plans and orders, intelligence, law, logistics, administration, and U.S. areas of interest overseas. Both juniors and seniors occupy leadership positions in the cadet corps during their advanced ROTC training. Field training stresses practical application of theory learned.

AIR FORCE. *Classroom*: junior year, three hours a week in growth and development of aerospace power; senior year, three hours a week in leadership, management, and officer responsibilities. *Corps Training*: an average of four hours a month, junior and senior years. A leadership laboratory in which the cadet is exposed to advanced leadership experiences and applies principles of management learned in the classroom. *Summer training*: A four-week training session at an Air Force base at the end of the third year (two-year program cadets excluded). *Flying program*: flight instruction during the senior year for all cadets accepted for pilot training. Includes ground school and thirty-six and a half hours of flying at Air Force expense.

NAVY. Classroom study in navigation, naval operations, engineering, and leadership. Laboratory periods include one half drill periods and one half functional periods devoted to practical application of subject matter taught in class. Summer at-sea training periods: Contract, six-week at-sea training period at the end of the junior year. In addition, Two-year Contract students attend Naval Institute for six weeks during summer prior to entering program; Regular, three at-sea training periods of about six weeks each. Flight Indoctrination Program provided during junior or senior year for physically qualified midshipmen interested in Marine or Naval aviation.

MARINES. Classroom study to provide the student with a broad knowledge of the history of warfare, an understanding of the principles of modern strategy and tactics, a familiarization with current amphibious doctrine, and a working knowledge of the basic tenets of military leadership. Summer Program: Contract and Regular, six-week summer training conducted at Marine Corps School, Quantico, Virginia. Flight indoctrination is concurrent with the Navy program.

## COMMISSIONING REQUIREMENTS

**ARMY.** Successful completion of Army Advanced ROTC Program to include attendance at a six-week advanced summer camp and award of a baccalaureate degree. Commissioned rank is Second Lieutenant.

**AIR FORCE.** Successful completion of the Air Force Professional Officer Course and the award of an undergraduate degree. Commissioned rank is Second Lieutenant.

**NAVY.** Successful completion of NROTC (Regular, Contract, or Marine Corps option) program and undergraduate study at Cornell. Commissioned ranks: Contract: Ensign, Naval Reserve; or Second Lieutenant, Marine Corps Reserve. Regular: Ensign, Navy; or Second Lieutenant, Marine Corps.

**MARINES.** See Navy.

## SERVICE OBLIGATIONS AFTER GRADUATION

**ARMY.** Two years' active duty with the Army Reserve, three years' Ready Reserve training and one year in the Standby Reserve or three years' active duty with the Regular Army, two years of Ready Reserve training, and one year in the Standby Reserve.

**AIR FORCE.** Four years' active duty for engineers or general-category graduates. For pilot and navigator trainees, five years after receipt of aeronautical rating.

**NAVY.** Contract: three years' active duty in the Naval Reserve or Marine Corps Reserve and three years' Ready Reserve Training. Regular: four years' minimum active duty in Navy or Marine Corps; two years' Ready Reserve Training. Exceptions: Law specialists have a four-year and aviators incur approximately a five-year active duty obligation with a corresponding reduced Reserve requirement.

**MARINES.** See Navy.

## ADVANCED STUDY

**ARMY.** Active duty deferments may be granted to selected individuals who desire to attend graduate school after commissioning. Length of active service time is not affected.

**AIR FORCE.** Newly commissioned officers may request delay in reporting for active duty while undertaking graduate study at own expense. Weather Officer candidates may receive one postgraduate year of college at government expense with no additional service obligation.

NAVY. Active duty deferments may be granted to certain newly commissioned officers who desire to attend graduate school. Length of active duty will not be affected.

MARINES. Upon graduation and commissioning, newly appointed officers will be assigned to the basic course, Marine Corps School, Quantico, Virginia, or to flight training depending upon their status at the time. Newly commissioned officers can request delay in active duty to pursue graduate studies. Length of active duty will not be affected.

## SCHEDULING

Applicants who know to which service they plan to apply should inform the appropriate ROTC office and their particular college or school as early as possible so that academic schedules will include required ROTC activities.

Academic schedules for incoming freshmen are made up in the individual colleges during the summer. It is desirable that the student's wishes concerning ROTC be known when schedules are planned to avoid the possible inconvenience of adjusting schedules on registration day. Students are advised to visit the appropriate ROTC office prior to registration.

# THE UNITED STATES ARMY ROTC PROGRAM

## GENERAL REQUIREMENTS

### Basic Course (MS I and II)

To be enrolled in the basic course the student must—

Be a citizen of the United States.

Be physically qualified under prescribed standards.

Be regularly enrolled in the institution.

Veterans of the Armed Forces of the United States, subject to the approval of the Professor of Military Science, may enroll and receive advanced standing.

Students entering college with ROTC credit from secondary or military schools (Junior Division ROTC) may also receive advanced standing for military instruction completed.

### Advanced Course (MS III and IV)

Cadets electing the advanced course must—

Be selected by the Professor of Military Science.

Have successfully completed the two-year basic course or the summer camp equivalent.

Be able to qualify academically for appointment as a Second Lieutenant prior to reaching twenty-eight years of age.

Successfully pass such physical and aptitude tests as may be prescribed.

Have at least two years of academic work remaining at this institution.

Execute a written contract with the United States Government to complete the advanced course and to accept a commission as an officer, if tendered.

Enlist in the U.S. Army Reserve.

## UNITED STATES ARMY RESERVE

Upon successful completion of the Army ROTC course, the student, unless commissioned in the regular Army, is appointed a Second Lieutenant, United States Army Reserve, in one of the branches of the Army such as Infantry, Artillery, Armor, Corps of Engineers, Signal Corps, Quartermaster Corps, or others. Although the needs of the Army must govern, he is allowed to express his preference for the branch of the Army in which he wishes to serve.





*Weapons training with the Army's new M60 machine gun.*



*Cadets dismount from an armored personnel carrier during a tactical exercise.*

ROTC graduates commissioned in the United States Army Reserve will be ordered to active duty within one year of graduation unless deferred for the purpose of graduate studies.

Active duty commitment is two years.

## THE CADET CORPS

Army ROTC cadets are organized into a cadet battalion for training in military drill and leadership. The battalion is commanded by a Cadet Colonel and his subordinates in rank from Company Commander to Squad Leader.

Prizes and awards are presented at the annual Presidential Review to cadets who have demonstrated outstanding ability in academic and leadership training.

## DISTINGUISHED MILITARY GRADUATES

A number of appointments as Second Lieutenants in the Regular Army are tendered annually to ROTC graduates who have demonstrated above-average academic achievement and outstanding military qualities. All members of the Army ROTC unit are eligible to compete for these appointments.

Distinguished Military Graduates who accept Regular Army commissions enter the Army on the same basis as graduates of the United States Military Academy at West Point.

## SCHOLARSHIPS

Army ROTC scholarships, which provide for tuition, fees, books, classroom supplies, and a \$50.00 a month subsistence allowance, are available to outstanding juniors who have completed basic ROTC as well as to freshmen who qualify prior to matriculation.

## CURRICULUM AND SCHEDULE OF CLASSES

### Basic Course (Freshman and Sophomore Years)

MS 111. Fall term. Two hours. T 9:05 or 11:15; Th 8:00, 10:10 or 12:20; and leadership laboratory W or Th 2:30.

One hour a week of classroom discussion on the pattern of Army organization; command and staff relationships; discipline; the combined arms team; the relationships between active Army and Army Reserve Forces; and the extent and nature of civilian control. One hour a week in leadership laboratory covering the school of the soldier and training in individual weapons and marksmanship.

MS 121. Spring term. Two hours. W 9:05 or 11:15; Th 8:00, 10:10 or 12:20; and leadership laboratory W or Th 2:30.

One hour a week of classroom discussion on roles, missions, and functions of unified commands and the Joint Chiefs of Staff; and the military force structure, technology, and doctrine of other world powers. One hour a week in a leadership laboratory covering the school of the soldier and squad, platoon, and company drill.

MS 212. Fall term. Three hours. M W 9:05 or 11:15; T Th 9:05 or 11:15; and leadership laboratory W or Th 2:30.

Two hours a week of classroom discussion and case studies in American military history; and one hour a week in a leadership laboratory covering the school of the soldier and exercise of command.

MS 222. Spring term. Three hours. M 9:05 or 11:15; or T 8:00 to 10:10; plus W or Th 3:35; and leadership laboratory W or Th 2:30.

Two hours a week of classroom discussions and practical exercises in map and aerial photograph reading and basic small unit tactics; and one hour a week in a leadership laboratory covering the school of the soldier and exercise of command.

## Advanced Course (Junior and Senior Years)

MS 312. Fall term. Three hours. T 8:00, 10:10 or 12:20; plus W or Th 3:35; and leadership training W or Th 2:30.

Three hours a week of classroom discussion in platoon and company tactics and counterinsurgency, military instruction, and branches of the Army; and one hour a week devoted to training in tactical command at squad and platoon levels.

MS 323. Spring term. Four hours. M W 8:00, 10:10 or 12:20; plus W or Th 3:35; and leadership training W or Th 2:30.

Three hours a week of classroom study in military operations, logistics, and personnel management; and one hour a week devoted to command and staff experience at platoon, company, and battalion level.

MS 413. Fall term. Four hours. M W F 8:00, 10:10, or 12:20; and leadership training W or Th 2:30.

Two hours a week of classroom study in military justice, the United States in world affairs, and service orientation; and one hour a week devoted to command and staff experience at platoon, company, and battalion level.

MS 422. Spring term. Three hours T Th 8:00, 10:10 or 12:20 and leadership W or Th 2:30.

Two hours a week of classroom study and practical exercises in Army organization and military communications plus the principles and psychology of leadership; and one hour a week devoted to training in tactical command at squad and platoon levels.

# THE UNITED STATES NAVAL ROTC PROGRAM

The mission of the Naval ROTC is to provide, by a permanent system of training and instruction in essential naval subjects at civilian educational institutions, a source from which qualified officers may be obtained for the Navy and the Marine Corps, and for the Naval Reserve and the Marine Corps Reserve.

The Department of Naval Science at Cornell offers a four-year course in Navy and Marine Corps subjects which can be integrated into almost any field of academic study which leads to a baccalaureate or higher degree.

Graduates are required to accept a commission in the Navy or Marine Corps and to report for a period of obligated active service immediately on attainment of the baccalaureate degree. A limited number of graduates are permitted to delay their active naval service to pursue graduate study at their own expense.

## REGULAR PROGRAM

Regular NROTC students are selected annually by state selection boards on the basis of a nationwide competitive examination held in December of each year for students entering college the following year. The Regular NROTC Program is a Navy-subsidized program for young men motivated to a naval career.

## FOUR-YEAR CONTRACT PROGRAM

Four-year Contract NROTC students are selected on the campus by the Professor of Naval Science, Cornell University. A quota of about a hundred four-year Contract students will be selected during the freshman orientation period and will be enrolled as civilians by execution of a contract with the Navy. The four-year Contract Program is selective. All freshmen interested in the Contract NROTC Program should visit the NROTC headquarters during the registration period for application and interview.

Contract students receive free naval science textbooks, course materials, and uniforms. A retainer of \$50 a month during the last two years is provided. One summer of at-sea training for a period of about six weeks following the third year of naval science provides an opportunity for practical experience aboard a U.S. Navy warship.

## TWO-YEAR CONTRACT PROGRAM

Two-year Contract students are selected from sophomores, in good standing; students beyond the sophomore class level who have at least two years remaining in school; and graduate students, or seniors going



*Summer cruise.*



*The new and the old.*

to graduate school, who have two years prior to receiving their advanced degree. Candidates for the Two-year Contract Program will attend a special six-week training session during the summer preceding their entrance into the program at Cornell. At the summer session, they will undertake those naval science courses normally studied by NROTC students during their freshman and sophomore years. Successful completion of the six-week session qualifies the candidate for enrollment at the junior level of the Contract NROTC program. He may choose one of five options: Surface, Aviation, Marine Corps, Supply, or Science and Engineering. A sixth option, Law, is available to law school students.

Two-year Contract students will receive the same retainer pay, books, and uniforms as the four-year contract student for the last two years. A six-week at-sea training period is required for the Two-year Contract student in the summer following his junior year.

## GENERAL CURRICULUM

Students enrolled as Contract or Regular NROTC students attend the same classes and receive the same instruction. The curriculum for the first two years is common to both Navy and Marine Corps candidates. During the second year a student may elect the Marine Corps curriculum for the third and fourth years and, if selected, will receive his commission in the Marine Corps. These courses are indicated by the M in the curriculum and schedule of classes (301M, 302M, 401M, and 402M).

The curriculum requires attendance at three one-hour classes and one two-hour laboratory session each week.

## REQUIREMENTS

An applicant for the Naval ROTC Program at Cornell must be a male citizen of the United States; he must have reached his seventeenth and not have passed his twenty-first birthday on June 30 of the entering year. If he matriculates in a major field of study requiring five years for a baccalaureate degree, he must not have passed his twentieth birthday on June 30 of the entering year. Students enrolled in a five-year academic program will be placed in a leave status with respect to the Department of Naval Science (draft deferment continues) during the third year. 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 a half at time of appointment for *Contract* students.

Physical requirements are the same as those of the U.S. Naval Academy. A waiver of 20/40 eyesight, correctable to 20/20 with glasses may be given to highly qualified applicants for the four year Contract program. Students with majors in certain science and engineering subjects may be granted waivers to 20/100.

Visual acuity standards for entrance into the Two-year Contract Program options are as follows:

<i>Option</i>	<i>Standard</i>	<i>Waiver Limit</i>
Surface	20/20	20/100
Aviation	20/20	No waiver
Marine Corps	20/40	20/100
Supply	20/20	20/200
Science and Engineering	20/20	20/200
Law	20/20	20/100

All programs require normal color perception although waivers may be granted for qualified applicants for the Marine Corps, Supply, and Science and Engineering option.

## NROTC FLIGHT INDOCTRINATION PROGRAM

The NROTC Flight Indoctrination Program is available at no cost to junior and senior NROTC students motivated to naval or marine aviation. This selective program affords an opportunity to become proficient in the fundamentals of aviation and to qualify for a private pilot's license through the Federal Aviation Agency.

The program provides thirty-five hours of ground instruction and forty hours of flying instruction. Upon commissioning, the graduate is ordered to Naval Aviation Training at Pensacola, Florida.

## DUTY ASSIGNMENTS

The student, upon graduation and meeting the physical requirements, will be commissioned as an Ensign, U.S. Navy (Regular students); Ensign, U.S. Naval Reserve (Contract students); Second Lieutenant, U.S. Marine Corps (Regular Marine Corps students); or Second Lieutenant, U.S. Marine Corps Reserve (Contract Marine Corps students).

Graduates commissioned Ensign, U.S. Navy, or U.S. Naval Reserve are ordered to sea duty or shore duty as the needs of the Navy require. Each graduate has an opportunity to request his preferred type of duty upon graduation. These requests are given careful consideration, and every effort is made to assign the newly commissioned officer duty of his preference. Choices of duty include: aviation, submarines, large and small surface ships, nuclear power training, civil engineering corps, supply corps, mess management for hotel students, and law. Graduate study is available after the initial tour of duty.

Graduates commissioned in the U.S. Marine Corps and U.S. Marine Corps Reserve are ordered to a seven months' basic course at Quantico, Virginia. Upon completion of the basic course, each officer has the opportunity to request his preferred type of duty. Active duty requirements for Marine Corps officers commence on compliance with orders to active duty.

## CURRICULUM AND SCHEDULE OF CLASSES

### 101. SEAPOWER AND ORIENTATION

Fall term. Credit three hours. Lecture-recitation, M W F 9:05 or 11:15; T Th F 8. Laboratory, W or Th 2:30-4:25.

A study of the organization of the Department of Defense, the customs and the traditions of the Navy, and naval leadership; basic seamanship, and the various types of naval forces; introduction to factors contained in the analysis of seapower. Required of all first-term Naval ROTC students.

### 102. SEAPOWER AND ORIENTATION

Spring term. Credit three hours. Lecture-recitation, M W F 9:05 or 11:15; T Th F 8. Laboratory, W or Th 2:30-4:25.

Continuation of study in the analysis of seapower. A study of seapower's influence upon global history. The future employment of seapower. Basic shiphandling. Required of all second-term Naval ROTC students.

### 201. NAVAL WEAPONS SYSTEMS

Fall term. Credit three hours. Lecture-recitation, M W F 9:05 or 11:15; T Th F 8. Laboratory, W or Th 2:30-4:25.

A study of naval weapons systems. Emphasis is placed on the guided missile, its applications, propulsion, and control. Required of all third-term Naval ROTC students.

### 202. PSYCHOLOGY OR PERSONNEL MANAGEMENT

Spring term. This course may be taken any time before Naval Science 402 is taken, but the fourth-term Naval ROTC student will be required to attend Naval Science Laboratory, W or Th 2:30-4:25. This will be any one of several three-credit-hour courses offered by Cornell and taught by a civilian faculty member, which will prepare the student for Naval Science 402. Choice of the course is subject to agreement between the school or college and the Department of Naval Science.

### 301. NAVIGATION

Fall term. Credit three hours. Lecture-recitation, M W F 9:05 or 11:15; T Th F 8. Laboratory, W or Th 2:30-4:25.

The theory and technique of celestial and terrestrial navigation, dead reckoning, piloting, and use of navigational instruments. Required of all fifth-term Naval ROTC students except Marine Corps candidates.

### 301M. EVOLUTION OF THE ART OF WAR

Fall term. Credit three hours. Lecture-recitation, M W F 8. Laboratory, W or Th 2:30-4:25.

The historical development of weapons, tactics, and materials; the classic principles of war illustrated by a study of selected battles and campaigns. Required of all fifth-term Naval ROTC students who are candidates for Marine Corps commissions.

### 302. NAVAL OPERATIONS

Spring term. Credit three hours. Lecture-recitation, M W F 9:05 or 11:15; T Th F 8. Laboratory, W or Th 2:30-4:25.

A study of shipboard operations, including maneuvering board, tactical communications and instructions, rules of the nautical road, and the opera-



tional importance of weather and fleet communications. Required of all sixth-term Naval ROTC students except Marine Corps candidates.

#### 302M. MODERN BASIC STRATEGY AND TACTICS

Spring term. Credit three hours. Lecture-recitation, M W F 8. Laboratory, W or Th 2:30-4:25.

A survey of modern strategic and tactical principles, using contemporary historical events as illustrative material. Required of all sixth-term Naval ROTC students who are candidates for Marine Corps commissions.

#### 401. NAVAL ENGINEERING

Fall term. Credit three hours. Lecture-recitation, T Th F 8 or M W F 11:15. Laboratory, W or Th 2:30-4:25.

A study of the different types of naval engineering propulsion plants including nuclear plants, and the principles of thermodynamics and heat transfer. Required of all seventh-term Naval ROTC students except mechanical engineering candidates (who are permitted to substitute certain heat power courses) and Marine Corps candidates.

#### 401M. AMPHIBIOUS WARFARE, PART I

Fall term. Credit three hours. Lecture-recitation, M W F 8. Laboratory, W or Th 2:30-4:25.

A detailed study of the technique and history of amphibious warfare. Required of all seventh-term Naval ROTC students who are candidates for Marine Corps commissions.

#### 402. PRINCIPLES AND PROBLEMS OF NAVAL LEADERSHIP

Spring term. Credit three hours. Lecture-recitation, T Th F 8 or M W F 11:15. Laboratory, W or Th 2:30-4:25.

The application of principles of psychology to leadership and the principles of management and management techniques and military law. Required of all eighth-term Naval ROTC students except Marine Corps candidates.

#### 402M. AMPHIBIOUS WARFARE, PART II: LEADERSHIP AND NAVAL JUSTICE

Spring term. Credit three hours. Lecture-recitation, M W F 8. Laboratory, W or Th 2:30-4:25.

A continued study of the techniques of amphibious warfare; the procedures for and the responsibility of an officer in the administration of naval justice; the psychology of leadership. Required of all eighth-term Naval ROTC students who are candidates for Marine Corps commissions.

# THE UNITED STATES AIR FORCE ROTC PROGRAM

The mission of the Air Force ROTC is to produce highly qualified career officers to fulfill stated Air Force requirements.

The Department of Aerospace Studies offers both a four-year and a two-year program leading to a commission in the United States Air Force Reserve. Courses of study are designed to prepare the student for his role as an informed citizen and to develop the cadet into a well-rounded Air Force officer.

## THE FOUR-YEAR PROGRAM

The four-year program consists of four semesters of General Military Course, four semesters of the Professional Officer Course, a four-week Summer Field Training unit between the junior and senior year, and corps training each semester. Acceptance to the Professional Officer Course is based upon the student's academic and physical standards and his general performance during the first two years.

Financial Assistance Grants are offered to a limited number of cadets in the four-year program.

## The General Military Course

The General Military Course covers the freshman and sophomore years and includes professional AFROTC subjects. The cadet attends AFROTC classes one hour each week and Corps Training an average of one hour each week. The General Military Course covers the nature and scope of world military conflict throughout the many possible spectrums, and the relationship of the United States defense establishment to it. The course also covers the function of aerospace forces as part of this defense establishment and concludes with a study in depth of the basis for conflict between democracy and communism, international alignments, and the pursuit of peace.

In Corps Training, the cadet is introduced to the responsibilities of the Air Force officer, gains experience in actual leadership situations, and learns the fundamentals of military drill and ceremonies, wearing the uniform, military courtesy and discipline, and military organization.

Textbooks and uniforms are furnished. A \$5 University registration fee and a \$25 uniform deposit are required.



*Air Force ROTC senior checks his flight plan before starting a solo cross-country flight.*



*Presentation of the Distinguished Air Force ROTC Cadet badge.*

## The Professional Officer Course

Each cadet accepted into the Professional Officer Course must enlist in the Air Force Reserve. He also signs an agreement to complete the program and accept a commission in the Air Force Reserve, if tendered, upon graduation. While attending classes in the Professional Officer Course, the cadet receives a subsistence fee of \$50 a month for a maximum of 20 months. In addition, all necessary uniforms and books are furnished at no cost to the student.

During the junior year, the cadet attends AFROTC classes three hours each week and studies the nature of war and the past and projected development of aerospace power. In his senior year, the cadet enrolls in a three-hour-per-week AFROTC course in professionalism, leadership, management, and officer responsibilities.

The Corps Training is conducted on an average of four hours a month for all Professional Officer Course cadets. These cadets plan, organize, and supervise all activities in the Cadet Groups, thus participating first hand in simulated duties, functions, and responsibilities of Air Force Commanders in realistic leadership situations.

All cadets in the Professional Officer Course are classified in relation to their college educational backgrounds.

Category I: Pilot or navigator

Category II: Engineering (civil, mechanical, electrical, chemical, etc.) or scientific (chemistry, physics, mathematics, meteorology, etc.).

Category III: Other (administrative, logistical, personnel, man-power, etc.).

## Field Training Program (Four-Year Program)

The cadet attends a four-week summer field training unit at an Air Force base, usually close to his home, between the junior and senior years.

The field training unit provides the opportunity to see the Air Force in action. The cadet will visit various offices and agencies that are normally found on an Air Force base, such as those related to engineering, the military police, procurement, supply, food service, and legal. He also participates in an orientation flight.

Each cadet attending the field training program is furnished uniforms, medical attention, food, lodging, transportation to and from field training, and pay of \$149.80.

## THE TWO-YEAR PROGRAM

The two-year program involves a six-week summer field training unit and the Professional Officer Course. In order to participate, a student must have two years of undergraduate or graduate study remaining. He must be physically and mentally qualified and recommended by an

Air Force ROTC interview board for attendance at the six-week field training unit.

Since completion of this field training unit is a prerequisite for entry into the program, application for entry should be made to the Professor of Aerospace Studies (ROTC) not later than January 15 preceding attendance at the field training unit.

## Field Training (Two-Year Program)

The two-year applicant attends a six-week summer field training unit at an Air Force base.

The six-week course includes substantial class work in world military systems. Otherwise, the training is similar to that received in the four-week training unit.

Each cadet attending the field training program is furnished uniforms, medical attention, food, lodging, transportation to and from field training, and pay of \$133.98.

## FLIGHT INSTRUCTION

Prospective pilots in their senior year participate in the Air Force ROTC flight instruction program at no cost.

This flying program consists of thirty-six and a half hours of flying training in a light aircraft at a local airport. Upon completion of the program, a cadet may apply for a private pilot's license through the Federal Aviation Agency.

## FINANCIAL ASSISTANCE GRANTS (Four-Year Program)

Qualified cadets are offered the opportunity to apply for Financial Assistance Grants. These grants are based upon individual qualifications and the needs of the Air Force.

Entering freshmen may apply during their high school senior year.

All other Air Force ROTC cadets may apply each year. In order to apply, these cadets must have at least a 2.5 cumulative grade point average and meet commissioning physical requirements.

Each cadet, upon accepting a Financial Assistance Grant, must enlist in the Air Force Reserve. He also signs an agreement to complete the program and accept a commission, if tendered, upon graduation.

This grant pays tuition, fees, \$75.00 a year toward textbook costs, and a subsistence allowance of \$50.00 a month.

## ACTIVE DUTY

Upon completion of either the four-year or two-year Air Force ROTC program and graduation from Cornell, the cadet is commissioned a

Second Lieutenant, Air Force Reserve. The length of active service required is four years for engineers and general service category officers. Pilot and navigator trainees are required to complete five years after receipt of their aeronautical rating. Service is normally as a Second Lieutenant for one and one-half years, as a First Lieutenant for two years, and as a Captain after three and one-half years. In most cases, active-duty tours can be postponed temporarily to permit students to obtain advanced degrees.

Those cadets designated as Distinguished Air Force ROTC Graduates may be offered commissions in the Regular Air Force upon graduation. Others have an excellent opportunity to compete for a regular commission during their early years of service.

## Duty Assignments

Air Force policy has been to assign each new officer to a career field which closely approximates his 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, weather, or various other engineering and scientific fields. They will work under the supervision of some of the most highly qualified men in their field and have access to the latest scientific facilities and equipment.

Pilots and navigators, after completion of flying training, are assigned primary duties flying various aircraft types depending upon their desires and the needs of the Air Force. They can look forward to worldwide travel and assignments.

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

## CURRICULUM AND SCHEDULE OF CLASSES

### General Military Course

#### AS 1A, AS 1B. WORLD MILITARY SYSTEMS

Throughout two terms, one classroom hour, credit one hour a term. M 12:20; T 9:05 or 10:10. In addition, Corps Training W or Th 3:35 (1 hr).

An introductory course exploring the causes of the present world conflict, the role of military power and its relationship to that conflict, and the responsibilities of an Air Force Officer. It includes a study of the interrelationship of national power factors and the role of military power as a facet of national power. A study of world military forces is begun through treatment of the United States Department of Defense and the doctrine, mission, and functions of the United States Air Force.

**AS 2A, AS 2B. WORLD MILITARY SYSTEMS**

Throughout two terms, one classroom hour, credit one hour a term. Th 9:05 or 11:15. In addition, Corps Training W or Th 3:35 (1 hr).

A continuation of the study of United States military forces and the political-military issues surrounding the existence of these forces. Included are a study of the United States Army and the United States Navy—their doctrines, missions, and employment concepts—and a study of a rationale of international alliances and alignment, and of contemporary world actions in pursuit of peace. The course is concluded with a comparative analysis of democracy and communism and the patterns of conflict relative to the confrontation between those opposing ideologies.

## Professional Officer Courses

**AS 3A, AS 3B. GROWTH AND DEVELOPMENT OF AEROSPACE POWER**

Throughout two terms. Credit three hours a term. Prerequisites, completion of the General Military Course or the six-week summer field training unit. M W F 8:00 or 10:10. In addition, cadets attend Corps Training an average of four hours a month. Scheduled W or Th 3:35.

A survey course concerned with the nature of war; development of air power in the United States; mission and organization of the United States Department of Defense; Air Force concepts, doctrine, and employment; astronautics and space operations; and the future development of aerospace power.

**AS 4A, AS 4B. THE PROFESSIONAL OFFICER**

Throughout the two terms. Credit three hours a term. Prerequisite, completion of AS 3A and AS 3B. M W F 9:05 or 11:15. In addition, cadets attend Corps Training an average of four hours a month. Scheduled W or Th 3:35.

A study of professionalism, leadership, and management. Includes study of the meaning of professionalism, professional responsibilities, the military justice system, leadership theory, functions and practices, management principles and functions, problem solving and management tools, practices, and controls.

## ROTC EXTRACURRICULAR ACTIVITIES

### RIFLE TEAMS

Cornell University has a varsity and freshman rifle team coached by a member of the Department of Military Science. The varsity participates in twenty "shoulder-to-shoulder" matches a year including the annual Ivy League Tournament and the National Rifle Association Sectional Matches. (Cornell has won the Ivy League Championship the past two years.)

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

The range is located in Barton Hall where weapons, ammunition, targets, and instruction are provided.

### SCABBARD AND BLADE

The National Society of Scabbard and Blade, a triservice military honorary society, 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 relationships, to encourage and foster the essential qualities of good and efficient officers, and to promote friendship and good-fellowship among all cadet officers. Membership is selected from ROTC cadets of all three services.

### 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, promote American citizenship, and create a close and more efficient relationship among the Air Force Reserve Officers' Training Corp cadets. Membership is offered to a limited number of Air Force cadets. The society has over 170 squadrons on campuses of various colleges and universities in the United States and Puerto Rico.

### NARMID — MEN'S NAVAL HONORARY SOCIETY

The Narmid Society is an honorary society for members of the NROTC junior and senior classes who have participated in at least one training cruise and stand at the top of their class in aptitude for the service. The purpose of the organization is to increase morale of the NROTC Unit



by example and selectivity, to give members a broader view of military service through a social program consisting of informal contact with officers and enlisted personnel, and to pass on experience in such a way as to benefit other midshipmen. A primary mission of Narmid is to serve the NROTC Unit.

## SEMPER FIDELIS SOCIETY (Marine Corps Honorary Society)

Those eligible for membership in the Semper Fidelis Society 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 future officers of the United States Marine Corps for their responsibilities when commissioned. This is accomplished by the receipt and the dissemination of policies, doctrines, and other vital 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.

## ROTC BRIGADE BAND

The ROTC Brigade Band furnishes music for drills, parades, and honor guards.

Any cadet who plays a musical instrument is encouraged to try out for the band.

## THE CORNELL RANGERS

The Cornell Rangers are dedicated to learning skills which increase an individual's confidence and help him become an effective combat leader. Its long-range objectives are to realize the value of staying in good physical shape, to achieve proficiency in Ranger operations, to promote enthusiasm for the ROTC program, and to motivate qualified cadets to seek a career in the Army.

The program emphasizes outdoor training and learning by doing. Training is conducted twice monthly Saturday afternoons. Instruction is conducted by qualified senior cadets of the organization and supervised by the Army ROTC cadre. Membership is selected from Army ROTC cadets.

## SELECTIVE SERVICE

Male college students between the ages of 18 and 26 must be registered with their Selective Service Boards.

Information about Selective Service may be obtained at the Office of the Dean of Students, 133 Day Hall, Cornell University, Ithaca, New York 14850.

## REQUEST FOR FURTHER INFORMATION

Requests for further information regarding admission to the ROTC programs may be made by filling out and mailing the coupon below.  
(Cross out all but desired addressee.)

-----

Professor of Military Science  
Professor of Naval Science  
Professor of Aerospace Studies (ROTC)  
Cornell University, Ithaca, New York 14850

Dear Sir:

I would like to receive further information about:

[*check one*]

- The Army ROTC  
 The Naval ROTC  
 The Air Force ROTC

Please register me tentatively for your program. I will be in  
the College or School of .....

Signature .....

Name (printed) .....

Address .....

(Enter specific questions on reverse side.)

## CORNELL UNIVERSITY ANNOUNCEMENTS

The Cornell *Announcements* are designed to give prospective students and others information about the University. The prospective student should have a copy of the *Announcement of General Information*; after consulting that, he may wish to write for one or more of the following *Announcements*:

- New York State College of Agriculture
- College of Architecture, Art, and Planning
- College of Arts and Sciences
- Department of Asian Studies
- Education
- College of Engineering
- New York State College of Home Economics
- School of Hotel Administration
- New York State School of Industrial and Labor Relations
- Center for International Studies
- Officer Education (ROTC)
- Summer Session

Undergraduate preparation in a recognized college or university is required for admission to certain Cornell divisions, for which the following *Announcements* are available:

- Graduate School: Biological Sciences
- Graduate School: Humanities
- Graduate School: Physical Sciences
- Graduate School: Social Sciences
- Law School
- Veterinary College
- Graduate School of Business and Public Administration
- Graduate School of Nutrition
- Medical College (New York City)
- Cornell University—New York Hospital School of Nursing (New York City)
- Graduate School of Medical Sciences (New York City)

Requests for the publications listed above may be addressed to  
CORNELL UNIVERSITY ANNOUNCEMENTS  
Edmund Ezra Day Hall, Ithaca, New York 14850

(The writer should include his zip code.)