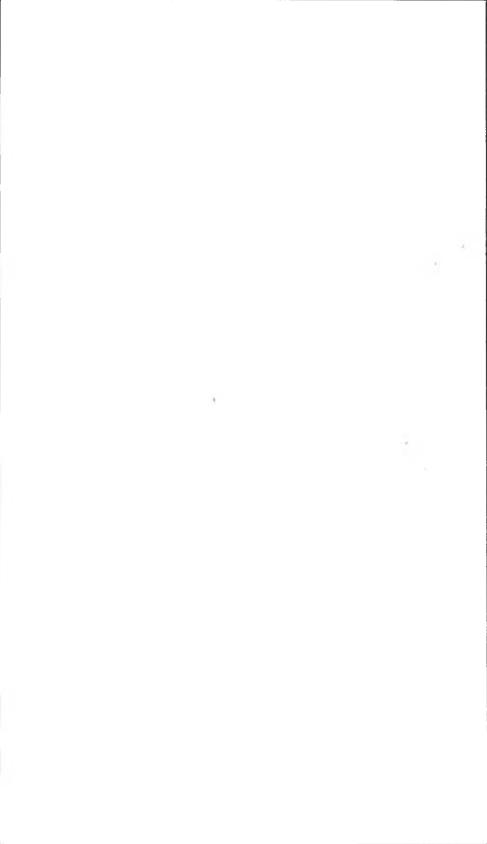


# Officer Education

1967-68



# Cornell University

# Officer Education

1967-68

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

# Academic Calendar

Registration, new students Registration, old students Fall term instruction begins, 7:30 a.m. Midterm grade reports due Thanksgiving recess:	1967-68 F, Sept. 8 S, Sept. 9 M, Sept. 11 S, Oct. 21	1968-69 F, Sept. 13 S, Sept. 14 M, Sept. 16 S, Oct. 26
Instruction suspended, 1:10 p.m. Instruction resumed, 7:30 a.m. Fall term instruction ends, 1:10 p.m. Christmas recess	W, Nov. 22 M, Nov. 27 S, Dec. 16	W, Nov. 27 M, Dec. 2 S, Dec. 21
Independent study period begins Final examinations begin Final examinations end Intersession begins Registration, old students Registration, new students Spring term instruction begins, 7:30 a.m. Deadline: changed or make-up grades Midterm grade reports due Spring recess:	W, Jan. 3 M, Jan. 8 T, Jan. 16 W, Jan. 17 F, Jan. 26 S, Jan. 27 M, Jan. 29 M, Feb. 5 S, Mar. 9	M, Jan. 6 M, Jan. 13 T, Jan. 21 W, Jan. 22 F, Jan. 31 S, Feb. 1 M, Feb. 3 M, Feb. 10 S, Mar. 15
Instruction suspended, 1:10 p.m. Instruction resumed, 7:30 a.m. Spring term instruction ends, 1:10 p.m. Independent study period begins Final examinations begin Final examinations end Commencement Day Deadline: changed or make-up grades	S, Mar. 23 M, Apr. 1 S, May 11 M, May 13 M, May 20 T, May 28 M, June 3 M, June 10	S, Mar. 29 M, Apr. 7 S, May 17 M, May 19 M, May 26 T, June 3 M, June 9 M, June 16

#### CORNELL UNIVERSITY ANNOUNCEMENTS

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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.

Franklin A. Long, Vice President for Research and Advanced Studies.

E. Hugh Luckey, Vice President for Medical Affairs.

Thomas W. Mackesey, Vice Provost.

Paul L. McKeegan, Director of the Budget.

Steven Muller, Vice President for Public Affairs.

Royse P. Murphy, Dean of the University Faculty.

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. Royse P. Murphy, Ph.D., Dean of the Faculty.

#### DEPARTMENT OF MILITARY SCIENCE

Colonel Martin J. Waters, Jr., U.S. Army, Professor of Military Science, and Commanding Officer of the Army ROTC Unit.

### Associate Professor

Major Robert F. Baker, Infantry, U.S. Army.

# Assistant Professors

Major Byron F. Prahm, Infantry, U.S. Army. Captain Francis B. Kish, Quartermaster Corps, 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

Lieutenant Colonel David B. Hayes, U.S. Marine Corps. Lieutenant William L. Clegg, U.S. Navy. Lieutenant Harold C. Mabie, U.S. Navy.

# DEPARTMENT OF AEROSPACE STUDIES (ROTC)

Lieutenant Colonel William H. 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 Richard O. Montgomery, 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. Cornellians 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.

Subsequent to World War I, the Reserve Officers' Training Corps was established. 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

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

sibility 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 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 remaining.

NAVY: Four-year Contract Program: freshman year. Two-year Contract Program: Certain sophomores in good standing eligible for enrollment for junior year. 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 provided eyes will correct to 20/20); Two-year Contract, 20/20 (waivers may be requested up to 20/100 for Surface, 20/200 for Technical Supply and Engineering, provided eyes will correct to 20/20); Regular, 20/20 without correction. Normal color perception for all programs. 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: \$40 a month while in the advanced program; \$150 a month while attending advanced summer camp. Uniforms, texts, and supplies are provided by the Army.

AIR FORCE: All cadets participating in the scholarship program, \$50 a month; juniors and seniors, \$40 a month while attending the Professional Officer Course, plus a summer field training rate of \$90.60 a month, two-year program, or \$151.95 a month, four-year program. Necessary uniforms and textbooks are furnished.

NAVY: Pay: Contract, \$40 retainer a month while in advanced program; Regular, all tuition, fees, cost of textbooks, and a subsistence allowance of \$50 a month during the entire program. Active duty pay of \$151.95 a month and traveling expenses are received during summer at sea training. Uniforms, books, and supplies are furnished by the U.S. 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 observation and practice of instruction and leadership techniques an average of one hour each week.

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, administration, military justice, and other responsibilities. Corps Training: An average of four hours a month, junior and senior years. Instruction in applied leadership. 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 36½ hours of flying at Air Force expense.

NAVY: Classroom study in navigation, naval operations, engineering, and leadership. Leadership laboratory instruction in unit formations and drill. Summer at-sea training periods: Contract, six-week at-sea training period at the end of the junior year; Regular, three at-sea training periods of about six weeks each. Flight indoctrination program provided during junior or senior year for qualified midshipmen interested in naval aviation.

MARINES: Classroom study to provide the student with a broad knowledge of the history of warfare, an understanding of the theoretical 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 program provided during junior or senior year for qualified Marine option students interested in Marine Corps aviation.

### 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 Education Program and the award of an undergraduate degree at Cornell. Commissioned rank is Second Lieutenant, Air Force Reserve.

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, four years after receipt of aeronautical rating.

NAVY: Contract: three years' active duty in the Naval Reserve or Marine Corps Reserve; three years' Ready Reserve training. Regular: four years' minimum active duty in Navy or Marine Corps; two years' Ready Reserve training.

MARINES: See Navy.

#### ADVANCED STUDY

ARMY: Active duty deferments may be granted to 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 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 during orientation or 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 Lieuten-

ant 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 institu-

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.

ROTC graduates commissioned in the United States Army Reserve will be ordered to active duty within one calendar year of graduation

unless deferred for the purpose of graduate studies.



Two Cornell ROTC cadets discuss conduct of patrol during summer camp at Indiantown Gap Military Reservation, Annville, Pennsylvania.



Army ROTC cadets practice helicopter operations at summer camp.

Under conditions short of a general war, tours of active duty for Reserve Officers will not exceed 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, class-room supplies, and a \$50 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)

 $\dot{M}S$  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 and practical exercise in organization of the Army and individual Weapons and marksmanship; one hour a week in a leadership laboratory covering the school of the soldier and exercise of command.

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 study on the United States Army and national security; and one hour a week in a leadership laboratory covering the school of the soldier and exercise of command.

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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 or 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 laboratory 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 in a leadership laboratory.

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

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

Three hours a week of classroom study in military operations, logistics, and administration; and one hour a week in leadership laboratory in a command position.

MS 422. Spring term. Three hours. T Th 9:05 or 11:15; and leadership laboratory 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 in leadership laboratory in a command position.

# 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 on 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 orientation period for application and interview.

Contract students receive free naval science textbooks, course materials, and uniforms. A retainer of \$40 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 who make application to the NROTC headquarters prior to March of the sophomore year. Candidates for the two-year Contract program



Summer at-sea training. Midshipman shooting the sun.



Three of the Navy's nuclear-powered ships.

will attend a special six-week training session during the summer preceding their junior year. At this summer session they will undertake those naval science courses normally studied by Contract NROTC students during their freshman and sophomore years. Successful completion of the six-week session qualifies the candidates for enrollment at the junior level of the Contract NROTC Program at Cornell. The successful candidate may choose one of the five options: surface, aviation, marine, technical supply, or science and engineering.

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 (301 M, 302 M, 401 M, and 402 M).

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 first 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.

Physical requirements are the same as those of the U.S. Naval Academy. A waiver for 20/40 eyesight, correctable to 20/20 with glasses may be given to highly qualified applicants for the four-year Contract Program. Visual acuity standards for entrance into the two-year Contract Program options are as follows:

Option	Standard	Waiver Limit
Surface	20/20	20/100
Aviation	20/20	(No Waiver)
Marine Corps	20/40	20/100
Technical Supply	20/20	20/200
Science and Engineering	20/20	20/200

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

#### 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, and supply corps. Graduate study is available after the initial tour of duty. Graduates commissioned Ensign, U.S. Navy, are required to serve a minimum period of active duty of four years; those commissioned Ensign, U.S. Naval Reserve, are required to serve three years of active duty and three years of inactive duty in the ready reserve.

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; Second Lieutenants, U.S. Marine Corps, serve a minimum period of four years on active duty; Second Lieutenants, U.S. Marine Corps Reserve, serve three years on active duty and three years in a ready reserve status.

# 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. 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 operational 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.

#### 22 NAVAL ROTC PROGRAM

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, M W F 8 or 9:05. 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, M W F 8 or 9:05. Laboratory, W or Th 2:30-4:25.

The application of principles of psychology to leadership and the principles of management and management techniques. 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 officers to satisfy 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 the General Military Education Program, four semesters of the Professional Officer Education Program, a four-week summer field training unit between the junior and senior year, and corps training each semester. Acceptance to the Professional Officer Education Program is based upon the student's academic and physical standards and his general performance during the first two years.

Public Law 88-647, signed by President Johnson, October 13, 1964, authorizes scholarships and subsistence pay of \$50 a month for a limited number of cadets in the four-year program. To date, scholarships have been offered to cadets starting their sophomore, junior, and senior years.

# THE GENERAL MILITARY EDUCATION PROGRAM

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.



Presentation of the Legion of Valor Bronze Cross for Achievement Award.



Advance cadet begins jet orientation during summer training.

# THE PROFESSIONAL OFFICER EDUCATION PROGRAM

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 \$40 a month for a maximum of 20 months, or \$50 a month if a scholarship cadet. 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 military justice.

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 Group, thus participating first-hand in simulated duties, functions, and responsibilities of Air Force Commanders in realistic leadership situations.

All cadets in the Professional Officer Education Program 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, biology, meteorology, etc.).

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

# Field Training Program (Four-Year Program)

The cadet attends a four-week 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 will also participate 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 at the rate of \$151.95 a month.

#### THE TWO-YEAR PROGRAM

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

mended 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 February 15 preceding attendance at the field training unit. Participation in the program is competitive.

# Field Training (Two-Year Program)

The two-year applicant attends a six-week 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 at the rate of \$90.60 a month.

#### FLIGHT INSTRUCTION

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

This flying program consists of 361/2 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.

#### 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 four years after receipt of their aeronautical rating (generally five years' total). 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 onehalf 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 or when reporting for active duty. 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 or 1:25. In addition, Corps Training W or Th 3:35 (1 hr).

An introductory course exploring the causes of the present world conflict, the role and relationship of military power 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. The course concludes with a comparative analysis of democracy and communism and the patterns of conflict relative to the confrontation between these opposing ideologies. Also included is a study of a rationale of international alliances and alignment, and of contemporary world actions in pursuit of peace.

### Professional Officer Courses

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# 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 field training unit. M W F 10:10 or 12:20. 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 two terms. Credit three hours a term. Prerequisite, completion of AS 3A and AS 3B. M W F 9:05. 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 holds the Ivy League Championship for 1966-67.)

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.

#### PERSHING RIFLES

The Pershing Rifles, established in 1894 by General John J. Pershing, is a national honorary military society of 131 companies and 5,000 members. It was organized, in the words of its founder, "To foster a spirit of friendship and cooperation among men in the military department and to maintain a highly efficient drill company."

Company B, 8th Regiment, at Cornell, has a drill team which competes with other colleges and universities throughout the eastern United States. Membership is selected from ROTC cadets of all three services.

### SCABBARD AND BLADE

The National Society of Scabbard and Blade, a tri-service 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.

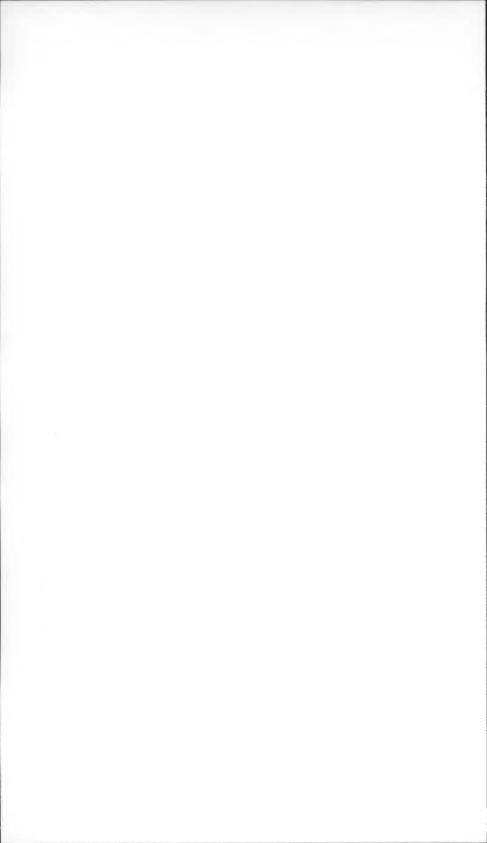
#### THE CORNELL RANGERS

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 on Sunday 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 Registrar, 240 Day Hall, Cornell University, Ithaca, New York 14850.



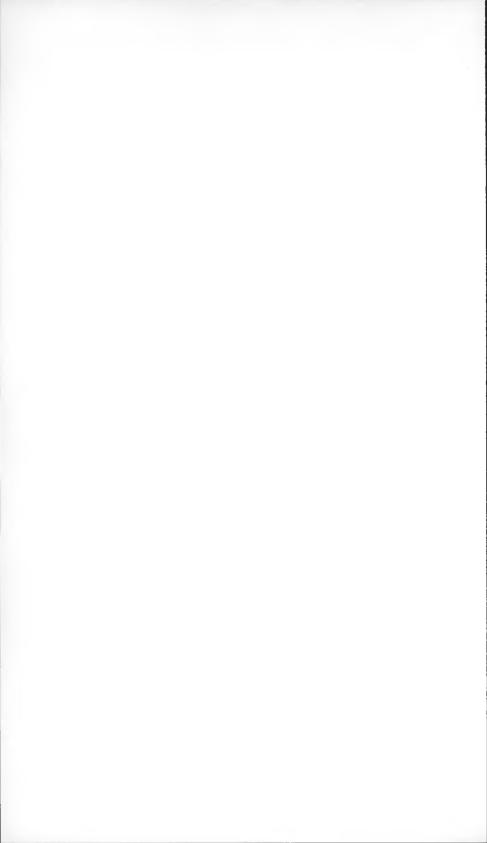
### REQUEST FOR FURTHER INFORMATION

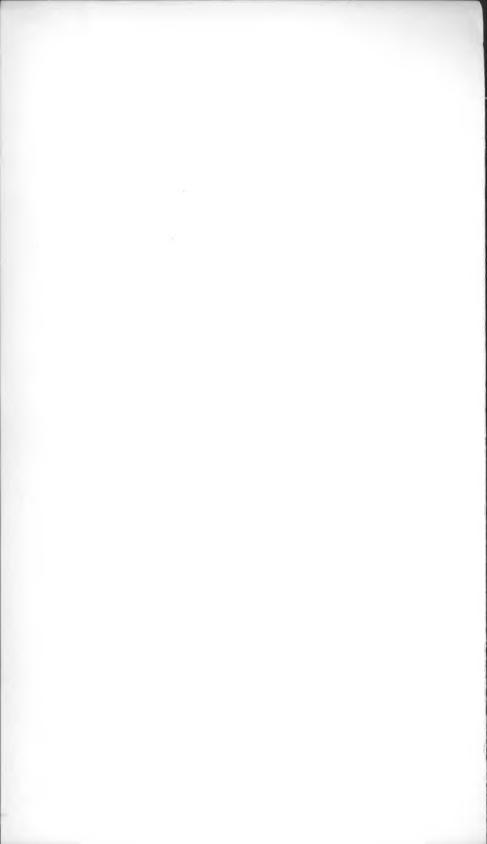
Professor of Military Science

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 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 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 General Information Announcement; 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, College of Arts and Sciences, School of 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 the following Cornell divisions, for which Announcements are available:

Graduate School, Law School, Medical College, Cornell University-New York Hospital School of Nursing, Graduate School of Nutrition, New York State Veterinary College, Graduate School of Business and Public Administration, Graduate School of Medical Sciences.

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.)