UNITED STATES MILITARY ACADEMY

WEST POINT®

ADMISSIONS CATALOG

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U.S.ARMY®

THE UNITED STATES MILITARY ACADEMY

The United States Military Academy at West Point, founded in 1802 and steeped in a tradition that has developed many of our nation's finest leaders, offers you an opportunity for educational enrichment, leadership development, and career potential in the service of our country.

"'Duty, Honor, Country.' Those three hallowed words reverently dictate what you ought to be, what you can be, what you will be ..."

This historic quotation by Gen. Douglas MacArthur provides a cornerstone of what West Point stands for. It is a special place. It may be a special place for you.

West Point will challenge you, test you, and force you to make personal sacrifices. However, those sacrifices will breed personal triumphs, both today and tomorrow.

The academic program develops the "whole person," providing a foundation for success in today's world of high technology. It is stimulating, developing minds that are creative, critical, and resourceful.

The physical education and athletic programs build strength, endurance, and confidence. The military training within the Corps of Cadets develops discipline, integrity, and loyalty, attributes so essential in developing successful officers.

This catalog provides a concise glimpse of the West Point Experience, and what the academy offers applicants who are interested in a high-quality education and a career as an officer in the U.S. Army.

West Point provides you that opportunity. The choice is yours, and so is the challenge.

For additional information on West Point, please visit www.westpoint.edu.

An important consideration for you is the academy form you must swear to or affirm on your first day at West Point. USMA Form 5-50 consists of the Oath of Allegiance, the Agreement to Serve and an affirmation as to your marital status and child support and custody obligations. The reverse side of the form contains a Statement of Department of Defense Policies regarding separation of cadets prior to graduation and subsequent to graduation on refusal to accept an appointment as a commissioned officer.

Please read USMA Form 5-50 (see Appendix A, Page 43), consider it carefully, and discuss it with your parents so you fully understand your military service obligation to the nation.

You will sign 5-50, the Oath of Allegiance, on R-Day as part of your in-processing.

THE MISSION

To educate, train and inspire the Corps of Cadets so that each graduate is a commissioned leader of character committed to the values of Duty, Honor, Country and prepared for a career of professional excellence and service to the nation as an officer in the United States Army.

As a young man or woman considering your options for obtaining a quality college education, you may wonder what unique opportunities you will find at the United States Military Academy at West Point (USMA). USMA offers one of the most highly respected, quality education programs in the nation and the foremost leadership training program in the world. Each graduate earns a Bachelor of Science degree and a commission in the U.S. Army. USMA's fully funded, four-year federal government program builds a solid leadership foundation that is essential when you serve your country as a U.S. Army officer following graduation.

Administrative titles at West Point may differ from those at most colleges, but the responsibilities that go along with the titles are similar.

The superintendent, like a college president, heads USMA, and the chief of staff is the principal executive to the superintendent in all command matters, directing and coordinating the formulation of operating policies and implementation of decisions of the superintendent. The dean of the Academic Board, like a college dean of faculty, coordinates the activities of the academic departments and advises the superintendent on academic matters.

The commandant of cadets is the military equivalent of a dean of students, overseeing cadet government and supervising the military training of the Corps of Cadets.

The superintendent, dean, and commandant join the heads of academic departments; the directors of Admissions, Military Instruction, and Physical Education; and the Medical Activity commander, to form the Academic Board, which establishes standards for admission, academic performance, and a wide range of other educational and administrative policies.

The faculty, composed primarily of Army officers, combines the wisdom and continuity of tenured professors and associate professors with instructors assigned to the academy for three or four years. Since 1815, a Board of Visitors, similar in function to a board of trustees, has annually reviewed USMA's curriculum, policies, and equipment and submitted recommendations to the president of the United States.

The United States Military Academy at West Point is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104 (267-284-5000). The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

THE MILITARY ACADEMY

The nation's oldest service academy – the world-famous United States Military Academy at West Point – is easily recognized in photographs or television news clips of the Corps of Cadets on parade or of the traditional march-on before the Army-Navy football classic. The academy is much more than a full-dress parade; it is an exciting and memorable four-year experience that stretches your intellect, develops your self-confidence and leadership potential, and prepares you for an important leadership role while serving our nation.

As you consider your college options, ask yourself these questions: What can I expect at West Point? What will USMA expect of me? What makes the academy unique? What follows are the answers to these important questions.

The Academy's Purpose

USMA is charged with educating, training and inspiring young Americans to provide the Army with commissioned leaders of character. The academy prepares graduates for selfless service to the nation.

Service to Country

What does this mean for you? It means that your personal goal should be to serve America as an Army officer. It means that you, as an Army officer, will lead people and organizations; manage resources to maintain the peace or deter or win wars; and accomplish other missions directed by our nation's elected leaders. It means you will operate in demanding and stressful environments where you will need to anticipate the unexpected, reason clearly in the midst of chaos, and lead with bravery and compassion. To help prepare you for the rigors of service as a commissioned officer in the United States Army, the academy provides a stressful, demanding program that will challenge you intellectually, militarily, and physically in an environment that promotes the development of character.

Education — Among the Best

USMA is consistently ranked among the top colleges in the country, and though it's a great honor, it's not surprising to those familiar with the United States Military Academy.

Since its founding in 1802, the academy has provided a world-class education. It is a Tier I academic institution, placing it in the same category as the famed Ivy League schools. The academic curriculum is broad-based and challenging.

The institution The United States Military Academy at West Point is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104. (267-284-5000) The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

Six engineering majors programs — civil engineering, electrical engineering, mechanical engineering, systems engineering, environmental engineering, and engineering management — are accredited by the Engineering Accreditation Commission of ABET, www.abet.org. In addition, the computer science major is accredited by the Computing Accreditation Commission of ABET, www.abet.org.

Cadets at West Point receive a balanced undergraduate education in the arts and sciences, a Bachelor of Science degree, and a firm foundation for future intellectual growth.

Army Opportunities

When you enter the academy, you are also beginning a profession. Upon graduation you are commissioned as a second lieutenant in the U.S. Army and will serve on active duty for at least five years. As you begin your military career you will be responsible for people, training, and equipment. Each new promotion brings additional responsibility and increased opportunity.

Service within the United States is complemented by overseas assignments, providing cross-cultural awareness and further opportunities for personal and professional growth.

Other Contributions

Clearly, military readiness is the Army's main task. Accordingly, USMA officers have served in capacities as varied as the nation's needs. Because of the breadth of their education and leadership experience, USMA graduates repeatedly have been sought for high-level leadership. Many have continued to serve the nation after a full military career and retirement from the Army. Their numbers include two U.S. presidents: Ulysses S. Grant and Dwight D. Eisenhower. Others are ambassadors, state governors, legislators, judges, cabinet members, educators, engineers, and corporate executives.

History: Change Within Tradition

When you join The Long Gray Line, you become part of a tradition almost as old as the nation. The first of the service academies, USMA has trained officers for more than 200 years. Yet the academy continuously changes in anticipation of the nation's needs. This gradual evolution of the academy's programs and activities has prepared its graduates to serve the nation; however, through it all, the academy remains unwavering in its mission: to provide the Army and the nation with commissioned leaders of character.

Leader Development at USMA

Everything cadets experience during their 47 months at West Point is focused on developing them as leaders of character who will serve as officers in America's Army. There is no other purpose for the academy.

The Cadet Leader Development System is the formal means of coordinating and integrating the programs, activities, and resources necessary to develop cadets as leaders of character. The system provides for sequential and progressive development in three complementary programs – Academic, Military and Physical – in a moral-ethical environment that promotes exemplary character.

Academic

USMA's Academic Program includes an excellent, broadly structured undergraduate curriculum that balances the physical sciences and engineering with the behavioral and social sciences. The goal is for every graduate to be able to think creatively and clearly express original ideas on both technological and interpersonal issues. In addition, the academy seeks to instill in cadets a commitment to progressive and continued educational development.

Military

USMA's Military Program provides an outstanding professional foundation focused on education in the American military ethic and the Army's core values, along with training in individual and small-unit leadership skills. Cadets are inspired to make a commitment to national service as an Army officer and to adopt the ideals of the seven Army Values.

Cadets receive formal military education each year in subjects that prepare them to become leaders. This education is complemented by summer military training, where cadets learn basic Soldier skills, such as firing a rifle accurately, navigating in the woods with a map and compass, and rappelling off high cliffs. In addition, cadets have the opportunity to spend part of one summer assigned to a unit in the field Army. These assignments often take cadets to Europe, Korea, Alaska, or Hawaii. Finally – and perhaps most importantly – cadets are afforded the privilege of leading and training junior members of the Corps of Cadets.

Physical

The Physical Program is focused upon the physically demanding requirements of an Army officer. It endeavors to develop in cadets the ability to maintain personal and unit fitness, fosters the warrior spirit, builds an appreciation for teamwork, and inspires the will to win. Specific program activities include physical education classes, regular fitness testing, and competitive athletics.

Character Development

Moral-ethical development is central to the 47-month West Point Experience and is explicitly mandated by the academy's mission statement. The emphasis on personal character is to support the USMA Motto – "Duty, Honor, Country" – and the ideals of the seven Army Values: loyalty, duty, respect, selfless service, honor, integrity and personal courage. A powerful means of influencing character development is the day-to-day interaction with USMA staff and faculty members, who set high standards for ethical conduct, but the academy also relies upon several formal developmental means.

In the Military Program cadets inevitably experience a wide variety of ethical dilemmas as they perform their duties as leaders and as subordinates. These dilemmas represent opportunities to make decisions that will shape their individual value systems and, potentially, the value systems of their peers. Officer and NCO supervision affords the cadets the opportunity to make ethical choices under the guidance and mentorship of experienced, professional Soldiers. The Simon Center for the Professional Military Ethic at West Point has oversight on the instruction of Army Values and the professional military ethic as well as the two programs that highlight the academy's core values: honor and respect.

The Honor Program

The ability to educate, train, and inspire outstanding leaders is linked to the academy's commitment to ensuring graduates internalize the values of truthfulness, fairness, respect, and commitment, ensuring others in the Profession of Arms maintain those values as well. In short, USMA expects its graduates and cadets to commit to a lifetime of honorable living. It expects the Corps of Cadets to live by the Honor Code and System, which simply states: "A cadet will not lie, cheat, steal, or tolerate those who do."

Under the supervision of the staff and faculty, the Corps of Cadets maintains the Honor Code and System. Since 1922, the elected members of the Cadet Honor Committee have represented the corps on all matters pertaining to honor and consider themselves to be stewards of the code.

The Respect Program

The ability to educate, train and inspire leaders of character is linked to the academy's commitment to ensuring a positive command climate, eliminating discrimination, and fostering an atmosphere of dignity and worth. In order to ensure a healthy command climate and focus more succinctly on character development, USMA adopted "respect" as a core value. The intent is to engender an attitude within the Corps of Cadets whereby "Cadets will treat others and themselves with dignity and worth and expect the same from those around them." The Respect Program Goals include many of the same tenets as an Army Equal Opportunity Program and exceed those expectations with its development and execution by a full cadet staff. The Cadet Respect Captain and Respect Committee are responsible for ensuring the corps of cadets understands the leader responsibility for a respectful climate, prevent discrimination, and prepares their fellow cadets for leading a diverse Army operating as ambassadors in diverse nations.

Individual Advanced Development

As cadets progress in their 47-month experience, they may take advantage of voluntary opportunities to pursue a specific area of personal interest through the Individual Advanced Development program. Many of these experiences take cadets to foreign countries, government agencies, or international organizations. Available only to those First and Second Class cadets who have successfully completed their baseline requirements, cadets have their choice of more than 250 enrichment opportunities from all three developmental programs – Academic, Military, and Physical. Most of these activities occur during the summer and provide cadets a unique opportunity for growth in areas of their choice.

Daily Schedule

This schedule typifies a cadet's life during the academic year, August through May. Cadets have many extracurricular opportunities; they may choose from more than 100 extracurricular activities and 25 intercollegiate sports. Worship services and other religious activities are also available for cadets. During the summer months, cadets take vacations and participate in military training and Individual Advanced Development.

The more-than 4,400 cadets who comprise the United States Corps of Cadets form a brigade of four regiments. A cadet regiment consists of three battalions, each with three companies, for a total of 36 companies in the brigade. Cadets fill all officer and noncommissioned officer positions in the corps. Each cadet not only leads but also receives counseling and guidance in the techniques of leadership.

THE ACADEMY, CONTINUED

In addition, each cadet is rated on leader development through an assessment system.

Vacations and Free Time

The number of vacations (leaves and passes) and the amount of free time a cadet has depends upon seniority as well as performance. While a First Class cadet (senior) has many opportunities to take weekend passes, a plebe (freshman) will have only a few weekend passes available. In addition to these passes, a plebe may leave the academy on authorized athletic, extracurricular, or cultural trips. All cadets may be awarded weekend passes based upon individual or unit achievement. All cadets may take Thanksgiving, winter holiday, spring, and summer leaves.

Pay and Allowances

As members of the U.S. Army, cadets receive room, board and more than $10,000 per year in pay. The cadet must pay for a notebook computer, uniforms, textbooks, and activity fees from this amount. Each cadet candidate is asked to make an initial deposit of $2,000 to help defray initial expenses.

Counseling and Health Care

Academic, military, financial and other types of personal counseling are available to cadets at all times. The Center for Personal Development is a cadet counseling service providing individual and group assistance for a variety of personal needs. Apart from this professional counseling, cadets can always seek advice from their peers in the cadet chain of command.

Cadets receive complete medical and dental care while at West Point. If a medical service is not available at the military hospital, civilian medical providers and facilities are used. Costs are reimbursed under the military health plan called "Tricare." Tricare benefits must be preauthorized except for emergency care.

Parents are advised to retain civilian medical coverage for their cadet while attending the academy. Eligibility for military health benefits terminates at midnight on the date a cadet is separated from the academy before completion of the four-year program. Retention of a civilian medical plan ensures continuous medical coverage, should the cadet be discharged before graduation, when medical coverage from the U.S. Army continues.

Facilities

The academy includes more than 16,000 acres in Orange County, New York, 50 miles north of New York City. Framed by the majestic Hudson Highlands and poised above the Hudson River, the massive Gothic structures of the campus blend with the rugged beauty of the surrounding hills.

The United States Military Academy Library, located in Jefferson Hall, a new, state-of-the-art learning center in the academic area, provides up-to-date, fully networked library service to the cadets, faculty and remote users. Supplementing a collection of more than 600,000 volumes, the library offers numerous full-text databases providing access to the contents of thousands of scholarly journals. Open more than 100 hours per week during the academic year, the library also offers a highly skilled staff, group study rooms, and an extensive microfilm collection. The institutional records of the academy are maintained as part of the library's collections, and these provide invaluable primary source material for research.

West Point's modern academic facilities are matched by its athletic facilities. Michie Stadium, home of Army Football, attracts crowds in excess of 40,000 during picturesque football weekends in the fall. The Kimsey Athletic Center, the Hoffman Press Box, Randall Hall, the Lichtenberg Tennis Center, the Lou Gross Center and the Anderson Rugby Center are new facilities that provide first-class resources for football, basketball, hockey, tennis, lacrosse, gymnastics and rugby programs. The Foley Athletic Center houses a state-of-the-art, climate-controlled indoor playing field.

Holleder Athletic Center, adjacent to the stadium, is a multi-sport complex housing a hockey rink with seating for 2,700 and a basketball arena with a 5,000-seat capacity. The 500,000-square-foot Arvin Cadet Physical Development Center is a state-of-the-art physical fitness facility that includes two gymnasiums, two multipurpose rooms, two swimming pools, six racquetball courts, five wrestling rooms, a rock-climbing wall, two fitness rooms, and a sports medicine facility.

West of the installation, the reservation's lake-dotted, forested highlands provide an extensive military training and recreational area. In the summer, Camp Buckner is used for field exercises of all descriptions. USMA cadets and residents may also hunt, fish, swim and hike on the reservation. In addition, Army Reserve Component units schedule field exercises; scouts and other civilian groups camp and hike, and local townspeople enjoy the recreational use of Long Pond. Round Pond is a clear mountaintop lake surrounded by a beach, playgrounds, picnic areas, and campgrounds. The Round Pond Office and Bait Shop sells West Point fishing and hunting passes and water ski passes for Stillwell Lake; and the Outdoor Equipment Resource Center, located behind the office, rents camping equipment, boats and trailers, party canopies, and various sports equipment.

West Point has an 18-hole golf course that winds through the lovely hills surrounding the north side of the post, a driving range, and a clubhouse with a pro shop and snack bar that also services the adjoining Victor Constant Ski Slope in the winter months.

Five separate chapels provide a variety of religious services: Christian, Jewish, Muslim, and Buddhist services are available, as are a number of interdenominational prayer groups, clubs, and events.

The cadet activities center, Eisenhower Hall, contains a 4,500-seat auditorium, a 1,000-seat restaurant, a large ballroom overlooking the Hudson River, a games area, an art gallery, and a spacious reception foyer for cadets and guests. Grant Hall offers additional cadet snack and lounge facilities.

The Visitors Center and the West Point Museum provide thousands of visitors a glimpse of daily life at the academy and the history of this military post and its graduates.

By entering the academy, you are taking the first step in a demanding, exciting, and rewarding profession as an officer in the United States Army.

An Army officer takes responsibility for the welfare, development and safety of Soldiers. It is a challenging task. An officer must motivate Soldiers, understand the complexity of sophisticated weapons systems, and analyze various situations and make crucial decisions that may have an international impact.

An Army officer must be able to understand and help fulfill the Army's current and future operational demands. Army divisions are reorganizing to become leaner and more mobile, yet more lethal in their ability to defend our nation. Officers must be able to adapt to new technologies, especially digital communications, which speed the exchange of information among all operational levels. These new technologies enable commanders to move their forces faster and concentrate their firepower more effectively.

An Army officer's leadership skills will be challenged with the various roles the Armed Forces play throughout the world. There is disaster assistance, community support, large and small missions, joint and allied training, and peacekeeping around the world.

An officer is a role model for Soldiers, instilling the strengths of the U.S. Army's core values – loyalty, duty, respect, selfless service, honor, integrity and personal courage – while leading and guiding his or her troops. Most importantly, there is a sense of pride that comes with being part of the world's finest Army.

After Graduation – What Then?

Upon graduation, you will be commissioned a second lieutenant in the U.S. Army and serve for at least five years on active duty as an Army officer.

When a USMA graduate flings his or her cap in the air, signaling the end of a 47-month experience on the banks of the Hudson River, it also signals the start of a special career where self-sacrifice and self-discipline are required.

The Army has a wide variety of specialized fields, called "branches." Each branch requires its own brand of technical and tactical expertise. Depending upon the needs of the Army and your personal desires, you will select from such branches as Adjutant General Corps, Air Defense Artillery, Armor, Aviation, Chemical Corps, Corps of Engineers, Field Artillery, Finance Corps, Infantry, Military Intelligence, Military Police, Ordnance, Quartermaster, Transportation Corps, Medical Service Corps, or Signal Corps.

Whatever the branch, an officer is responsible for the training and morale of his or her troops and the maintenance and employment of their equipment. Assignments around the world test an officer's leadership and managerial skills. The officer's performance and the needs of the Army are considered when determining the nature and locale of assignments.

Officers attend a Basic Officer Leader Course that teaches junior officers about the Army culture and trains them in basic field skills. Upon successful completion of this course, officers transition to branch-specific courses to develop their competence in the technical aspects of their specialties.

During the first eight years of service, officers will be in first-line leadership, troop command, and staff positions and gain additional education and training, both military and civilian. All officers attend an advanced course in their branch area of specialty to prepare for the higher levels of responsibility, leadership, and specialization required as commanders.

Advanced Professional Development

At about the 11th year of service, every officer selects a career field. This critical point in an officer's career provides the opportunity to stay as a mainstream warfighter or shift to a functional specialty, such as operations research, foreign area officer, communications-electronics, or engineering. Professional patterns in the modern Army have come to demand academic specialization. Many academy graduates who remain in the Army earn graduate degrees from leading civilian universities.

Officers continue on to Command and General Staff College, where they study subjects such as high-level management practices and international affairs. Education and experience at this level prepare them for the highly rewarding later years when they may be working in the Pentagon, commanding a large troop unit, serving as a military attach in a foreign country, or having the responsibility of being in charge of leading a professional school, training junior officers.

Outstanding officers are selected to attend one of the Senior Service Colleges or a foreign equivalent. Many make creative contributions to thought and research on the defense implications of their specialties.

A small group of the most talented officers is selected for the rank of general officer. They make their greatest professional contributions commanding divisions or larger units composed of thousands of men and women, or participating in the highest policy councils of the nation.

It is a great responsibility to lead Soldiers in a time of national emergency and to guard the nation's readiness in times of peace. Life as an Army officer is driven by service to country and is full of challenge and satisfaction.

ADMISSIONS

Each year the academy admits approximately 1,200 young men and women. These new members of the Corps of Cadets come from all corners of the United States and represent nearly every race, religion, and culture in the country. Nurtured by the USMA environment, this diversity of background helps cadets gain a culturally rich educational experience.

To become a cadet you must meet the requirements specified by public law and must be qualified academically, physically and medically. Each candidate must also obtain a nomination from a member of Congress or from the Department of Army in one of the service-connected categories described later in this section.

As a candidate, you are evaluated for admission on the basis of academic performance (high school record and SAT or ACT scores, including the required writing portion, if taking the ACT), demonstrated leadership potential, fitness assessment, and medical qualification.

The academy seeks a class composition of top scholars, leaders, athletes, Soldiers, women, and minorities to maintain a diversified collegiate environment and corps. USMA encourages a strong college-preparatory academic background as a prerequisite for admission.

Recommended areas of preparation are: four years of English, with strong emphasis on composition, grammar, literature, and speech; four years of math – algebra, plane geometry, intermediate algebra, trigonometry; at least two years of a foreign language; four years of science, including two years of laboratory science such as chemistry and physics; and one year of U.S. history.

Additionally, you will find courses in geography, government, and economics to be very helpful. If your school includes a course in pre-calculus and calculus in its curriculum, and a basic computer course, those courses will be extremely helpful during your first year at West Point.

College courses taken prior to entrance to the academy may be substituted for similar courses in the academy curriculum (see "Validation," Page 16).

1. Determine whether you meet the basic requirements.

General Qualifications

Candidates must:

– Be at least 17 but not older than 22 on July 1 of the year you enter the academy.

– Not be married.

– Not be pregnant.

– Not be legally responsible for support of any children.

Medical Qualifications

Candidates must:

– Be in good physical and mental health.

– Pass a Medical Exam (see Appendix B).

Physical Qualifications

Each candidate should have:

– Above-average strength, endurance and agility.

– Strong performance on the Candidate Fitness Assessment (see Appendix C).

2. Start a file at USMA online.

USMA will start your candidate file upon receipt of a completed Candidate Questionnaire. You should complete the Candidate Questionnaire online at the Admissions website, **www.westpoint.edu/admissions**, in the middle of your junior year in high school or as soon thereafter as possible. You must have a Social Security number to establish a file. Your file will be reviewed, and you will be notified if you lack the qualifications to compete for admission.

3. Apply for nominations.

You must obtain a nomination in order to compete for admission to the academy, and you should apply for a nomination from each source for which you are eligible during the spring of your junior year.

Congressional nominating authorities specify to the Department of Army the method of selecting candidates to fill cadetships. Cadetships are allocated by law to the vice president; members of Congress; congressional delegates from Washington, D.C., the Virgin Islands, and Guam; the governors of Puerto Rico and American Samoa; the resident representative to the United States from the Commonwealth of the Northern Mariana Islands; and the Department of Army.

At a minimum, most candidates are eligible for a congressional nomination from their local congressional representative, their two United States senators, and the vice president of the United States.

You can find information about applying for nominations and view request letter formats on the USMA Admissions webpages: www.westpoint.edu/admissions.

Types of Nominations

Congressional

Members of Congress may select up to 10 young people to compete for each cadetship vacancy they have. As a member of Congress, the vice president has five cadetships for applicants from the United States at large. U.S. senators and representatives nominate from their respective states and districts. Each may select up to 10 young people to compete for each cadetship vacancy they have. As a member of Congress, the vice president has five cadetships for applicants from the United States at large. Candidates interested in seeking a vice-presidential nomination should apply online at the following website: www.whitehouse.gov/administration/vice-president-biden/academy-nominations. Applicants must complete the online nomination application during the application period of March 1 to January 31 preceding the year of entrance to the academy.

The Washington, D.C., congressional delegate nominates from that district. The governor of Puerto Rico nominates a native-born Puerto Rican, and the Puerto Rican Commissioner nominates five residents of Puerto Rico. Congressional delegates of Guam and the Virgin Islands, the resident representative from the Northern Mariana Islands, and the governor of American Samoa nominate sons and daughters of U.S. citizens or nationals living on their respective islands.

Service-Connected

Sons and daughters of career military personnel are eligible for presidential nominations. The term "career military personnel" refers to members of the U.S. Armed Forces (Army, Navy, Air Force, Marines, Coast Guard) who are on active duty other than for training and who have served continuously on active duty for at least eight years, or who were retired with pay or granted retired or retainer pay. Also included are service members currently serving in the Reserve Component who are credited with at least eight continuous years of service computed under section 12733 of Title 10, United States Code. Finally, members of the Select Reserve who would be (or who died while they would have been) entitled to retirement pay except for not having reached 60 years of age are also included in this category.

Regular Army and Reserve Components

This category is for enlisted members of the Regular Army, Army Reserves, and Army National Guard. To request a nomination under this category, enlisted members should submit a commander's endorsement with their applications.

This application must reach the Director of Admissions by the second Monday in January. Soldiers who are not offered an appointment to the academy are automatically considered for enrollment in the U.S. Military Academy Preparatory School (USMAPS). Some applicants who fail to obtain admission to the academy on their first tries enlist in the Army and win appointments in either the Regular Army or Reserves category on their second attempts. If interested, consult with an Army, Army Reserve, or Army National Guard recruiter.

ROTC, JROTC Honor Units

Applicants enrolled in a junior or senior Army Reserve Officer Training Corps program are eligible for nomination in this category. Certain ROTC schools designated by departments of the Navy, Air Force, and Marine Corps as "Honor Units with Distinction" may recommend three of their honor graduates for nominations. Applications should be made through the professor of military science or the senior instructor at such a school to the Director of Admissions, U.S. Military Academy, 606 Thayer Road, West Point, NY 10996-1797.

Your senior instructor must fill out and submit a Request for ROTC Nomination to USMA (Form 5-497) and a USMA Admissions Interview Report (USMA Form 21-8) to be considered for a nomination. This application must reach West Point by the second Monday in January. The best-qualified candidates, without regard to schools, are then selected for enrollment.

Sons and Daughters of Deceased or Disabled Veterans

This category is for sons and daughters of deceased or 100-percent disabled Armed Forces veterans whose deaths or disabilities were determined to be service-connected, and for sons and daughters of military personnel or federally employed civilians who are in a missing or captured status. Application should be made to the Director of Admissions, U.S. Military Academy, 606 Thayer Road, West Point, NY 10996-1797. This application must reach West Point by the second Monday in January.

Sons and Daughters of Persons Awarded the Medal of Honor

All sons and daughters of persons awarded the Medal of Honor who seek admission and are fully qualified will be admitted. Apply by the second Monday in January to the Director of Admissions, U.S. Military Academy, 606 Thayer Road, West Point, NY 10996-1797.

Other Countries

No more than 60 citizens of foreign nations may be USMA cadets at one time. The applicant should prepare a letter requesting a nomination, addressed to the United States defense attaché of the nominating nation. Requirements for enrollment, advancement from class to class, and graduation are the same as for United States citizens.

The three nomination methods:

Competitive Nominations

The nominating authority submits a slate of up to 10 nominees. The academy evaluates all nominees and ranks them according to their qualifications. The best-qualified nominated candidate is selected for an offer of admission.

Principal w/Competing Alternates

The nominating authority designates a principal nominee; up to nine alternates compete as above for the cadetship only if the principal nominee is disqualified.

Principal w/Numbered Alternates

If the selected principal nominee is not fully qualified, each alternate is evaluated in the order designated by the nominating authority until one is found fully qualified.

Department of Army Nominations

Service-Connected (Presidential) 100

Enlisted Members of the Regular Army 85

Enlisted Members of the Army Reserve/ National Guard 85

Honor Military, Naval Schools and ROTC... 20

Sons and Daughters of Deceased or 100-percent Disabled Veterans (approx.) 20

Sons and Daughters of Persons Awarded the Medal of Honor ..... Unlimited

4. Fill out USMA forms online.

The Admissions Office reviews Candidate Questionnaires, and candidates who pass the initial screening will receive instructions about the remaining admissions requirements, including being qualified by the Department of Defense Medical Examination Review Board (DoDMERB). All procedures and forms must be completed promptly. Candidates who do not pass the initial screening will be notified.

5. Follow up on nominations.

A nomination is the legal authority for the academy to offer admission, and the nomination process is independent of the USMA admissions evaluation.

Each year, more than 10,000 candidates open files for admission to the academy. Only about 4,000 receive congressional or service-connected nominations, so it's important to aggressively pursue every nomination available to you.

6. ACTs and/or SATs.

All candidates must take the timed ACT or SAT. USMA does not accept untimed scores for academic evaluation. We recommend that candidates take both the SAT and ACT at least once.

Please note: All candidates for admission are required to submit a writing score with their SAT and/or ACT exam. The SAT has a writing exam as part of the basic test; however, the writing portion on the ACT is currently optional. If you register for the ACT, you must select the "ACT Plus Writing" exam in order to be considered for admission. **ACT scores submitted without the writing section will not be evaluated.**

It is recommended that candidates take the ACT and/or SAT exams as many times as practical, as the Admissions Committee only considers the candidate's highest scores on each segment of the exams.

Although not required for admission, advanced placement examinations are considered in several subject areas, including mathematics, physics, chemistry, history, and social sciences (see the section on Validation and Advanced Placement, Page 16). Results are evaluated for awarding formal credit for course completion or scheduling individuals into higher-level sections or classes.

ACTs

The ACT is administered at test centers throughout the world. For information on ACT testing in your locale, consult any high school counselor or visit the ACT website: **www.act.org**. Again, if you register for the ACT, you must select the "ACT Plus Writing" exam. To ensure the academy receives your test results, list the ACT college code number for USMA (2976) on your registration folder. To ensure your congressional representatives receive your test results, you must place their ACT code number on your application. The congressional code numbers can be obtained on the ACT website at **www.act.org**.

SATs

Candidates taking the College Board exam for admissions are required to take the SAT I. (Note: SAT II subject tests are not required.) To take the examination, consult your guidance counselor or visit the "Student" section of the website: **www.collegeboard.com**. To ensure the academy receives your test results, list the college code number for USMA (2924) on the registration form. To ensure your congressional representatives receive your test results, contact your congressional representatives to obtain their College Board code numbers and record each number on the registration form. Your test results will be mailed directly to your congressional representatives. Final admissions decisions will be made by April from the data present at that time in the candidate's file.

Qualifying Medical Exam

All candidates desiring to enroll must take a Qualifying Medical Examination. One Qualifying Medical Examination meets the application requirements of all service academies and all ROTC scholarship programs. The Department of Defense Medical Examination Review Board (DoDMERB) will schedule your exam and evaluate the results after you have started an admissions file. You will receive instructions for taking the Qualifying Medical Examination directly from DoDMERB. It is important to schedule medical exams at the earliest time possible to allow sufficient time to resolve potential medical issues.

For information or questions on medical issues, applicants may visit the following DoDMERB website: **https://dodmerb.tricare.osd.mil**. To access information about DoDMERB, click on the "FAQs" link on the left column menu. For tracking medical status, applicants should click on the "Applicant" link. Detailed USMA medical requirements are covered in Appendix B.

Candidate Fitness Assessment

In order to qualify for admission to the academy, all candidates must pass the Candidate Fitness Assessment (CFA). The CFA measures strength, endurance, and agility. There are six events in this test: basketball throw for distance from kneeling position, pull-ups, timed shuttle run, modified sit-ups, pushups, and timed one-mile run. Those six events are described in more detail in Appendix C. Candidates will receive instruction booklets for their physical education instructors describing how to conduct this test in their schools. In addition, any Army officer or USMA liaison representative may administer the CFA.

Candidates are advised to prepare for this examination by engaging in vigorous activities such as running, general conditioning exercises, and competitive games, in addition to practicing the specific test events. The only other CFAs accepted by USMA are the Naval Academy or the Air Force Academy CFAs.

7. Monitor Application Status.

A formal offer of admission is possible as early as November for fully qualified, outstanding candidates who have completed all admissions requirements and receive nominations. The majority of offers of admission are announced by mid-April. Files not completed by the last working day in February will be closed. It is possible that a few candidates will not be notified of acceptance until shortly before entrance. Offers of admission are conditional from time of offer to date of admission.

8. Visit West Point.

Candidate Orientation Visits are offered Monday through Friday during the academic year (September to November and January through April). Members of the Corps of Cadets volunteer to escort each candidate individually, and the orientation includes class attendance, a visit to the barracks, lunch in the Cadet Mess and an Admissions briefing. If you have the opportunity, a visit to West Point offers invaluable insight into cadet life and can greatly assist in the college decision-making process. A student who has applied for admission can **arrange for a visit at our website – www.westpoint.edu/admissions. Please understand that at least two weeks' notice is required to schedule a visit**.

For more information about orientation visits, please call (845) 938-5760.

COMPOSITION OF A RECENT CLASS

Number of Applicants

	Men	Women	Total
Applicant Files Started	12,282	3,125	15,407
Nominated	3,461	705	4,166
Qualified (academically & in physical aptitude)	2,141	399	2,353
Admitted	1,002	188	1,190

Rank in High School Class

First Fifth	71%
Second Fifth	20%
Third Fifth	8%
Fourth Fifth	1%
Bottom Fifth	0%

ACT Scores**

Range	Eng	Math	Sci Reas	Read
31-36	41%	40%	26%	50%
26-30	40%	43%	48%	34%
21-25	17%	17%	25%	15%
16-20	2%	0%	1%	1%
11-15	0%	0%	0%	0%
Mean	29	29	28	30

SAT Scores**

Range	Critical Reading	Math
700-800	20%	26%
600-699	46%	49%
500-599	29%	23%
400-499	5%	2%
300-399	0%	0%
Mean	627	646

***Includes only scores used as a basis for admission.*

Academic Honors

Class Valedictorians	97
Class Salutatorians	42
National Merit Scholarship Recognition	227
National Honor Society	747

Activities

Boys/Girls State Delegate	214
Class President or Student Body President	232
School Publication Staff	
School Paper Editor, Co-Editor or Staff	141
Yearbook Editor or Co-Editor	96
Debating	162
Dramatics	106
Scouting Participants	445
Eagle Scout (men) or Gold Award (women)	160
Varsity Athletics	1,155
Letter Winner	1,093
Team Captain	777
Combat Veterans	257
International	14

Notes:

Cadets are appointed by Congress from each of the 50 United States, as well as from military-service sources.

Upon graduation, international cadets return to their countries as officers in their respective armed forces.

9. Prepare for entrance to USMA.

Candidates should prepare for the academic, physical, and leadership demands a cadet faces at West Point. If you have met the academic qualifications for admission, you will be ready for the challenges of the USMA curriculum. Work hard on your physical fitness. Vigorous conditioning exercises, swimming, and cross-country running are recommended. It is especially important that a candidate train through a variety of strenuous activities. Participation in school and community activities helps a future cadet prepare for leadership positions at the academy, and seeking leadership roles in those activities or on sports teams can further enhance leadership preparation.

USMA Liaison Officers

USMA Admissions enjoys the nationwide assistance of liaison officers who provide service to candidates. They include graduates of the academy, both in and out of the active Army, and U.S. Army Reserve officers who have been trained at West Point for this specific program. These volunteers are available to assist candidates in the admissions process and to answer questions about specific USMA programs. Through them, the Admissions Office can maintain a flow of information about the West Point Experience and assist candidates in pursuit of appointments to the academy.

To locate an Admissions representative in your area, first find your congressional district. Go to www.house.gov and type in your zip code at the top of that page to locate your congressional representative. Then call your region's candidate technician, who can identify your local Admissions representative from your congressional district number. You can find the staff for your region – Northeast, Southeast, Great Lakes, Southwest, or Far West – on the Admissions website at www.westpoint.edu/admissions/SitePages/Admissions Team 2.aspx.

ACADEMIC PROGRAM

Those entering the academy can expect to expand their knowledge, to develop more fully the intellectual skills they need to assume responsibilities as junior officers, and to build strong foundations for assuming senior officer responsibilities. They will also acquire a firm foundation for postgraduate specialization in one of a variety of academic disciplines.

The Educational Philosophy

The United States Military Academy at West Point, as the only college specifically charged with preparing young men and women for service as officers in the United States Army, has a singular educational philosophy: Graduates must be enlightened military leaders of strong moral courage, whose minds are creative, critical, and resourceful.

Standard academic courses provide an essential core of knowledge in the arts and sciences with emphasis on problem-solving. Advanced and elective courses allow the individual cadet to concentrate or major in a specific area of interest.

The Academic Program, Physical Program, and Military Program form the three major aspects of the West Point leader-development experience. While the academy continually adapts itself to the pace of professional, national, and international change, it remains true to the sense of duty, honor, and service to country that has traditionally distinguished its graduates.

The Academic Curriculum

The present curriculum reflects more than 200 years of evolutionary change, both in the military profession and in higher education. Today's balanced offering of courses in the arts and sciences leads to a Bachelor of Science degree and builds a foundation for continuing education and professional development.

Methods of Instruction

A cadet is far more than a mere face in the crowd. Small classes – usually 12 to 18 cadets – assure individual participation and individual attention.

Cadets are encouraged to participate daily and are evaluated frequently. If a cadet is unsure of the material taught on any given day or wishes to move beyond it, extra one-on-one instruction is available.

Cadet Support – Center for Enhanced Performance

One of the unique features of the academy is the Center for Enhanced Performance (CEP), an unparalleled facility devoted to educating and training the key mental and academic skills that underlie high performance in all situations. At the CEP, cadets have the opportunity to participate in two different programs oriented toward maximizing performance in the academy's academic, physical, and military experiences. Additionally, cadets can take integrative courses designed to incorporate fundamental skills from both programs in order to more fully develop as self-regulated learners.

In addition to those courses, the AEP provides all USMA cadets with a variety of individualized and group student development services.

The AEP's **Company Tutor Program** is one of the nation's most comprehensive peer tutor programs, with over 700 cadet tutors. It is certified by the College Reading and Learning Association (CRLA). The tutor director mentors the cadet academic staff and coordinates and facilitates annual tutor training and Term End Examination (TEE) preparation sessions for all cadets.

Another valuable resource within the AEP is the **Academic Athletic Support Coordinator Program**. These counselors are hired by the Director of Intercollegiate Athletics but partner with the CEP to work specifically with student athletes, providing individualized support, writing assistance, and group sessions that help cadets achieve academic success.

Another CEP program is the **Performance Enhancement Program (PEP)**, which provides individual and team instruction in applied sport psychology, using state-of-the-art training methods and sophisticated audio/video technologies. This training, as comprehensive and detailed as any received by professional and Olympic athletes, enables cadets to develop confidence under pressure, concentration amidst distractions, and composure during times of stress. It is designed to enhance the adaptive thinking, mental agility, and self-regulation skills essential to the pursuit of personal strength, professional excellence, and the Warrior Ethos.

While derived from sport psychology, this training benefits all aspects of cadet performance and is available to all cadets. Cadets participate in individual training sessions during free periods in their academic schedule, learning and then applying the skills of visualization, attention control, energy management, and goal setting. Biofeedback training allows cadets to learn crucial self-regulation techniques, and sophisticated audio and video simulations of game and practice situations are created to facilitate guided imagery and mental rehearsal of specific sport skills.

The center's own audio/video studio produces custom-made audio files from cadets' goal scripts and instructional/motivational videos from game or practice footage. State-of-the-art electronic visual-skills training devices allow cadets to improve peripheral awareness, visual concentration, and reaction speed. In addition to individual and collective

mental skills instruction, the PEP also teaches:

PL360 Psychology of Elite Performance is a full-semester course in the theory and application of psychological skills related to physical, academic, and military performance. Cadets engage in detailed monitoring of cognition and affect, and complete projects in stress management, goal setting, imagery, and applied research. This is a 40-lesson course carrying 3.0 credits.

CEP training has been widely used both at West Point and throughout the Army to enhance the mental skills necessary to thrive amid the pressure and stress of a dynamic and complex combat environment. The Center for Enhanced Performance is a powerful demonstration of the academy's commitment to provide the finest training available to the future leaders of the nation.

Academic Support — USMA Library

The USMA Library serves cadets for both academic research and recreational reading. The library's resources include more than 600,000 volumes, more than 58,000 journals in paper and electronic format, newspapers, government documents, audiovisual materials, official USMA archives, microform journal files, and valuable special collections. Knowledgeable staff members are on hand seven days a week to provide individual and group assistance.

The library is located in Thomas Jefferson Hall, the academy's new learning center. Sharing the facility with the Center for Enhanced Performance and the Center for Teaching Excellence, Jefferson Hall provides students with an inviting location for personal intellectual development. The combined learning center staff offers cadets and faculty the highest caliber of support in their pursuit of academic endeavors.

Working in a wireless laptop environment, cadets have access to the online catalog and a broad array of undergraduate and graduate-level online research materials and services. Cadets have the opportunity to work with a vast array of manuscript collections and rare books in the library's special collections and archives. Many of these resources have been transformed to digital format and are available on the library's webpage.

Present library resources are comparable to those of a quality liberal arts college, but also reflect considerable strength in the fields of history, mathematics, science, and engineering. Extensive holdings in military subjects attract national and international scholars for special research work at West Point.

Special collections include the papers and books of famous USMA graduates including those of generals Omar Bradley and George Patton. The official cadet and academic records of the academy also provide a rich resource for study and research on USMA topics.

While the library continues to expand its resources through the newest technology and information resources, its history actually predates that of the academy. The book collection that formed the first

ACADEMIC PROGRAM GOALS

The overarching goal of the Academic Program at West Point is "to enable its graduates to anticipate and to respond effectively to the uncertainties of a changing technological, social, political, and economic world." From this goal, the academy derives a set of 10 specific program goals that address specific Army needs and reflect the attributes the academy seeks to develop in every graduate. The achievement and integration of all 10 Academic Program Goals enable graduates to meet the overarching goal.

Graduates anticipate and respond effectively to the uncertainties of a changing technological, social, political, and economic world.

Upon achieving this overarching goal, graduates will be able to:

- listen, read, speak, and write effectively
- think and act creatively
- recognize moral issues and apply ethical considerations in decision-making
- demonstrate the capability and desire to pursue progressive and continued intellectual development

... and demonstrate proficiency in six domains of knowledge:

- Engineering and Technology
- Math and Science
- Information Technology
- History
- Culture
- Human Behavior

library was the first federal library in the United States. These early acquisitions were made by Col. Sylvanus Thayer in Europe before he became superintendent in 1817. With the support of then-Secretary of War James Monroe, Col. Thayer purchased about 1,000 books, which formed the foundation of early engineering education in this country.

Technological Environment

USMA is committed to the idea of operating an "information rich" environment wherever learning occurs. Cadets and faculty at the academy enjoy the benefits of a first-class information technology environment. Every cadet has a notebook computer, and everyone is connected – wired and wirelessly – to a large array of powerful academic computing services at West Point.

USMA has carefully crafted an electronic environment in which every course offered has integrated computer use. Cadets register for classes, get grades and counseling reports, and receive and send homework assignments using the USMA network. Through the use of virtual private network (VPN) services, the network is extended to include wherever cadets or faculty members are, enabling access from any location with internet access.

With more than 6,000 active users, the networking infrastructure continues to evolve to meet the needs of cadets. West Point now has 100 percent secure wireless coverage in every academic building, most common areas, the cadet living areas and many outdoor locations. Currently the academy is piloting the use of iPads in support of the academic and training mission.

In the classroom, cadets and faculty use sophisticated software, such as computer-aided design, modeling and simulation, and 3-D terrain visualization. Multimedia interactive instruction is used across the curriculum.

Graduates of the academy are well-versed in the use of information technology and services and are ready for the challenges awaiting them in the high-tech Army of the present and future.

Lecture Series

Academic departments and other groups sponsor a comprehensive lecture series that complements the academy's course of instruction. Guest lecturers include recognized authorities in various academic disciplines, noted authors, playwrights, religious and civic leaders, businessmen, and military leaders.

Among lecturers have been Coach Mike Krzyzewski (USMA '69); American entrepreneur T. Boone Pickens; President George W. Bush; broadcaster Tom Brokaw; Reverend Desmond Tutu, archbishop of Cape Town, South Africa; former U.N. Secretary General Boutros Boutros-Ghali; Madeleine Albright, former U.S. ambassador to the U.N. and former secretary of state; former New York City Mayor Rudy Giuliani; and former Philippines President Fidel Ramos (USMA '50).

Other notables who have lectured at the academy include H. Ross Perot, founder of EDS Corporation and former presidential candidate; Frank Borman, former astronaut and CEO of Eastern Airlines; Sandra Day O'Connor, former associate justice of the U.S. Supreme Court; and the Reverend Jesse L. Jackson, founder of the National Rainbow Coalition.

Graduate Civil Schooling

The growing complexity of technology, international diplomacy, and world commitments of the Army has increasingly come to demand that Army officers attend civilian graduate institutions. Many academy graduates who serve on active duty more than the required five years attend graduate school through the Army Civil Schooling Program or on a scholarship or fellowship.

Army Civil Schooling Program

Qualified graduates are normally selected for fully funded master's programs at civilian graduate schools between their fourth and 10th years of active military service.

Medical and Legal Training

Up to two percent of each USMA graduating class may attend medical school immediately following graduation. The exact number each year will vary depending upon the needs of the service, the qualifications of the applicants, and their acceptance into medical schools. There are two fully funded sources that produce physicians for the Army: the Uniformed Services University of the Health Sciences and the U.S. Army Health Professions Scholarship Program. USMA graduates may participate in either program. If not selected to attend immediately following graduation, they may compete with other active duty Army officers afterward.

Under the provisions of the Judge Advocate General Funded Legal Education Program, selected officers may attend law school. USMA graduates must complete two years of active duty to become eligible for consideration. Selection for law school is competitive among all active duty officers who apply.

Phi Kappa Phi

The USMA chapter of the National Honor Society of Phi Kappa Phi was established in 1978. Membership in the society is based upon demonstrated academic ability and good character. Any cadet may be elected to membership who is a Second Class cadet (junior) and ranks, by Academic Order of Merit, in the upper 7.5 percent of the class or is a First Class cadet (senior) and ranks in the upper 10 percent of the class.

Fellowships and Scholarships

USMA is fourth on the list of total winners for Rhodes Scholarships, fourth on the list of Hertz Fellows, and seventh for Marshall Scholarships. In each case, the institutions with more scholarship winners also have larger student bodies.

Rhodes Scholarships

More than 90 academy graduates since 1923 have been awarded Rhodes Scholarships to attend Oxford University while on active duty, making USMA the nation's fifth-ranking source of Rhodes Scholars.

Selection is based on four categories specified in Cecil Rhodes' will: (1) intellectual excellence and attainment, (2) strength of character, (3) demonstrated leadership ability, and (4) the demonstration of physical vigor. Rhodes hoped that scholars would "esteem the performance of public duties as their highest aim."

Marshall Scholarships

The Marshall Scholarship program was established in 1953 by the government of the United Kingdom in honor of General George C. Marshall and in gratitude for the Marshall Plan. The program annually awards scholarships to graduates of United States colleges and universities for two years of study of any subject leading to the award of a British university degree.

The selection committee looks for distinction of intellect and character, as evidenced by scholastic performance and other achievements. Since USMA first participated in the competition in 1983, 34 graduates have received the scholarship, and the academy is a Marshall Scholarship Center of Excellence.

Gates Cambridge Scholarships

The Gates Cambridge Scholarship was established in 2001 through an endowment by the Bill and Melinda Gates Foundation. It is awarded to graduating college seniors who have proven academic and leadership abilities and shown an interest in issues of global concern. The scholarship provides recipients one to three years of study leading to a graduate degree from Cambridge University. USMA graduates have received 12 scholarships since first competing.

Harry S Truman Scholarships

The Harry S Truman Foundation scholarship is awarded to college juniors who have demonstrated a dedication to public service. All the service academies began competing for this prestigious scholarship in 1991, and, since then, 33 USMA graduates have won this scholarship, sixth-most in the nation.

George Mitchell Scholarships

The U.S.-Ireland Alliance awards George Mitchell scholarships to 12 graduating American seniors annually for one year of graduate study in Ireland or Northern Ireland. The academy first competed for the scholarship in 2001.

Fulbright Scholarships

The United States Congress created the Fulbright Program in 1946 as a step toward building international cooperation. With 140 participating countries, it is designed to give scholars the opportunity to observe political, economic, and cultural institutions; exchange ideas, and embark on joint ventures of importance to the general welfare of the world's inhabitants. Ten USMA graduates have won this scholarship since cadets first competed in 2004.

Rotary Foundation Scholarships

The Rotary Ambassadorial Scholarship provides the opportunity for cadets to earn a Master's Degree during one or two years of study in one of more than 150 countries around the world. The scholarship is awarded periodically by the Rotary Club district that encompasses West Point, and USMA has produced 42 Rotary Scholars in the last decade.

Churchill Scholarships

The Winston Churchill Scholarship provides support for one year of study and research at the University of Cambridge for 12 of the nation's best math, science, and engineering students. The first time the service academies were invited to compete for the Churchill was 2007.

National Science Foundation Fellowships

USMA cadets have won National Science Foundation Graduate Research Fellowships since 1961. Outstanding cadets compete annually for the fellowships, which enable them to pursue graduate study at the universities of their choice.

Hertz Foundation Fellowships

Since 1969, cadets have been winning five-year Hertz Foundation Fellowships leading to doctorates in applied physical science disciplines. Academic performance, recommendations, and personal interviews are factors considered by the foundation. Thirty-eight Academy graduates have won this scholarship, making USMA fourth in the nation.

East-West Center Fellowship

The East-West Center Fellowship provides opportunities for cadets to earn Master's Degrees in studies related to countries of the Pacific Rim at the University of Hawaii's East-West Center.

The Academic Curriculum

The academy's curriculum offers a balanced education in the arts and sciences, while also permitting cadets to pursue academic specialization in majors of their choice. The two components of the academic curriculum are a broad, general, core program that is prescribed and an elective program that is individually selected. The core curriculum is the foundation of the academic program and provides a foundation in mathematics, basic sciences, engineering sciences, information technology, humanities, behavioral sciences and social sciences. This core curriculum — from 26 to 30 courses depending upon the major — represents the essential broad base of knowledge necessary for success as a commissioned officer, while also supporting each cadet's choice of academic specialization. It is, in effect, the "professional major" for every cadet, since it prepares each graduate for a career as an officer.

The academy curriculum complements the core program by providing the opportunity for study in depth through the elective program, the choice of which leads to a major. Cadets may choose from more than 40 academic majors that cover all the humanities, sciences and engineering disciplines one would expect to find in a high-quality, selective college or university of comparable size.

Cadets may enter most majors without restriction. No special grade point averages are established for entry, but there may be a limit to the number of cadets in a particular major. Each study-in-depth program offers cadets an integrative experience – as a course or project – that addresses the overarching

ACADEMICS, CONTINUED

academic program goal: to anticipate and to respond effectively to the uncertainties of a changing technological, social, political and economic world.

The baseline path to graduation requires the cadet to complete 10 electives defined by the disciplinary field. Those cadets who desire to enrich their academic experiences and pursue disciplines in greater depth may elect to take majors that go beyond the baseline. Cadets electing these majors must follow more-demanding sequences, with 11 or more electives, and complete a senior thesis or design project. Cadets who maintain a 3.0 grade point average in the core curriculum, a 3.5 in their majors, and complete additional course work may graduate with honors.

To graduate, cadets must successfully complete the baseline requirement of 40 academic courses, seven semesters of physical education and four military science courses, and achieve a cumulative grade point average of at least 2.0. Within the 40 academic courses, cadets must successfully complete or validate each course in the core curriculum and complete a major.

Validation and AP

Cadets may be excused from ("validate") certain core courses if they have sufficient knowledge of a subject to meet that department's standards. Credit earned in other colleges, advanced placement examination scores, and tests administered at the academy are considered in validation decisions, but no credits transfer from other institutions. Advanced placement examination scores may be used in mathematics, physics, chemistry, history, social sciences, and foreign languages. Validation of a core course allows a cadet to substitute an additional elective.

If a cadet shows unusual ability or has prior knowledge of a subject but cannot validate it, he or she may be enrolled in an advanced or accelerated program.

AIADs

During the summers before the junior and senior years, cadets participate in Advanced Individual Academic Development — academic, military, or physical-development programs to enrich their individual development.

Cadets may choose from more than 100 academic-enrichment opportunities that normally involve about three weeks of active summer participation and that might include: Operation Crossroads Africa, research work in technical laboratories throughout the United States, immersion language training in foreign countries, study at other civilian and military institutions, and numerous work-fellow positions with federal and Department of Defense agencies.

Individual Advanced Study

If a cadet is an exceptional student, he or she may enroll in advanced individual study in many of the disciplines taught at West Point. These programs emphasize independent or tutorial work and are excellent preparation for graduate study.

SAMPLE 40-COURSE ACADEMIC PROGRAM

FRESHMAN YEAR	1	ENGLISH COMPOSITION	CHEMISTRY	MATHEMATICS	HISTORY[1]	PSYCHOLOGY
	2	LITERATURE	CHEMISTRY TECHNOLOGY I	INFORMATION	MATHEMATICS	HISTORY[1]
SOPHOMORE YEAR	1	FOREIGN LANGUAGE[2]	POLITICAL SCIENCE	PHILOSOPHY	MATHEMATICS	PHYSICS
	2	FOREIGN LANGUAGE[2]	ECONOMICS	MATHEMATICS	PHYSICS	PHYSICAL GEOGRAPHY
JUNIOR YEAR	1	INFORMATION TECHNOLOGY II	ENGINEERING SCIENCE[3]	INTERNATIONAL RELATIONS	ELECTIVE	ELECTIVE
	2	ENGINEERING SCIENCE[3]	ENGLISH; ADVANCED COMPOSITION	MILITARY LEADERSHIP	ELECTIVE	ELECTIVE
SENIOR YEAR	1	ENGINEERING	CONSTITUTIONAL & SCIENCE[3]	MILITARY HISTORY MILITARY LAW	ELECTIVE	ELECTIVE
	2	MILITARY HISTORY	ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE

(1) Assignment of Western Civilization/Regional Studies in World History or United States History.
(2) Foreign languages available: Arabic, Chinese, French, German, Portuguese, Russian, Spanish.
(3) Cadets pursuing most non-engineering specializations take a three-course engineering sequence in Civil, Computer, Electrical, Environmental, Mechanical, Nuclear or Systems Engineering.

MAJORS

Mathematics-Science-Engineering

Basic Science
Chemical Engineering
Chemical Engineering Studies
Chemistry
Civil Engineering**
Civil Engineering Studies
Computer Science***
Electrical Engineering**
Electronic/Information Technology Systems
Engineering Management**
Engineering Psychology
Environmental Engineering**
Environmental Geography
Environmental Science
Environmental Engineering Studies
Geospatial Information Science
Information Engineering
Information Technology***
Kinesiology
Life Science
Mathematical Sciences
Mathematical Studies
Mechanical Engineering**
Mechanical Engineering Studies
Nuclear Engineering**
Nuclear Engineering Science
Operations Research
Operations Research Studies
Physics
Systems Engineering**
Systems Management

**Major programs accredited by the Engineering Accreditation Commission (EAC) of ABET, www.abet.org.

***Major programs accredited by the Computing Accreditation Commission (CAC) of ABET, www.abet.org.

Humanities-Social Sciences

American Legal Studies
Art, Philosophy and Literature
Defense and Strategic Studies
Economics
Foreign Area Studies:
- Africa
- East Asia
- Eurasia
- Latin America
- Middle East
- Europe

Foreign Language:
- Arabic
- Chinese
- French
- German
- Portuguese
- Russian
- Spanish

History:
- International
- Military
- United States

Human Geography
International/Comparative Legal Studies
Leadership
Management
Military Art and Science
Political Science:
- American Politics
- Comparative Politics
- International Relations

Psychology
Sociology

For more information on course offerings, please refer to the USMA course catalog:
www.usma.edu/curriculum/RedBook/AY13_RedBook.pdf

TYPICAL CADET DAY

Morning:

6:55	Breakfast Formation
7:05-7:20	Breakfast
7:30-11:55	Class or Study

Afternoon:

12:10-12:25	Lunch Review (Mondays only)
12:05-12:35	Lunch (Mondays until 12:40)
12:50-1:45	Commandant's/Dean's Time
1:55-4:00	Class or Study
4:15-6:30	Intramural/Club Athletics; Drill & Ceremony; Military & Physical Training; or Free Time

Evening:

6:00-7:30	Supper (Optional except Thursday, 6:45-7:15. Plebes also have mandatory dinner Mondays & Wednesdays)
7:30-8:30	Evening Study Period/ Extracurricular Activities
8:30-11:30	Evening Study Period
11:30	Taps
12:00-5:20	Lights Out

ACADEMIC DEPARTMENTS

The academy's 13 academic departments, under the direction of the Dean of the Academic Board, are organized to support the core curriculum as well as the more than 35 majors offered at West Point. The Commandant of Cadets oversees the Department of Military Instruction and the Department of Physical Education. For specific classes or curricula, please see the USMA Red Book at www.usma.edu/curriculum/RedBook/AY13_RedBook.pdf.

BEHAVIORAL SCIENCES & LEADERSHIP

The Behavioral Sciences field directly promotes our understanding of human behavior at individual, small group, organizational and societal levels. Cadets explore underlying causes of behavior, producing military officers who can influence the organizations and societies in which they are expected to lead. In several elective programs – psychology and sociology – emphasis is on understanding as a basis for leader decisions. The elective program in Engineering Psychology examines the technology of human performance and Soldier/machine interface on the modern and future battlefields.

The department offers majors in the behavioral sciences. Five disciplinary options (majors) are available: Psychology, Engineering Psychology, Leader Development Science, Management, and Sociology.

Behavioral Sciences Majors

Overall, study of the behavioral sciences provides an opportunity to increase cadet understanding of human behavior at several levels ranging from the individual through small groups, to organizations and social institutions. The courses taught and insights gained improve cadets' ability to describe, explain, predict and influence human behavior.

The Behavioral Sciences majors allow cadets to structure an appropriate sequence of electives that will ensure understanding of behavior from the psychological, as well as the sociological and organizational perspectives. This underlying basis ensures that every program of study in the department has direct and immediate relevance to the lives of our graduates during their careers as Army officers and beyond.

Leadership and Management Majors

The Leadership and Management (LMS) Program provides cadets the academic foundation for a wide variety of activities particularly important to an Army officer. The modern-day professional Army officer is required to understand and apply concepts of leadership and management to lead, sustain, and improve organizations in a volatile, uncertain, complex, and ambiguous environment.

Cadets will choose to pursue either the leadership or the management option in order to analyze one of the fields in depth. Cadets pursuing the leadership option will study the field of leadership from five levels of analysis: individual, group, leader, organization, and environment. Cadets pursuing the management option will study the field of management from the interdisciplinary bases of human resource management, economic and financial analysis, marketing, quantitative decision-making, and strategy. Cadets studying either field will concurrently gain exposure to courses in the other option.

Cadets who major in LMS will culminate their studies by completing a capstone course tailored to their respective options.

For more information on course offerings, please refer to the USMA course catalog: www.usma.edu/curriculum/RedBook/AY13_RedBook.pdf

CHEMISTRY AND LIFE SCIENCE

The Department of Chemistry and Life Science presents a two-semester general chemistry course to all fourth class cadets. The purpose of this course is to contribute to each cadet's background those fundamental principles of chemistry and modern experimental techniques that are vital to an understanding of our external environment. The course is also fundamental to success in subsequent scientific and engineering courses and is necessary for continued intellectual growth and development as a professional officer. The department also provides elective courses that support a Chemistry Major, a Life Science Major and a Chemical Engineering Major. Each of these programs prepares cadets for service in any of the branches of the Army and for graduate studies in chemistry, chemical engineering, or the life sciences or for medical school.

Chemistry, Life Science, and Chemical Engineering Majors

The Department of Chemistry and Life Science offers separate majors for cadets with an interest in chemistry, chemical engineering, or the life sciences.

Many of the department electives have practical laboratory work integrated with the classroom instruction to improve the individual's fundamental understanding of complex concepts and processes. Particular emphasis is directed toward practical applications.

Scientific maturation is expected, especially in the areas of experimental observations, organization and use of data, deductive reasoning, problem solving, logical decision-making, technical writing ability, and delineation of conclusions.

CIVIL & MECHANICAL ENGINEERING

The Department of Civil and Mechanical Engineering (C&ME) provides a program of engineering study that emphasizes creative problem solving and hands-on engineering design in the fields of civil and mechanical engineering. These programs develop in the student an understanding of the practical applications of science essential to officers in a modern and highly technical Army. For cadets who want to concentrate in the field of engineering, the department offers degrees in civil engineering and in mechanical engineering that are accredited by the Engineering Accreditation Commission of ABET, www.abet.org. The department also offers three-course engineering sequences in either civil or mechanical engineering that cadets may choose to satisfy the core engineering requirement. Both emphasize engineering science fundamentals, creative problem solving and hands-on engineering design to develop cadets' understanding of the practical applications of science essential for officers in our modern, high-technology Army.

Core Sequences in Civil and Mechanical Engineering

The Department of Civil and Mechanical Engineering offers two three-course core sequences, one in Civil Engineering and the other in Mechanical Engineering. Either sequence may be taken by the non-engineering cadet to fulfill the core requirement for engineering science and design.

One fundamental engineering science course is common to both the Civil and the Mechanical sequences: MC300 Fundamentals of Engineering Mechanics and Design. This foundation course is followed by a two-course sequence in either civil or mechanical engineering: CE350 Infrastructure Engineering and CE450 Construction Management for civil engineering, and ME350 Introduction to Thermal Systems with Army Applications and ME450 ME Design of Army Systems for mechanical engineering.

The Civil Engineering Major

Civil engineers are engaged in the planning, analysis, design, construction, and maintenance of a wide variety of structures and facilities, including buildings, bridges, highways, railroads, airports, dams, canals, ports, water and wastewater treatment systems, and stormwater and sanitary sewer systems. Civil engineers work for private firms and public agencies, teach at universities, and conduct research in laboratories.

Within the Army, civil engineering is considered so important that a separate branch, the Corps of Engineers, exists to provide the needed technical expertise. As leaders in the US Army, graduates who major in civil engineering:

1. Solve complex, multi-disciplinary problems effectively, including:

• Recognizing and fully defining the physical, technological, social, political, and economic aspects of a complex problem.

C&ME, CONTINUED

• Using a methodical process to solve the problem.

• Demonstrating creativity in the formulation of alternative solutions.

• Using appropriate techniques and tools to enhance the problem-solving process.

• Working effectively on teams.

• Developing high-quality solutions that consider the technological, social, political, economic, and ethical dimensions of the problem.

2. Provide appropriate civil engineering expertise to the U.S. Army, when called upon to do so.

3. Communicate effectively.

4. Continue to grow intellectually and professionally — as Army officers and as engineers.

The Civil Engineering major includes mandatory courses in structural analysis and design, hydrology and hydraulic engineering, civil engineering site design, infrastructure engineering, geotechnical engineering, construction management and civil engineering professional practice. The program focuses on building its graduates a broad-based foundation in civil engineering skills that allows them to understand the built environment.

The program culminates with a capstone design course, in which cadet teams develop comprehensive designs to meet the requirements of building systems, the building site, foundation systems, drainage systems, and other constraints imposed by the site and local and regional considerations. In addition, many cadets take on independent-study projects that feature a real-world, client-based civil engineering project, involving research, community service, or competition between cadet teams. Through this experience, cadets apply and synthesize knowledge gained from earlier civil engineering course work. Design is emphasized throughout the program, as is the use of the computer as a tool for analysis.

The Civil Engineering program serves as excellent preparation for initial Army troop assignments in combat and construction engineering, as well as subsequent assignments in civil works and facilities engineering. The program also provides a sound basis for graduate schooling in civil engineering and related fields, and for registration as a professional engineer. Cadets who maintain good standing in the ABET-accredited civil engineering major will sit for the Fundamentals of Engineering (FE) examination during the spring semester of the senior year. Passing the FE examination is the essential first step in becoming a registered professional engineer.

The Mechanical Engineering Major

Mechanical engineering is one of the broadest and most diverse of the engineering fields. It deals with devices and systems for energy conversion, for material transport and for control of motion and forces. A sampling of the topics addressed by the discipline include air, ground and sea vehicles; power plants; control systems; machinery; machine tools; conventional and nuclear-powered power production facilities; biomedical devices; space vehicles; pollution control; new energy sources; energy conversion; transportation systems; and military weapons systems.

Modern Army systems are used as vehicles of instruction in many of the courses, making mechanical engineering particularly appropriate for those considering service in most branches of the Army as well as specialties such as aviation, research and development, project management, and logistics.

Six options are available within the major: aeronautical systems, automotive systems, biomechanical systems, power and energy, engineering management, and mechatronics. A cadet selecting a particular option will focus program electives to gain greater depth of knowledge in the area of interest. All cadets, regardless of option, experience the same core mechanical engineering program.

The goal of the Mechanical Engineering program is to provide the cadet with high-quality instruction in a positive learning environment that fosters development of critical thinking skills and fundamental understanding of engineering science and design. The graduate is well-prepared to excel as an officer and an engineer and to address complex technical problems in a rapidly changing, high technology Army. The practice-oriented degree is strengthened by the complete integration of design and laboratory experience throughout the curriculum.

Graduates who major in mechanical engineering:

• Demonstrate the philosophical basis for the practice of engineering that applies creative design and engineering thought processes to solve problems.

• Continue to develop an understanding of and appreciation for natural laws and technology, particularly as they apply to mechanical engineering.

• Act responsibly, upholding strict ethical and moral standards and considering impacts of decisions on social, political, economic, and technological issues.

• Demonstrate the necessary leadership and teamwork skills to work in multidisciplinary team environments.

• Demonstrate elements of engineering practice that prepare graduates for advanced study in engineering or other technical areas, including admission into and success at top engineering graduate programs.

• Communicate orally and in writing, using correct and precise terms demonstrating clear, critical thinking.

• Commit to continuous self-improvement and lifelong learning with the flexibility to adapt to changing Army needs.

ELECTRICAL ENGINEERING & COMPUTER SCIENCE

Virtually all systems, technologies and devices of the future will depend on the hardware, software and information technology principles our department teaches today. The Department of Electrical Engineering and Computer Science (EECS) covers the spectrum of the electrical engineering, computer science, and information technology disciplines. This includes both computer hardware and software, but especially network systems design and integration, photonics and lasers, telecommunications, information assurance, robotics, computing theory, algorithms, software design and construction and their impacts on people, organizations, and societies.

Our programs develop intellectual ability, creativity and skills for professional practice. The faculty and staff are dedicated to the professional growth of cadets and each other. The department's Information Technology and Operations Center, Photonics Research Center, and Network Science Center provide unique opportunities for faculty and cadets to investigate the latest concepts and solve problems on the forefront of knowledge and modern battlefield technology.

The quality of our scholarship and service is recognized by our peers, both nationally and internationally. Our programs and all our actions reflect core values consistent with the ethics of the military and the engineering and scientific professions. Each academic program has its own emphasis, but all are designed to prepare graduates for their roles as Army officers and national leaders.

The Department of Electrical Engineering and Computer Science offers traditional academic majors in Electrical Engineering (EE), Computer Science (CS), and Information Technology (IT). In addition, the department offers the Electronic and Information Technology Systems (EITS) academic major, with selectable emphases in areas such as remote sensing, robotics, digital networks, information technology, and information assurance.

These four major programs emphasize the application of creative problem-solving processes, coupled with knowledge of the underlying enabling sciences and technologies, to design, build and test solutions that serve humanity and our nation's defense. The programs prepare graduates to respond to the challenges of a modern military that is increasingly dependent on the dynamic technologies of electrical engineering, computer science and information technology.

These four academic majors (EE, CS, IT, EITS) consist of 40 to 44 courses completed over the four years at West Point. These majors consist of 26 core courses integrated with 14 to 18 additional courses in the four respective major programs.

All cadets at West Point complete the same 26 core courses. One of these is IT105 Introduction to Computing and Information Technology, taught by this department. Taken during the first year, IT105 introduces cadets to information technology and to problem-solving based on the computing sciences.

Cadets not in one of the four major programs of this department and not in one of the other engineering programs at West Point complete an additional four core courses, which are taught by this department to cadets in the Second Class year in addition to one of seven three-course engineering sequences chosen by cadets at the beginning of the Third Class year. Two of these seven engineering sequences are taught in this department, one in electrical engineering and one in computer science.

The Electrical Engineering Major Program

Electrical engineers play a critical role in the development of advanced technologies for the Army and society of the 21st century. They serve as design engineers, program managers, and industry leaders in the military, government, and commercial sectors. Electrical engineers engage in the planning, analysis, design, construction, and maintenance of the electronic and electrical systems that energize, connect, and control in order to benefit society and the military. They apply the principles of electrical system design to build computer, communication, robotic, optical, power, control, and other electronic systems to serve the needs of humanity.

The Electrical Engineering major program requires completion of 26 core courses and 18 additional courses in electrical engineering, mathematics, and other engineering disciplines. Cadets who pursue the Electrical Engineering major program choose depth in one of six areas: robotics, wireless communications, fiber optic communications, computer architecture, electronics, and information assurance. For breadth, all options include courses in circuit theory, analog and digital electronics, linear systems theory, electromagnetics, introductory computer architecture, power engineering and engineering courses outside the fields of electrical engineering and computer science. The Electrical Engineering major program concludes with a two-semester senior design project during which cadets work in teams to design, build, and test an electrical system by

drawing from the four-year curriculum and applying theoretical concepts to solve a real problem. Final design projects have included autonomous aircraft and land vehicles, optical and wireless communication systems, robotic systems, automated control systems, laser display systems, and optical character and pattern recognition systems.

Teamwork, hands-on laboratory and computer exercises, as well as interdisciplinary design projects, are hallmarks of the Electrical Engineering major program. The courses are current and relevant, and laboratory facilities are among the best in the world. Our faculty is unique among Electrical Engineering faculty in that they include leaders of Soldiers, experts in the discipline, and world-class teachers. Our cadets routinely attend national undergraduate conferences and compete in and win engineering design competitions.

The Electrical Engineering major serves as excellent preparation for initial Army troop assignments, as well as subsequent engineering and leadership positions. The program provides a sound basis for graduate schooling and for registration as a professional engineer. Prior to graduation, Electrical Engineering majors take the Fundamentals of Engineering Examination as the first step toward registration as a professional engineer.

The Electrical Engineering major is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

In the several years following graduation, alumni of the Electrical Engineering major program:

• Demonstrate the skills and confidence to grow intellectually and professionally in electrical engineering through self-study, continuing education, and other means, including being prepared to pursue any area of the discipline in-depth as desired or required by the Army.

• Apply disciplinary knowledge and skills to identify and formulate solutions to problems relevant to the Army that can be solved through the application of electrical engineering theory, tools, and techniques.

• Apply an engineering methodology and creativity to problem-solving in the Army, communicate concepts effectively, and integrate information and computer technologies as multipliers for human intellectual ability and the application of military force when appropriate.

• Demonstrate the ability to work as a member of a diverse team and effectively manage team projects, technology, and technologists, particularly in a military environment.

• Effectively employ electrical and electronic systems in the Army, and lead the exploration of new applications, techniques, and doctrine for their use.

Upon graduation, cadets who major in Electrical Engineering can:

• Apply knowledge of mathematics, probability, statistics, physical science, engineering, and computer science to the solution of problems.

• Identify, formulate, and solve electrical engineering problems.

• Apply techniques, simulations, information and computing technology, and disciplinary knowledge in solving engineering problems.

• Design and conduct experiments to collect, analyze, and interpret data with modern engineering tools and techniques.

• Communicate solutions clearly, both orally and in writing.

• Work effectively in diverse teams.

• Apply professional and ethical considerations to engineering problems.

• Incorporate understanding and knowledge of societal, global and other contemporary issues in the development of engineering solutions that meet realistic constraints.

• Demonstrate the ability to learn on their own.

Some cadets in the Electrical Engineering major program choose to enter the Electrical Engineering Honors major program. The Honors major program offers cadets the opportunity for additional depth of study in Electrical Engineering. It is expected that cadets graduating from the Electrical Engineering Honors Major will be among the highest-achieving majors in Electrical Engineering. They will be recognized as "Honors Graduates" of the Department of Electrical Engineering and Computer Science and will have "Electrical Engineering Honors Major" annotated on their official West Point transcript.

In order to qualify for the Electrical Engineering Honors major, cadets will be required to participate in either an undergraduate research experience or report on their engineering design experience. Both of these include writing a research or engineering paper suitable for submission to a conference or engineering design competition.

Cadets in the Electrical Engineering Honors major program must satisfy minimum graduation requirements including a 3.0 grade point average in the core courses and a 3.5 grade point average in the major program courses to graduate in the honors program.

The Computer Science Major Program

Computers and computer technology play a dominant role in shaping the world and the Army of the 21st century. Computer scientists analyze, plan, design, and build computer systems and components. They become systems analysts, software engineers, information systems managers, computer systems consultants and educators. Computer scientists are employed in every aspect of commercial, military and government practice. As the Army and society at large become ever more dependent on computer systems and technology, the role of computer scientists in protecting digital information becomes more critical every day. The Computer Science program gives cadets an opportunity to acquire an in-depth understanding of computer systems and the principles underlying their design, implementation, and security.

The computer science major program provides cadets a thorough foundation in computer science and prepares them with critical thinking skills to pursue lifelong learning. The program requires completion of 26 core courses and 18 additional courses. Foundation courses in computer science are augmented

with courses that cover software design, concepts of programming languages, computer organization and architecture, computational theory, operating systems, databases, simulation, networks, and societal impacts. In their senior year, cadets in the computer science major program work in teams on projects such as developing autonomous unmanned ground vehicles, building software to enhance the security of information systems, and supporting Army system development initiatives. Cadets in computer science also choose three electives from topics such as artificial intelligence, computer graphics, and cyber operations. At least one of the choices must be from a group of electives that cover topics in computer networking.

The Computer Science major is accredited by the Computing Accreditation Commission of ABET, www.abet.org.

In the several years following graduation, alumni of the Computer Science major program will have:

• Initiated and completed tasks that identify aspects of a complex situation that can be enhanced by using computing technology.

• Applied computing knowledge and skills while using an engineering process individually or in diverse teams to develop computing technology applications.

• Used effective communication to explain new computing technology to war fighters in support of current and emerging Army warfighting doctrine.

• Grown professionally through self-study, continuing education and professional development.

Graduating cadets in the Computer Science major program are expected to:

• Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in the design choices.

• Analyze a problem, and identify and define the computing requirements appropriate to its solution.

• Apply design and development principles in the construction of software systems of varying complexity.

• Function effectively on teams to accomplish a common goal.

• Use current techniques, skills, and tools necessary for computing practice.

• Recognize the need for, and engage in, continuing professional development.

• Understand professional, ethical, and social responsibilities expected of a computer scientist and a military officer.

• Communicate with a range of military and nonmilitary audiences.

• Analyze the impact of computing on Army operations, soldiers, units, and society at large, including ethical, legal, political, and security issues.

Some cadets in the Computer Science major program choose to enter the Computer Science Honors major program at the beginning of the spring term of the Second Class year. This requires a 3.0 cumulative grade point average in the core courses at the time of entry.

The Computer Science Honors Program offers cadets the opportunity for additional depth of study in Computer Science. Cadets in the Computer Science Honors Program will be among the academically highest ranking graduates in Computer Science. They will be recognized as Honors graduates of the Department of Electrical Engineering and Computer Science and will have "Bachelor of Science in Computer Science with Honors" annotated on their official West Point transcript.

Successful completion of the Computer Science Honors Program includes a research requirement that is met by both a written report and an oral presentation. The report and presentation should be of a depth and quality suitable for professional publication.

Cadets in the Computer Science Honors major program must satisfy minimum graduation requirements including a 3.0 grade point average in the core courses and a 3.5 grade point average in the major program courses to graduate in the honors program.

The Information Technology Major

The Information Technology (IT) program builds on the West Point Academic Program Goal for Information Technology:

"Graduates understand and apply information technology concepts to acquire, manage, communicate, and defend information, solve problems, and adapt to technological change," and on the associated definition of Information Technology given in Educating Future Army Officers for a Changing World:

"Information Technology encompasses the knowledge, skills, processes, and tools by which the state of the physical world is sensed and, along with other knowledge, is disseminated, stored, transformed, processed, analyzed, presented, used to make decisions about actions, and used to initiate and control actions."

Information technologists play a critical role in the specification, design, acquisition, deployment, and management of information technologies for the Army and society. They address the development and evolution of infrastructure and systems for use in organizations. In the Army, information technologists design, install and modify information systems and networks in tactical and strategic environments.

The IT major program provides cadets an opportunity to study information technology in substantially greater depth than is possible in the core courses. The IT major is about integrating information technology solutions with organizational processes to effectively and efficiently meet the information needs of the Armed Forces, businesses, and other organizations while giving firm consideration to human nature. Graduates of the IT major will be able to integrate the hardware designed and built by electrical engineers and the software developed by computer scientists to build, assemble, install, configure and operate an information infrastructure that is responsive to rapidly changing and unexpected user requirements. Building on the core courses in Information Technology required of all cadets, the IT major provides the combination of knowledge and practical, hands-on expertise for planning, selecting, installing, integrating, and maintaining a complete information system.

The primary goal of the IT major is to teach cadets to systematically identify critical information requirements and then design, build, and

test complex information systems from hardware and software components to meet individual client and Army organizational needs.

The Information Technology major program is accredited by the Computing Accreditation Commission of ABET, www.abet.org.

In the several years following graduation, alumni of the Information Technology major program:

• Identified and exploited opportunities to improve Army operations by applying best practices in information technology.

• Effectively communicated information technology to a range of audiences.

• Grown professionally through self study, continuing education, and professional development in service to the Army.

Expected outcomes for graduating cadets in the Information Technology major program are to:

• Communicated solutions to problems clearly, both orally and in writing.

• Adhered to the professional and ethical standards of the IT profession.

• Embraced lifetime learning and the recognition to continue learning throughout a career.

• Developed specialized IT skills in a self-selected specialty area.

• Worked as individuals and members of a design team that meets desired specifications.

• Identified, documented, and analyzed information system requirements for a client and then develop information systems that meet those requirements by integrating core information technologies while using current best professional practices.

• Developed and evaluated effective user interaction designs.

• Applied and explained the rational for accepted security practices to optimize information assurance.

• Demonstrated knowledge in the design and implementation of networks.

Some cadets majoring in Information Technology choose to declare entry into the Information Technology (IT) Honors Program at the beginning of the spring term of the Second Class year. The Honors major program offers cadets the opportunity for additional depth of study in Information Technology. It is expected that cadets graduating from the Information Technology Honors Major will be among the highest-achieving majors in Information Technology. They will be recognized as Honors graduates of the Department of Electrical Engineering and Computer Science and will have "Information Technology Honors Major" annotated on their official West Point transcript.

Successful completion of the honors program includes a research requirement consisting of enrollment in an independent study course that will include completion of both a written report and an oral presentation. The report and presentation should be of a depth and quality suitable for professional publication.

Cadets in the Information Technology Honors Major must satisfy minimum graduation requirements, including a 3.0 grade point average in the core courses and a 3.5 grade point average in the major program courses to graduate in the honors program.

The EITS Major Program

The Electronic and Information Technology Systems (EITS) major is a 40-course major that offers theoretical and hands-on experience with electrical engineering, computer science, information technology, and other topics of interest to the individual cadet. EITS is a flexible major that gives cadets significant choices in composing programs of study that match their individual interests by selecting courses from throughout the offerings of the department. The EITS major is challenging, but lets cadets choose their challenges. Additionally, the EITS major can be completed with no more than five courses each term, giving the cadet the opportunity to place greater emphasis on other parts of the academic program, the military program or the athletic program.

Cadets majoring in EITS choose a focus area such as Information Assurance, Robotics, Digital Networks, or Software Development. These focus areas are created by selecting one of the augmented 4-course engineering sequences offered by the department and by selecting additional 3-course threads from among more than a dozen offered in areas such as networks, telecommunications, information assurance, robotics, remote sensing, machine intelligence, software development, and more.

3-Course Engineering Sequences

Cadets not in one of the four major programs of this department and not in one of the other engineering programs at West Point complete one of seven 3-course engineering sequences chosen by cadets at the beginning of the Third Class year. Two of these seven engineering sequences are taught in this department, one in electrical engineering and one in computer science.

Electrical Engineering 3-Course Engineering Sequence

The three-course engineering sequence in electrical engineering is available to all cadets not in one of the engineering major programs to satisfy their 3-course engineering sequence requirements. The primary goal is to provide a meaningful design experience in electrical engineering focused on robotics.

The sequence begins with courses in digital computer logic and electrical circuits and concludes with a course surveying military electronic systems, including the design of such a system.

Computer Science 3-Course Engineering Sequence

The three-course engineering sequence in computer science is available to all cadets not in one of the engineering major programs to satisfy their 3-course engineering sequence requirements. The 3-course sequence in computer science provides a focused foundation in software and information systems engineering. The sequence culminates in an integrated, end-to-end team system design and implementation experience, building an effective and adaptable Internet-based information system.

ENGLISH & PHILOSOPHY

The Department of English and Philosophy contributes to the total education of cadets by teaching them to organize their ideas effectively and express them clearly in writing; to understand the power of imagination and the beauty of language through a study of literature; to reason clearly, through a study of philosophy, about fundamental matters affecting their desire to lead worthy, examined lives; and to appreciate the diverse cultures that constitute America and the world by studying texts that reflect those cultures. In addition to core courses in composition, literature, and philosophy, the Department of English and Philosophy offers a major in Art, Philosophy, and Literature.

Studies in Art, Philosophy, and Literature Major

Intellectually curious cadets who shape a program in Art, Philosophy, and Literature deepen their knowledge and appreciation of humanity's ability to reason and create. The field offers cadets unparalleled insights to the human condition through study of the aesthetic creations, world views, and imaginative works that mark a wide array of cultures.

As manifestations of human behavior, those subjects repay attention with enriched understandings of history and with explanations of why people pursue particular goals.

Presenting ethical issues in diverse ways, the field helps cadets in apprehending life's moral complexity and in dealing reasonably with it. Cadets refine their speaking and writing skills and strengthen their respect for the power of language.

By completing a major, cadets develop a culturally sensitive global perspective, prepare themselves uniquely for Army service, and promise to contribute immensely to the continued success of the Army.

MAJORS

Mathematics-Science-Engineering

Basic Science
Chemical Engineering
Chemical Engineering Studies
Chemistry
Civil Engineering**
Civil Engineering Studies
Computer Science***
Electrical Engineering**
Electronic/Information Technology Systems
Engineering Management**
Engineering Psychology
Environmental Engineering**
Environmental Geography
Environmental Science
Environmental Engineering Studies
Geospatial Information Science
Information Engineering
Information Technology***
Kinesiology
Life Science
Mathematical Sciences
Mathematical Studies
Mechanical Engineering**
Mechanical Engineering Studies
Nuclear Engineering**
Nuclear Engineering Science
Operations Research
Operations Research Studies
Physics
Systems Engineering**
Systems Management

Humanities-Social Sciences

American Legal Studies
Art, Philosophy and Literature
Defense and Strategic Studies
Economics
Foreign Area Studies:
- Africa
- East Asia
- Eurasia
- Latin America
- Middle East
- Europe

Foreign Language:
- Arabic
- Chinese
- French
- German
- Portuguese
- Russian
- Spanish

History:
- International
- Military
- United States

Human Geography
International/Comparative Legal Studies
Leadership
Management
Military Art and Science
Political Science:
- American Politics
- Comparative Politics
- International Relations

Psychology
Sociology

** Major programs accredited by the Engineering Accreditation Commission (EAC) of ABET, www.abet.org.
*** Major programs accredited by the Computing Accreditation Commission (CAC) of ABET, www.abet.org.

FOREIGN LANGUAGES

The Department of Foreign Languages (DFL) provides the opportunity to develop strong foundations in one or more of eight foreign languages: Arabic, Chinese, French, German, Persian, Portuguese, Russian, and Spanish. These are among the most-commonly spoken languages in the world. Computer-assisted language learning activities are fully integrated into the department's academic program. All of DFL's languages have cadet-led clubs that sponsor extra- and co-curricular events to strengthen cadets' language skills and cultural competencies.

DFL also offers two programs to enhance cadets' foreign language skills through language studies and cultural excursions abroad: Academic Individual Advanced Development (AIAD) is a three-week summer immersion program, and the Semester Abroad Program (SAP) affords cadets the opportunity to study at a foreign military academy or civilian university. As participants in these two programs, some 250 cadets per year travel to more than 30 countries, including Argentina, Chile, China, Egypt, France, Germany, Morocco, Russia, Taiwan, and Senegal.

Foreign Languages Major

The study of languages permits access to the minds, to the literature, and to the recorded knowledge of peoples of foreign cultures. Language is the repository of a people's common experience and collective values. Proficiency in foreign languages is a valuable skill for Army officers, of great practical use both professionally and personally. Cadets may study Arabic, Chinese, French, German, Persian, Portuguese, Russian, or Spanish – some of the most important languages of the modern world. They may study a single foreign language or a combination of any two languages.

The primary emphasis in all courses is to develop listening and speaking abilities. Traditional study methods are complemented with technology-mediated learning activities. Advanced-level language study includes courses on the media and military readings, as well as on civilization, culture, and literature.

Requirements for the Single and Double Language Major

The requirements for the single language major in Arabic, Chinese, French, German, Portuguese, Russian, and Spanish include up to eight language courses at the 300 and 400 levels, one course in another Humanities and Social Sciences discipline (Defense and Strategic Studies, English, Geography, History, Law, Social Sciences), and the Language and Culture Capstone Seminar.

Cadets pursuing the double language major are required to take up to seven language courses at the 300 and 400 levels in their primary language and four courses at the 200, 300, or 400 level in their secondary language. In addition, they take one course in another Humanities and Social Sciences discipline (Defense and Strategic Studies, English, Geography, History, Law, Social Sciences) and the Language and Culture Capstone Seminar.

Foreign Area Studies Major

A Foreign Area Studies major is offered to cadets interested in pursuing an interdisciplinary course of study focusing on Africa, East Asia, Eurasia, Europe, Latin America, or the Middle East. Cadets choosing one of these area programs will study the peoples, societies, languages, cultures, geographies, histories, foreign relations, politics, and economics of a particular region. Cadets will have the opportunity to study in-depth the factors that frequently determine national objectives and influence the formulation of governmental policy.

The Foreign Area Studies program is designed to develop cadets' abilities to assess and interpret the relationships and importance – both present and future – of these regions to the United States. This multidimensional academic program requires cadets to synthesize and analyze knowledge from a variety of disciplines. As a result, cadets who select this academic major will gain the intellectual background and personal insights indispensable to effective and rewarding service in the globally committed U.S. Army.

Requirements for the Area Studies Major

In order to major in Foreign Area Studies, cadets are required to complete four language courses at the 300 and/or 400 level. In addition, they take five courses in the Humanities and Social Sciences (Defense and Strategic Studies, English, Geography, History, Law, Social Sciences) and the Language and Culture Capstone seminar.

GEOGRAPHY & ENVIRONMENTAL ENGINEERING

The Department of Geography and Environmental Engineering (G&EE) empowers cadets with an understanding of our Earth, its people, and how they interact. This understanding begins in our core physical geography course, EV203, where cadets learn to apply the basic sciences of the core curriculum to the study of the Earth's surface and atmosphere. Understanding the forces that shape the landscape, how weather and climate impact human activities, and how all these factors affect human endeavors is essential for tomorrow's successful Army officer.

Academic majors offered in the department cover the continuum of disciplines that describe the human interaction with the environment and how we can protect our fragile environment from the harmful impacts of a burgeoning population. Cadets learn to apply the laws of science governing physical and human processes to understand and solve modern problems facing the military and civilian worlds, while sustaining the quality of our environment. Majors include Human Geography, Environmental Geography, Environmental Science, Geospatial Information Science, and the ABET Environmental Engineering major. Additionally, the Environmental Engineering sequence offers an opportunity for cadets interested in the environment to learn about key issues while completing their core engineering sequence requirement.

Tools such as satellite imagery, global positioning systems, and geographic information systems are available in our state-of-the-art Geographic Sciences Laboratory. The department also operates world-class environmental analysis and environmental engineering laboratories.

Majors

The Department of Geography and Environmental Engineering offers majors in both the Humanities and the Social Sciences (HSS), and the Mathematics, Sciences, and Engineering (MSE) disciplines. HSS programs include Human Geography. Environmental Geography bridges the gap between HSS and MSE programs. The department also participates in interdisciplinary programs focused on Foreign Area Studies (East Asia, Eastern Europe, Western Europe, Latin America, or the Middle East). The department's MSE programs include Environmental Science, Environmental Engineering, and Geospatial Information Science. In addition, the department offers an Environmental Engineering core engineering sequence, one of seven such sequences offered by West Point. The goal of the Environmental Engineering sequence is to develop critical-thinking and problem-solving skills through the analysis and solution of complex environmental issues. Cadets develop solutions to environmental problems through the use of mathematics, science, and the application of technology. All of the department's programs of study include technical support from superior undergraduate laboratory facilities for cartography, geology, remote sensing, photogrammetry, environmental analysis, surveying, and geographic information systems. Course work in all majors has direct application to all Army branches and supports future graduate-level studies in geography, in several engineering fields, and in the physical and social sciences.

Human Geography: The Human Geography major focuses on cultural, economic, demographic, and political patterns of human activity. Approaching the study of the Earth as social scientists, human geographers work to understand patterns of human activity and the processes that create them. The major emphasizes an understanding of the Earth's regions and to that end offers seven regional geography courses that provide in-depth, place-based study. Additionally, the program offers courses in urban geography and land-use planning and management, as well as other systematic courses in geography that teach cadets how to look critically at the world and solve problems they will experience in their lifetimes. Because geography is, by nature, an interdisciplinary undertaking, cadets are encouraged to sample from programs outside the field. Human geography is a broad course of study for any cadet interested in international and differential development, culture, globalization, urban or regional planning, or in-depth study of a particular region.

Geospatial Information Science: The United States Department of Labor has identified geospatial information science as one of the top-three growth industries in the United States for the next decade. This is a relatively new discipline that focuses on spatial information, i.e., information that has a location. Location is the main factor used to integrate a very wide range of data for visualization and analysis. As almost all information has a spatial variable, the varieties of information and applications with which the geospatial information scientist is involved are extremely varied. Geospatial information scientists design, develop, and operate systems for collecting and analyzing spatial information about the land, the oceans, natural resources, and the environment. These activities include

but are not limited to GPS surveying, digital mapping, geographic information systems (GIS), land information management, land surveying, photogrammetry, and remote sensing.

The Geospatial Information Science curriculum includes specialized courses in surveying, cartography, photogrammetry, remote sensing, advanced remote sensing, geographic information systems, advanced geographic information systems, and military geospatial operations. Cadets are also given the opportunity to select two classes from a broad list of elective courses. No restrictions are placed on the selection of a core engineering sequence. The curriculum culminates with the integration of all forms of geospatial data acquisition and synthesis techniques in an integrative experience focusing on military applications. An honors program in Geospatial Information Science is also offered. Both the civil and military sectors of our society are placing ever-increasing reliance on the ability to build and query geospatial information databases to support a myriad of social/economic and engineering issues. The cadet at West Point has a rare opportunity to pursue an integrated major that other academic institutions commonly spread over several separate disciplines. This major has applicability for the future military officer regardless of branch. The curriculum prepares cadets for advanced civil schooling in any of the specialized fields of geospatial information science.

Environmental Geography: Geography is the study of the variable character of the surface of the Earth as the home of humanity. Environmental Geography is the branch of geography that specifically examines the interactions between people and their environments. Whereas physical geographers focus on the Earth's surface and the atmosphere and human geographers concentrate on the spatial aspect of human activities, environmental geographers are interested in both how people adapt to specific environments and how they alter those environments through their activities. The major consists of both human geography courses and physical geography courses, and is intended for cadets interested in the intersection of humanity and nature. As the world becomes more and more interconnected it is ever more apparent that to understand the holistic system fully, one must dig through multiple layers of phenomena and tie them all together. This is precisely what an environmental geographer does.

Environmental Science: Environmental science is a broad, integrative, science-based discipline that focuses on the interrelationships between people and the environment. Environmental scientists conduct investigations to analyze these interrelationships and to identify, abate, or eliminate human-caused pressures on the environment. The ultimate goal of these investigations is to create a sustainable balance between humans and the natural world that minimizes environmental degradation. This major develops expertise into the processes that sustain our environment by expanding upon the West Point core science education by adding studies in the natural sciences such as biology, ecology, geology, and meteorology, and in the integrative studies of environmental decision making and environmental security. This broad academic background is excellent preparation for challenges faced by a military leader who must balance resource and human requirements. The program seeks to (1) enhance curiosity about natural processes and the ability to study such processes as a scientist and (2) deepen knowledge of human influences on the environment and foster evaluation of our individual and collective responsibilities as environmental stewards.

Environmental Engineering: Environmental engineers face a range of issues from disasters like air pollution from the terrorist attack on the Twin Towers or drinking water contamination following the earthquake in Haiti. Environmental engineers use chemical, biological, and physical processes to engineer systems that address these issues. This discipline is evolving to face new challenges resulting from rapid growth in human population and technology. Environmental engineers work in multinational teams to develop methods to combat global climate change; find alternative sources of energy; and to recover materials from discarded products. It is not surprising that a report in Fortune Magazine identified environmental engineering as the fastest growing profession for the period 2002 to 2012. Our program provides you with an active learning experience designed to develop your knowledge of math, science, and engineering science and your ability to use this knowledge to be an active problem solver for complex environmental issues. This skill has been invaluable to our graduates in the Army as they work environmental projects in Iraq and Afghanistan and improve the welfare of their Soldiers. The objectives of the Environmental Engineering Program identify what our graduates can accomplish after graduation. Graduates of the Environmental Engineering Program can:

• Analyze and solve complex problems. Graduates can apply their knowledge of mathematics, science, engineering, and the humanities to analyze and solve practical problems, including those in Environmental Engineering. They can evaluate, mitigate, and communicate risk. They can use appropriate technologies to formulate effective, context-based courses of action; adapt methods and strategies to overcome incomplete or imperfect information; and recommend or choose a best course of action. Graduates can creatively adapt problem solving strategies and solutions to rapidly changing and/or potentially life threatening situations. Problem-solving is not bounded by disciplinary expertise. Graduates may encounter problems within the environmental engineering discipline or within the broader context of officership in the profession of arms.

• Lead, manage, and execute. Graduates can lead people, manage resources and programs, prioritize activities, and execute projects within constraints to successfully complete the mission within the environmental field and the Army. Graduates must be able to execute an array of

HISTORY

History is the study of the human past, with an eye to influencing the present and shaping the future. By examining the human experience, cadets can acquire an understanding of how previous generations and different societies have sought to understand their environment and shape their destinies. From this understanding, cadets expand their breadth of experience and gain insights into current problems and future challenges. In the process of examining the development of those societies, institutions, and ideologies, they will enhance their ability to think critically, research effectively, and communicate persuasively, both orally and in writing. Moreover, they will establish an analytical framework for studies in related fields and an intellectual foundation for an Army career and lifetime of service to the nation.

Cadets may pursue a major in one of four fields: American History, International History, Military History, or Defense and Strategic Studies. Each offers flexibility, permitting cadets to develop a foundation of historical perspective as well as pursue specialized studies in world regions, languages, and other disciplines.

History Major

The major in history offers cadets an opportunity for in-depth study in one of three areas: military history, international history, and American history. Most cadets who major in history will write a senior thesis that requires detailed research in primary sources. An honors program is available for high achievers.

Defense and Strategic Studies Major

The Defense and Strategic Studies major offers cadets the opportunity to pursue a multidisciplinary approach to the study of the modern military profession and national security. Electives allow cadets to examine military operations and defense policy and strategy through a historical approach. Cadets take courses in a number of disciplines, including military science, history, social sciences, law, and geography. An honors program is available for high achievers.

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missions efficiently while minimizing environmental impacts. Potential missions include actions in combat, homeland security, disaster relief, humanitarian aid, and other operations under austere conditions.

• Communicate effectively. Graduates have the ability to listen to, understand, and assess varying viewpoints and can, based on this assessment, communicate pertinent information to stakeholders and the general public in such a manner as to bridge their differences and strengthen relationships among them.

• Recognize their roles as professionals. Graduates have internalized their professional responsibilities to society, the profession of arms, and the practice of engineering. They demonstrate internalization through participation in professional societies, continuing education, progression in assignments, community outreach, and other activities.

The Environmental Engineering major is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

Environmental Engineering Sequence: The Environmental Engineering three-course sequence provides cadets with an opportunity to think critically about topical environmental issues and to identify engineering solutions that protect human health and the environment. These issues and their solutions take into account social, political, and economic concerns and are excellent preparation for decision-making in an uncertain world. The Army is a trusted steward of the environment, and cadets who participate in the Environmental Engineering Sequence will gain a better appreciation of the environmental ethos and the importance of safeguarding the health of their Soldiers.

Summary: The strength of the Department of Geography and Environmental Engineering stems from the synergy created by the multidisciplinary expertise of the department faculty. Cadets who choose to major in the department can develop an area of expertise in Human Geography, Environmental Geography, Geospatial Information Science, Environmental Science, or Environmental Engineering, in addition to acquiring a robust foundation in the Humanities, Social Sciences, Mathematics, and Physical Sciences afforded by the USMA core curriculum.

MATHEMATICAL SCIENCES

The Department of Mathematical Sciences provides each cadet the opportunity to gain the mathematical education essential to progressive and continuing development throughout a career as a Regular Army officer. Emphasis is placed on achieving intellectual discipline, mastery of reasoning, understanding of mathematical concepts, skill in practical applications of mathematics, and appreciation for the role of mathematics in the military and society.

The core requirement in mathematics is satisfied by successful completion or validation of the standard program. Cadets with weak backgrounds in algebra and trigonometry are required to complete a course in precalculus prior to undertaking the standard program. Building on the foundation of the core mathematics program, analytic and problem-solving skills are developed through a rich variety of electives in mathematics.

In addition, the Department of Mathematical Sciences has a major in Mathematical Sciences and, in conjunction with the Department of Systems Engineering, a major in Operations Research.

Mathematical Sciences Major

The Department of Mathematical Sciences offers a wide range of elective courses that enables cadets to complete either a field of study or a major in the mathematical sciences. Depending on the interest of each cadet, programs of study generally are organized to focus on mathematics of the applied sciences, mathematics of operations research, and mathematics of computation, or statistics.

Operations Research Major

The field of Operations Research evolved from organizations' need to examine the operational characteristics of complex systems involving technology, people, and processes with the intent on making them more efficient and effective. This application of logical thought and quantitative methods provides commanders and managers with a sound basis for decision-making. The focus of study at West Point is on translating requirements into working models, optimization methods, applications of probability and statistics, and various forms of modeling, including simulation. Cadets electing the Operations Research field of study or major must take the Systems Engineering sequence in addition to a host of Operations Research courses designed to provide a required depth of study at the undergraduate level.

LAW

The Department of Law manages two majors in undergraduate legal studies: American Legal Studies and International and Comparative Legal Studies. These programs, through required and elective courses, examine law as a primary means of maintaining societal order, balancing individual interests with the interests of society, and resolving inherent conflict. Department courses are offered to Legal Studies majors, cadets in related disciplines, and those who are interested in broadening their understanding of the important role of law in the domestic and international contexts. The Department of Law also offers instruction in the academy's core course in constitutional and military law to First Class cadets. This course prepares cadets to recognize and evaluate fundamental constitutional issues in American society and to appropriately exercise the legal authority of an Army officer and commander.

PHYSICS AND NUCLEAR ENGINEERING

The Department of Physics and Nuclear Engineering offers core courses designed to be relevant to the modern military, promote scientific literacy as preparation for commissioned service, prepare logical and creative thinkers skilled in problem solving, and serve the essential needs of several academic disciplines. In addition to classical mechanics and electromagnetic interactions, topical coverage includes fundamentals of nuclear energy, lasers, optics, and the interactions of radiation with matter. Every cadet takes this two-semester, calculus-based, core physics sequence during the sophomore year. Cadets interested in physics may select a major in either Physics or Basic Science. The department's Nuclear Engineering Program offers a three-course core engineering sequence in nuclear engineering, a Nuclear Engineering major, and a Nuclear Engineering Science major.

Physics Major and Basic Science Major

The Physics major is designed to equip graduates with knowledge of scientific principles and experimental techniques that will prepare them to lead Army science and technology efforts in the future. The major includes a thorough grounding in the fundamentals of theoretical physics that prepares cadets for the possibility of future graduate studies. The Department of Physics and Nuclear Engineering also sponsors, jointly with the Department of Chemistry and Life Science, a Basic Science major. This major offers a great deal of flexibility within the three scientific disciplines offered by the departments. Interested cadets meet with a department counselor to choose a slate of 10 courses, within certain guidelines, that best fits their educational goals and needs.

Core Sequence in Nuclear Engineering

The Department of Physics and Nuclear Engineering offers a three-course sequence in nuclear engineering taken by non-engineering cadets to fulfill the core requirement for engineering science and design. The sequence teaches cadets to apply nuclear science and engineering skills in the application of nuclear energy, neutronics, thermal-hydraulics, power production, safety, economics, nuclear weapons, and weapons effects.

Nuclear Engineering Major and Nuclear Engineering Science Major

The Nuclear Engineering major (NEN0) is designed to provide depth of knowledge in the application of nuclear energy, including power production, radiation health physics, nuclear weapons, and weapons effects. The major is taught through multiple departments and includes 17 interdisciplinary courses from physics, mathematics, mechanical engineering, civil engineering, electrical engineering, and nuclear engineering. The NEN0 major is accredited by the Engineering Accreditation Commission of ABET, www.abet.org. The Nuclear Engineering Science major provides depth of knowledge in the application of nuclear energy, however, not as much depth as in the Nuclear Engineering major. The Nuclear Engineering Science major is taught through multiple departments and includes 13 interdisciplinary courses from physics, mathematics, mechanical engineering, civil engineering, electrical engineering, and nuclear engineering.

The nuclear engineering cadet will gain a broad background for further study in graduate school and Army assignments requiring expertise in nuclear engineering, civil and mechanical engineering, applied radiation physics, nuclear weapons and weapons effects, or any of a variety of related fields. The goal of the nuclear engineering program is to provide the cadet with high-quality instruction in a positive learning environment that fosters the development of critical thinking skills, and a fundamental understanding of three educational threads interwoven throughout the program: experimental (hands-on), engineering design, and computational threads. The graduate is well-prepared to excel as an officer and an engineer and to address complex technical problems in a rapidly changing, high-technology Army.

Graduates who major in nuclear engineering:

1. As Army leaders, solve complex, multi-disciplinary problems for the Army and the nation.

2. Demonstrate the necessary leadership and teamwork skills to work in multi-disciplinary team environments.

3. Are prepared to provide appropriate nuclear and radiological engineering expertise to the Army.

4. Communicate effectively, orally and in writing.

5. Continue to grow intellectually and professionally as Army officers and as engineers.

SOCIAL SCIENCES

The Department of Social Sciences teaches courses in the interrelated fields of economics, politics, policy, strategy, and international affairs. Each core and elective course endeavors to give cadets a basic understanding of the subject matter, to present a methodology for solving real-world problems, and to indicate the relevance of the course material to the cadet's future duties and responsibilities as a citizen and an officer.

The Department of Social Sciences offers majors in Economics; Comparative Politics; International Relations; and American Politics, Policy & Strategy, and a minor in Terrorism Studies. The department also supports the interdisciplinary fields of Foreign Area Studies and Management.

All Third Class cadets are required to pass or validate SS201 Economics: Principles and Problems, and SS202 American Politics. Second Class cadets are required to pass or validate SS307 International Relations.

Economics Major

This field provides insights into the basic social questions of what a society should produce, how that output can be produced most efficiently, and how the output should be distributed. The field includes required courses on the national economy, decision-making by firms and individuals, and applications of economic principles to national security issues.

In addition, there are courses on international trade, comparative economic systems, accounting, managerial economics, and financial institutions. In each course, the emphasis is on the development of principles that can be applied to help resolve important public policy issues.

The Economics major supports graduate study in the social sciences in general, with particular relevance to economics, operations research, engineering management, business administration, and domestic and international affairs. Cadets who meet GPA requirements and complete two additional courses, including a thesis, qualify for the major with honors.

Political Science Majors

Cadets studying political science take electives that introduce them to the methods, theories, and scope of the discipline. Within their elective program, cadets select courses that focus their studies in one of three fields: American, comparative, or international politics.

American Politics, Policy, & Strategy

These electives examine American political traditions and the philosophical origins of American politics, political Institutions, decision-making processes, and public policy. Cadets learn to research and analyze political phenomena by focusing on the domestic political environment.

Comparative Politics

These electives examine political questions from a cross-cultural perspective. Cadets learn about the nature and importance of political institutions by studying them in a variety of environments and regions. Two main questions in this field are: "What causes stability or instability with states?" and "What factors determine a state's regime type?"

International Relations

Courses in this field focus on two central questions: "Why do states act the way they do?" and "How do international relations reflect cooperation and conflict?" Cadets learn theories of international behavior and examine the impact of domestic institutions and problems on international relations. Courses address both historical patterns of relations and current issues of cooperation and conflict in the international system.

The political science major supports graduate study in the social sciences in general, with particular relevance to international affairs, public policy/administration, area studies, and conflict resolution. Cadets who meet GPA requirements and complete two additional courses, including a thesis, qualify for the major with honors.

SYSTEMS ENGINEERING

The Department of Systems Engineering offers cadets the opportunity to engineer and design solutions to large-scale, multidisciplinary problems facing our Army and the nation today and in the future. The department has four distinct programs: Systems Engineering, Engineering Management, Systems Management, and our Core Engineering Sequence for non-majors. Systems Engineering and Engineering Management are accredited by the Engineering Accreditation Commission of ABET, www.abet.org. The department is also a joint proponent for the interdisciplinary major in Operations Research.

The Systems Engineering, Engineering Management, Systems Management, and Operations Research programs offer opportunities to enrich the academic experience through summer programs at military and civilian agencies. Cadets have a wide range of opportunities to conduct Advanced Individual Academic Development (AIAD) projects with the USMA Operations Research Center of Excellence and the Center for Nation Reconstruction and Capacity Development, which are collocated with the department. Additionally, cadets may also be eligible to graduate with honors from the Systems Engineering and Engineering Management programs.

The goals of all four programs are focused on preparing future Army officers to solve a wide range of problems by engaging cadets and faculty in projects that seek solutions to major issues confronting society and the profession of arms. Furthermore, this framework helps cadets develop an understanding of the role of emerging technologies in solving large-scale problems. All of the programs are excellent preparation for graduate study in the disciplines of Systems Engineering, Engineering Management, Industrial Engineering, Operations Research, and Masters of Business Administration (MBA).

Systems Engineering Major

Systems Engineering is a top-down, interdisciplinary, lifecycle approach to the design, development, and deployment of complex systems, processes, or operations to meet the effective needs of users and stakeholder groups in a cost-effective, high-quality way. Any collection of objects that, when connected, exhibit behavior not present when these objects stand alone can be considered a "system" within the purview of this program. The Systems Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

This dynamic and growing field of engineering is focused on meeting the challenge of understanding, analyzing, and solving a class of real-world problems characterized by their interdisciplinary nature, breadth of impact, complexity, and unpredictability. Examples of "systems" include: airport planning and operations, military command-and-control systems, informal leadership structures within organizations, information management systems, software development projects, urban planning and infrastructure renewal, plant layout and manufacturing operations, physical security and vulnerability planning, and business processes re-engineering.

In recent years, Systems Engineering has exploded as a discipline. One can attribute this to the rapid advances in technology, the necessity for innovation and the increasing complexity of the world around us. To address these issues, part of what Systems Engineering majors learn is to build models and simulations of proposed projects to refine and test new ideas, to save resources, and avoid major mistakes before a large-scale system is actually created and implemented.

The Systems Engineering program is focused on the achievement of the following educational objectives:

1. Produce graduates for a career of professional excellence and service to the nation as an officer in the United States Army.

2. Produce graduates who effectively lead interdisciplinary teams in joint, combined, interagency, and multicultural environments.

3. Produce graduates who solve complex systems engineering problems in uncertain future environments.

4. Produce graduates who communicate engineering solutions convincingly both orally and in writing to technical and non-technical audiences.

5. Produce graduates who seek out and succeed in continued intellectual professional development in systems engineering and related fields.

The Systems Engineering program is designed to ensure its graduates can achieve the objectives listed above some years after graduation when they are serving in their chosen fields. The objectives are supported by the following outcomes that the Systems Engineering program ensures its students can accomplish upon graduation from the program.

1. Act professionally and ethically as a leader of character within each stage of the system lifecycle.

2. Employ up-to-date techniques, skills, and engineering tools necessary for Army officers and systems engineering practice.

3. Lead and work effectively as a contributing member of multidisciplinary systems engineering teams.

4. Define the problem, design solutions, make decisions, and implement the chosen engineering solution within a broad global and societal context.

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5. Identify and formulate a client's engineering problem and specify the client's actual needs, using systems thinking, systems engineering, and systems decision-making.

6. Define and measure system performance to guide solution design and systems decision-making and to validate that the design solution adds value and solves the defined problem.

7. Design or re-engineer system or process in order to develop alternatives that meet the needs of a the client within realistic environmental constraints, such as cultural, historical, legal, moral/ethical, economic, environmental, organizational, emotional, social, political, and technological.

8. Apply knowledge of mathematics, science, and engineering appropriate to Army officers and practicing systems engineers in order to develop, quantitatively evaluate, and implement effective and efficient solutions.

9. Design and conduct systems experiments, including collecting, analyzing, and interpreting data.

10. Accurately, clearly, and concisely report findings, conclusions, and recommendations to the client in a manner that supports the client's decision.

11. Apply knowledge of contemporary stakeholder issues to systems decision-making.

12. Demonstrate the skills necessary to support continued intellectual growth and learning for a career of professional excellence and service to the nation as an officer in the United States Army.

Engineering Management Major

Engineering Management majors study the engineering relationships among the management tasks of staffing, organizing, planning, financing, and leading the human element in production, research, engineering, and service organizations. By emphasizing leadership in a technical setting, the program builds on the traditional roles of the basic and applied sciences for engineering and technology management. Engineering managers must understand the interaction of organizational, technical, and behavioral variables in order to build a productive engineering team.

Majors get a technical foundation in a specific engineering field of their choice: civil, mechanical, nuclear, electrical, environmental or general engineering. The program also provides a solid base of courses in personnel management, finance and accounting, engineering economy, production operations management, quantitative business analysis, project management, and computer modeling in order to prepare graduates to lead in a technical environment. The program culminates with a capstone design experience for a real client. Cadets may also be eligible to graduate with honors from this program.

The Engineering Management program at West Point is one of the top undergraduate programs in the nation and is accredited by the Engineering Accreditation Commission of ABET, www.abet.org, a U.S. accreditor of college and university programs in applied science, computing, engineering, and technology. The program provides the academic foundation for a wide variety of activities important to Army officers of all branches.

Engineering Management Program Objectives: Graduates who major in engineering management:

1. Lead or participate as members of multi-disciplinary teams that succeed in diverse, multi-cultural environments around the world throughout a career of professional excellence and service to the nation as an officer in the United States Army.

2. Plan, organize, staff, manage, and control resources to provide tactical and strategic value to an organization while taking into account contemporary issues in society and the military.

3. Use strong general engineering and scientific foundations and tools to provide thoughtful analysis and innovative solutions to complex problems.

4. Effectively communicate technical and other information crucial for effective decision-making.

5. Seek out and succeed in continued intellectual and professional development in engineering management and related fields.

6. Personally engage in, model and enforce ethical and professional responsibility throughout the course of their military and engineering professional careers.

Engineering Management Program Outcomes: To achieve these objectives, cadets upon graduation will:

1. Lead and work effectively as a contributing member of multidisciplinary engineering teams.

2. Lead the design or reengineering of a system, process, or organization within realistic environmental constraints such as cultural, historical, legal, moral/ethical, economic, environmental, organizational, emotional, social, political, and technological.

3. Use the techniques, skills, modern engineering tools, and technology necessary for engineering management practice.

4. Use systems thinking and engineering management techniques to identify, define, solve, recommend, and implement the solution to a client's problem.

5. Monitor, assess, and manage the broad global and societal impacts of engineering management problems, solutions, and management decisions throughout the system lifecycle.

6. Use stakeholder analysis to identify contemporary issues in engineering management.

7. Apply knowledge of mathematics, science, and engineering appropriate for Army officers and practicing engineering managers.

8. Design and conduct system experiments, including the ability to collect, analyze, and interpret system input and output data.

9. Accurately, clearly, and concisely report engineering findings, conclusions, and recommendations to clients and stakeholders to support decision making.

10. Demonstrate the skills necessary to support continued intellectual growth and learning for a career of professional excellence and service to the nation as an officer in the United States Army.

11. Act professionally and ethically as a leader of character.

Systems Management Major

Systems Management is the study of decision-making; specifically, decision-making for leaders in a world of increasingly sophisticated technology. The Systems Management program combines specific core courses with traditional engineering, systems engineering, economics, finance, and organizational management courses.

Cadets will study and understand the relationships between the management tasks of staffing, organizing, planning, and financing, as well as the human element in production, research, service, and Army organizations. Systems Management analyzes these decision-making skills in the context of defense acquisition and design, leading and managing the creation of the next generation of high-technology weapons systems in accordance with performance requirements, limited budgets, and strict time schedules.

The discipline of Systems Management develops graduates' abilities to conceptualize and manage the design and implementation of high-quality, large-scale, complex systems that meet the needs of all stakeholders, including operators, maintainers, and commanders. Courses such as the Systems Management Capstone, Engineering Economy, Project Management, Systems Acquisition Management, and Financial Accounting, provide a solid foundation to enable a graduate to act as an intermediary between stakeholders and clients in an acquisition environment.

Cadets who major in Systems Management will culminate their studies by completing a capstone project for an actual client. This major will produce graduates with technical and business skills and prepare them for future academic and professional opportunities in a society increasingly dominated by technological change.

Operations Research Major

Operations Research (OR) is a scientific approach to decision-making, the focus of which is how best to design and operate systems, usually under conditions requiring the allocation of scarce resources. Today, OR is inextricably linked to the direction and management of large systems of people, machines, materials, and money in government, industry, business, and defense.

Since its inception during WWII, the inter-disciplinary field of OR has set itself apart as an applied mathematical science and engineering discipline with a diverse range of applications. Because of the increased demand for OR analyses within the Army, the OR specialty (FA49) continues to enjoy steady growth in membership, and is associated with superb educational and promotion opportunities throughout an officer's military career.

The OR program at West Point is jointly sponsored by the Department of Systems Engineering and the Department of Mathematical Sciences. West Point remains the single-largest source of FA49 officers for the Army. Graduates of the OR program at West Point are well-prepared to tackle some of the Army's most challenging problems and to pursue graduate study in support of the FA49 career field.

Systems Engineering Sequence

The Systems Engineering Sequence consists of three courses. Cadets enrolled in the Systems Engineering core sequence may start the sequence in the first or second term of their junior year. The three course sequence must be completed in consecutive semesters.

The first course (SE300) is an introduction to systems engineering, systems thinking, and the systems decision process. Cadets are introduced to modeling and complete two case studies. Cadets learn techniques to understand complex systems, their interactions, and the concept of value-focused thinking centered on decision makers and stakeholders.

The second course (SE350) introduces cadets to a range of modeling and analysis techniques using Microsoft Excel® and other simulation software. The course provides a link between systems thinking and the systems decision process and the tools used to solve real world problems. Completing this course equips cadets with fundamental stochastic and deterministic modeling tools as well as decision economic analysis techniques.

The final course (SE450) is a capstone design course in which cadets apply the system decision process and the modeling techniques from previous courses to real-world systems at the United States Military Academy. These projects require cadet teams to apply the principles of project management, modeling, and decision analysis while interacting with a real client on a real problem. In the past, these clients have included the Director of Admissions, the Cadet Arms Room, the Boy Scouts of America, the Directorate of Cadet Activities, the Directorate of Intercollegiate Athletics, and the offices of the Dean and Commandant.

For further information, please call the Department of Systems Engineering at (845) 938-2701 or visit the department at www.usma.edu/se.

MILITARY PROGRAM

Each year during late June or early July, a new class, designated fourth class cadets, enters the United States Military Academy. In succeeding years, they become members of the third class, second class, and finally — in their senior year — first class.

The United States Military Academy's purpose is to educate, train, and inspire these select young men and women for exemplary service as commissioned officers in the Regular Army of the United States. The first step in this training is discipline. The daily regimen of cadet life is designed to develop an appreciation for discipline and the need to maintain professional standards of the highest order. Self-discipline, selfless service, attention to details and enforcement of standards are among the characteristics most highly prized within the cadet corps.

Cadets discover that at West Point they must make that "extra effort," budget their time wisely, and establish a clear sense of priorities. In the tradition of West Point, cadets become aware of and learn to fulfill their responsibilities to the Soldiers they will eventually lead. The military training program is dedicated to inspiring and preparing cadets to lead this nation's sons and daughters in the defense of freedom.

Organization

The Office of the Commandant of Cadets oversees all aspects of the military training and development of the corps within the context of the Military Program. This program provides a dynamic four-year sequential and integrated developmental process to teach, train, and inculcate the fundamental military knowledge, skills, and abilities expected of an Army officer.

The Office of the Commandant is organized with a supporting staff and separate departments to execute the Military Program. The United States Corps of Cadets (USCC) staff provides administrative, logistic, and training management in support of the Corps of Cadets. The Department of Military Instruction (DMI), discussed in the following section, provides formal Military Science education and organizes the majority of military training. The Brigade Tactical Department oversees the daily activities of the cadets.

Professional Education and Training

Future officer-leaders must master fundamental military concepts and skills, and understand tactics and doctrine. They must understand and commit themselves to the demanding code of ethics of the American professional Soldier.

Each cadet receives instruction in the fundamentals of small-unit tactics and leadership through the study of military science and leadership. Physical education and an extensive intramural program ready the cadet for the physical demands of service life and the combat environment. Four summers of field training give each cadet repeated opportunities for the practical application of principles learned, while sustaining the high level of fitness demanded of the Army officer.

Classroom instruction and practical experience in the field are combined to develop in each cadet the basic leadership expertise critical to the Profession of Arms. A strong sense of duty and responsibility is especially valued. In addition to self-discipline, each cadet learns to exercise good judgment, even when thinking and reacting under mental and physical stress and the demands of time. The cadet's high standards, manner, bearing, and appearance are but the visible signs of a deep pride in the profession. Like The Long Gray Line of graduates before them, West Point cadets share a sense of dedication to "Duty, Honor, Country."

Fourth Class Year

During their first day at West Point, the men and women of the incoming class make a rapid transition not only from civilians to cadets, but from civilians to Soldiers. They discover that they are expected to produce phenomenal results in a single afternoon, and they discover that they can do it. Beginning with this particularly challenging first day, new cadets start the intensely rigorous six-week Cadet Basic Training Program (CBT) designed to teach them to be both Soldiers and cadets. They learn to answer to "new cadet" and to make every response with the traditional military courtesies.

They learn to wear the cadet uniforms, to prepare their rooms for exacting inspections and to participate in parades.

Many hours of tough physical exercise prepare them for the long foot marches, rappelling, rifle marksmanship, and tactical maneuvers that are part of their field training in the basic skills of the individual Soldier. Like all new Soldiers everywhere, new cadets learn to respond quickly and accurately to their commanders under conditions of mental and physical stress. The primary purpose of the new cadets' experiences during these six weeks was expressed very well by a cadet who stated that the training was ". . . the most significant event in my life. It has provided for me exactly what I came here for: discipline, personal pride and confidence, and a high sense of duty." Another reason for this type of training is that officers can perform with greater perspective and understanding if they have at one time experienced the life of the Army recruit. Equally important, new cadets sharing a rigorous experience form strong friendships and team spirit that remain with them for the rest of their lives.

In mid-August, the end of this initial training period, new cadets are formally accepted into the corps. These new members of the United States Corps of Cadets have a well-deserved sense of confidence and pride, which comes with the knowledge that they have successfully completed a long, physically and emotionally demanding period of their lives. During the Acceptance Day parade ceremony, each new member of the Fourth Class, traditionally called a "plebe," is assigned to one of the 36 companies that make up the corps.

Military instruction during the rest of the Fourth Class year introduces cadets to the military profession, focusing on the Army Values, the professional qualities of an officer, and the military branches of the Army. It also provides detailed instruction on map reading and small-unit tactics. The academy also stresses physical development, a trend that continues throughout a cadet's life and during service in the Army.

Third Class Year

After a short leave, Third Class cadets (known traditionally as "Yearlings") report to West Point's Camp Buckner for seven weeks of military field training. The emphasis in Cadet Field Training (CFT) is on the close, combined fight, both light and mechanized. Extensive training on infantry operations, artillery firing, weapons training, Army aviation, military engineering, and land navigation makes up most of this training experience. Additionally, one week is spent at Fort Knox, Ky., for familiarization with armor, cavalry, mechanized infantry, self-propelled field artillery, and combat engineer operations.

The training during these seven weeks is designed to be physically and mentally demanding and to push the cadets to new personal heights. The cadets are challenged to give everything they have and then are challenged to give more.

Members of the Third Class emerge from the summer inspired about their future profession and role as commissioned officers. They have a better appreciation for leadership in stressful conditions; for mental and physical toughness and endurance; for the skills necessary to fight and win our nation's wars.

Second Class Year

During the Second Class summer, cadets further develop their leadership skills by serving as noncommissioned officers within the Corps at Cadet Basic Training and Cadet Field Training, and participating in Military Development School (MDS) in schools such as Airborne, Air Assault, Sapper Leader's Course, and Combat Diver. Other cadets receive leadership experience in actual Army units worldwide. Cadets participating in Cadet Troop Leader Training (CTLT) gain first-hand experience in leading real Soldiers. Cadets are also introduced to the unique bond shared among Soldiers and military families, as well as among the commissioned and noncommissioned officer corps.

In all of the above programs, cadets practice many of the skills learned at the academy and gain invaluable appreciation for the challenges faced by Soldiers and leaders in the active Army. Most cadets treasure these experiences as the most memorable of their four years at the academy as they make a new commitment to serve our nation.

First Class Year

With the arrival of the long-awaited First Class year come more privileges and latitude, and much greater responsibility. During the summer before starting this final academic year, one-quarter of the First Class serves in cadet officer positions, leading the training of the Third Class cadets at Camp Buckner and the new cadets during Cadet Basic Training. The remainder of the First Class participates in the CTLT and MDS programs mentioned above, if they did not do so the previous year. With four years of intensive military training experience, First Class cadets are selected to fill leadership positions from commander (known as the "first captain") of the 4,000-member corps, to leaders of 30-member platoons, and staff positions that involve management of all the activities of the Corps of Cadets. The opportunities for planning, organizing, and leading are almost limitless.

The culmination of the military training programs occurs on graduation day as the cadets shed "Cadet Gray" for their Army uniforms, and join a time-honored officer corps. Cadets confirm their commitment by taking the commissioning oath and swearing to protect and defend the Constitution, and to faithfully and selflessly lead American Soldiers.

BRIGADE TACTICAL DEPARTMENT

The Brigade Tactical Department is responsible for the daily operations and control of the Corps of Cadets. The department is led by the brigade tactical officer, and is organized into four regiments, each commanded by a regimental tactical officer. Each regiment is organized into nine cadet companies (A through I), with each cadet company commanded by the company tactical officer, and assigned a company tactical noncommissioned officer.

Mission

The mission of the Brigade Tactical Department is to develop and train cadets, through integration of West Point programs, to be leaders of character, committed to Duty, Honor, Country, and inspired for careers as U.S. Army officers and a lifetime of selfless service to the nation.

The members of the department accomplish this mission in diverse ways. Tactical officers and tactical noncommissioned officers (company TAC teams) are the integrators of West Point's developmental programs. They oversee each cadet's individual development in the academic, military, physical, and moral-ethical dimensions. The TAC teams train the cadets with a continual focus on leader development. The tactical officer is the legal commander of each cadet company and is responsible for the establishment and maintenance of a climate that fosters individual and unit excellence in all program areas.

Role

The role of the TAC Team is very diverse – mentor, counselor, leader, motivator, trainer, evaluator, commander, role model, administrator, and teacher. Tactical officers and tactical noncommissioned officers are chosen from the Army based on their demonstrated abilities and potential in all of these areas. All company TACs have been successful company commanders during their Army careers. The NCOs have all been successful platoon sergeants, drill sergeants or first sergeants. Their combined abilities, experiences, and training inspire and motivate cadets in preparation for their Army careers.

TAC teams interact daily with cadets across the developmental spectrum. They are in the company area when cadets wake in the morning and attend all formations with the cadets. TAC teams regularly teach numerous leadership and professional development classes. They attend drill and ceremonies practice, military training, and intramural sporting events with their companies. They perform these same duties during the summer training period during Cadet Basic Training or Cadet Field Training. Additionally, many tactical officers and tactical noncommissioned officers are assistant coaches, officer representatives, or officers-in-charge of cadet corps squad teams and cadet sports clubs and activities.

TAC Teams regularly interact with cadets' professors, mentors, coaches, staff, faculty, and parents. Tactical officers and tactical NCOs are the point of contact for any questions or concerns about cadets.

USCC Chaplains

A large and enthusiastic group of cadets participate in and lead the numerous activities offered in the four West Point chapels. Whether it is acting as a religious education teacher, singing in one of the cadet choirs, or serving as an usher or acolyte, cadets find opportunities to nurture their own spiritual lives as well as provide inspiration for the West Point Community.

Protestant and Eastern Orthodox services are offered each Sunday in the Cadet Chapel. Catholic masses are celebrated daily at Holy Trinity Chapel, and Jewish cadets attend service each Friday at the Jewish Chapel. Muslim worship is also offered each Friday at the Cadet Interfaith Center. The Old Cadet Chapel serves as the meeting place on Sunday for Lutheran cadets. Other denominational groups meeting each week include Southern Baptists, Episcopalians, Church of Christ, and Church of Jesus Christ of Latter Day Saints.

Chaplains are quick to lend a sympathetic ear to the cadet who seeks individual guidance or counsel about personal and family problems or who simply wants to talk. The chaplains' offices in Washington Hall, hub of the cadet living area, make this kind of personal counseling readily available.

Religious groups such as the Officers Christian Fellowship and the Navigators are also active at West Point. The Fellowship of Christian Athletes meets weekly, where coaches and professional athletes are among the speakers. Company Bible studies and fellowship groups are also available throughout the week to all cadets.

Retreats are popular activities. Each cadet is authorized one religious retreat each semester. It may be a ski retreat with the Fellowship of Christian Athletes, the always-popular Plebe Retreat, a Teens Encounter Christ (TEC), or Vida Nueva (New Life) weekend that helps keep the cadet active in the spiritual community.

West Point's religious activities are as varied and as appealing as the cadets who participate in them. They provide a vital link with congregations and parishes back home as well as giving spiritual vitality during cadet life at West Point.

DEPARTMENT OF MILITARY INSTRUCTION

The mission of the Department of Military Instruction is to train, educate, and inspire the Corps of Cadets in the essence of warfighting and the Profession of Arms over the 47-month West Point Experience in order to develop competent future Army officers.

The academic year instruction and the summer training program complement and supplement each other in a logical and progressive sequence to achieve a smooth transition from civilian status, through four cadet years, to commissioning as a second lieutenant.

Through a robust and wide-ranging program of visits, guest lecturers, conferences, and exchanges, the Military Program at West Point continues to incorporate the latest changes in doctrine, strategy, and tactics resulting from the ongoing Army Transformation. The Military Training Program, Military Science classes, and Defense and Strategic Studies within the Military Program continue to provide the foundation upon which the graduate will be able to begin a career as a commissioned officer with confidence, competence, and dedication to service.

Cadet Basic Training is the beginning of the Military Training Program and the start of the 47-month West Point Experience. The mission of Cadet Basic Training (CBT) is to train, instruct, and develop new cadets in order to transition them from civilians to Soldiers and to build a foundation to develop leaders of character strongly committed to military service. CBT is an eight-week program of instruction that instills in cadets the principles of discipline, personal pride, confidence, and a sense of duty. New cadets are challenged physically with a rigorous physical training program that includes a series of challenging foot marches, obstacle courses, and combat-focused physical training. They are trained in a variety of skills including rifle marksmanship, mountaineering and 75-foot rappels, land navigation, and hand-to-hand combat. CBT ends with the DMI Challenge, a two-day training event that challenges new cadets to demonstrate their proficiency in select tasks trained during the summer. The new cadets finish their CBT experience with a 14-mile foot march – the "Marchback" – back to West Point, where they are welcomed by the rest of the Corps of Cadets.

All cadets complete the four-week Cadet Field Training (CFT) during their second summer at West Point. The purpose of CFT is to train Third Class cadets in advanced individual skills, small unit tactics, and leadership in order to create competent, confident junior leaders for the Army and to introduce cadets to the essence of our Army – winning the close ground fight. CFT also provides a powerful leadership experience that develops the leader skills and abilities of participating First and Second Class cadets. Of the numerous training events in which cadets participate during CFT, two of the key events are a block of Urban Combat Operations and a 48-hour Field Training Exercise (FTX). Urban Combat Operations training introduces cadets to the rigors of fighting an enemy entrenched in a complex environment of streets, structures, and civilians. Cadets are trained in the tactics, techniques, and procedures used to defeat enemy combatants based on current trends from Contingency Operations Overseas. Near the end of the CFT experience, cadets participate in a 48-hour FTX that reinforces all the training received during CFT. This event challenges them both physically and mentally to make tactical decisions in stressful, complex, and ever-changing realistic situations. Cadets participating in this training must demonstrate the fortitude expected of an Army officer to lead and inspire Soldiers to accomplish any assigned mission, regardless of the conditions.

Cadet Leader Development Training (CLDT) is an intensive three-week training program for rising First Class cadets executed during their fourth and final summer at West Point. CLDT focuses on the Army's Troop Leading Procedures and leadership development during a 19-day tactical field training exercise. The training is modeled from the contemporary operating environment and lessons learned from units conducting combat operations in support of the Global War on Terror. Cadets conduct air assault operations, cordon and search, search and attack, mounted patrolling operations, platoon attack, and attack in an urban environment, and they conduct operations from a company combat outpost against an insurgent group hostile to host nation security forces. They gain an appreciation for cultural awareness through their interaction with Arabic-speaking role-players who replicate sheiks, imams, and other village/tribal leaders.

Core Military Science Courses

The Core Military Science (MS) curriculum is a critical component of the Military Program at the United States Military Academy that provides cadets the knowledge and skills necessary for continued cadet development and success as an Army officer. The curriculum allows cadets to study the Army profession during the academic year as a continuum of the Cadet Summer Training programs. This core program is taught by instructors from the Department of Military Instruction and is incorporated into the cadets' first three years. Each academic year builds upon the previous year's instruction so that each cadet matures in his or her

DMI, CONTINUED

Military Science knowledge and ability to think and communicate militarily. MS300 further develops the cadet's knowledge of doctrinal and warfighting principles, general professional knowledge, and troop-leading procedures (TLPs) in order to instill an aggressive and flexible combined arms mentality. Cadets are challenged to apply knowledge, skills, and common sense to solve complex situations that require critical thinking and creative problem-solving skills. Instruction in the fundamentals of Army operations emphasizes both offensive and defensive tactics. Additionally, cadets are expected to demonstrate mental agility and an increased understanding of the TLPs through nearly daily execution of tactical decision-making exercises. In addition to tactics, cadets continue their general instruction in the various Army systems, procedures, and functions that are important aspects of officership. Finally, cadets examine the small-unit leader's role in ensuring that the moral and ethical decision-making process is integrated into all operations.

Defense & Strategic Studies Major

The Defense and Strategic Studies major is an interdisciplinary military studies curriculum that goes well beyond the academy's core Military Science education. The DSS major is offered through the Department of Military Instruction and is an excellent choice for cadets who wish to undertake a serious academic study of the Profession of Arms.

These elective courses may be chosen from a wide interdisciplinary menu that includes advanced military science, history, social science, geography, law, and foreign language courses. Each course within the DSS major is weighted 3 credit hours in support of the academic program score. No credit is provided toward the military program score.

"Leadership and learning are indispensable to each other."

John F. Kennedy

THE WILLIAM E. SIMON CENTER

The mission of the William E. Simon Center for the Professional Military Ethic is to educate, train, and inspire leaders of character in the Corps of Cadets through the development, coordination and integration of the Professional Military Ethic in West Point curricula and activities.

Located in Nininger Hall, the original cadet barracks, the Simon Center houses the Cadet Honor Committee, the Cadet Respect Committee, and three endowed chairs, including the Class of 1966 Chair for the Professional Military Ethic, the Class of 1969 Chair for Officership, and the John A. Hottell Chair for Character.

Each of these entities is essential to inculcating in cadets the character and competencies required of Army officers. The Simon Center draws on the expertise of its staff, cadet committees, the rich history of West Point, and the most current research and Army doctrine to provide cadets with a challenging and relevant education in the Army profession.

The Simon Center develops the curricula and directs the instruction of two academic courses: the Professional Military Ethic Education (PME^2), and MX400 Officership. In PME^2, faculty and First Class cadet facilitators present real-life scenarios to small discussion groups to lead conversations in ethics, the Army Profession, and military leadership. Building from the lessons learned in PME^2, MX400 Officership is a three-credit course and the capstone educational experience in officership for all cadets.

Through completing reading and writing assignments on leadership and Army doctrine, and participating in seminars and panel discussions with current combat leaders, cadets gain broad insights into the character and competencies necessary for prospective officers to be effective and professional Army leaders. The courses provide a rigorous, interdisciplinary experience to augment the development of each cadet's character and professional identity as an officer and member of the Army profession.

DEPARTMENT OF PHYSICAL EDUCATION

The Department of Physical Education develops warrior leaders of character who are physically and mentally tough by engaging cadets in activities that promote and enhance the warrior ethos and lifelong physical and functional fitness. The physical program helps future leaders develop motor skills, self-confidence, respect for fair play, and a commitment to maintaining individual and unit physical fitness. The Department of Physical Education develops leaders of character through a coordinated, challenging, and safe physical education and fitness experience.

The Physical Education Core Program consists of:

- Basic Instruction skills classes (Survival Swimming, Boxing/Fundamentals of Combatives, Military Movement, Combat Applications).
- Personal and unit fitness instruction.
- Lifetime physical activity skills and knowledge.
- Fitness assessment to determine individual status and progress.
- A compulsory competitive sports program for all cadets.

The Physical Education curriculum is integrated with the cadet summer training program and the competitive sports program to provide all cadets a physical-development experience unmatched in the United States.

During the first year of physical education, cadets must strive to achieve a baseline of movement skills, physical fitness, knowledge, and self-confidence necessary to meet the future physical requirements of the United States Military Academy and the Army. All cadets are required to pass the following core courses: Military Movement, Fundamentals of Combatives (women only), and Boxing (men only).

During the second year of physical education, cadets enhance physical readiness, self-confidence, and physical fitness. Enrollment in one lifetime physical activity course is mandatory for all cadets. The Lifetime Physical Activity program is designed to develop a foundation of skills, knowledge, and personal attributes that enable cadets to successfully participate in lifetime sports, provide motivation for continued improvement, and establish a pattern of physical activity for a lifetime. Cadets will also take Fundamentals of Fitness, which provides the knowledge and experience to develop a personal fitness plan based on the Army doctrinal approach to physical readiness.

The third year of physical education affords cadets the opportunity to take Army Combat Applications and Survival Swimming. Army Combat Applications enhances cadets' personal fitness, warrior ethos, and leadership skills by providing a comprehensive set of basic combatives skills suited for a combat scenario. Cadets learn to respond appropriately to aggression by utilizing proper body mechanics, skills, aggressiveness, and fear management. Survival Swimming is designed to develop aquatic proficiency with emphasis on the military applications of swimming and survival skills, including breath control, buoyancy positions, stroke assessment, and swimming endurance.

Competitive Club Squads

Crew (M/W)	Cycling
Triathlon	Equestrian
Volleyball	Fencing
Lacrosse (W)	Boxing
Marathon	Martial Arts
Orienteering	Judo
Rugby (M/W)	Powerlifting
Skiing (Alpine)	Water Polo
Skiing (Nordic)	Sailing
Sport Parachute	Team Handball (M/W)
Mountaineering	Freestyle Wrestling

During the fourth year of physical education, cadets take Army Fitness Development which prepares future company grade officers for their role as fitness leaders by equipping them with the knowledge to plan, implement, and assess unit physical training in a variety of conditions and by giving them opportunities to apply this knowledge.

In addition to the instructional coursework, every cadet must participate in a competitive sport (company squad, club squad, or corps squad) during each academic term. Additionally, Second Class cadets must pass the Indoor Obstacle Course Test.

Baseline requirements are established for all cadets. The objective is for all cadets to share the same physical development experience in a cadet-centered environment. All cadets are required to complete and pass core instructional courses and physical fitness assessments, and also participate in competitive sports during each academic term.

Competitive Sports

Company Squad

Each cadet competes in company athletics twice weekly. Company athletics provide every cadet a chance to build character, leadership, esprit de corps, and fitness as well as relax, reduce stress, and have fun.

Competitive Club Squad

Competitive club squads complement the company athletics and intercollegiate athletic programs. Cadets who desire to compete at a higher level than the company athletic program are offered the opportunity to compete on one of the 23 different competitive clubs. These competitive teams, which are sponsored by the Department of Physical Education and funded by the Directorate of Cadet Activities, compete against other club, college, and university teams on a seasonal basis.

In most club sports cadets are leaders and planners as well as participants. As such, they are afforded the unique opportunity to further develop leadership and organizational skills in preparation for officership.

INTERCOLLEGIATE ATHLETICS

The athletic program is an integral and essential part of the total West Point Experience. The mission of the Office of the Director of Intercollegiate Athletics (ODIA) is to contribute to the achievement of the USMA physical program goals by providing cadets the opportunity to compete at their highest level of ability in an array of competitive intercollegiate athletic teams that emphasize winning championships, leadership development, and character growth.

ODIA Goals

- Reinforce the cadet-athlete commitment to excellence in academic, military, and physical programs.
- Provide a broad array of competitive opportunities and field competitive teams at the highest level compatible with other USMA programs.
- Achieve excellence and develop leaders of character through spirited competition, fair play, thorough preparation, teamwork, dedication, and self-sacrifice.
- Support the concept of equity for all teams and cadet-athletes.
- Comply fully with the letter and spirit of NCAA legislation.
- Operate a financially sound athletic program.

'Every Cadet an Athlete'

The athletic program is guided by the dictum, "Every cadet an athlete, every athlete challenged." Every cadet at West Point competes in intercollegiate, club or intramural sports. In addition, each cadet participates in the physical education program. The value of athletic experience to the potential Army officer has long been recognized.

Intercollegiate Athletics

Gen. MacArthur's position on the importance of athletics in the overall training of the cadet takes on special meaning with a look at some of the distinguished graduates who earned the coveted Army "A" while at West Point, including former President and General of the Army Dwight D. Eisenhower, and General of the Army Omar Bradley.

Former Army football stars Felix "Doc" Blanchard, Glenn Davis, and Pete Dawkins all earned the coveted Heisman Trophy. More than one-quarter of the entire Corps of Cadets competes on the intercollegiate level. ODIA's athletic program was presented with its NCAA certification, signifying that the program remains in substantial conformity with NCAA guidelines.

West Point's football program continues to generate most of the national interest for the intercollegiate athletic program at West Point. Historic Michie Stadium has long been recognized as one of the premier college football venues in the nation. The Black Knights compete at the Division I-A level in football and play a national schedule as well as the annual service academy battles with Air Force and Navy.

In the fall, Army also fields intercollegiate squads for men in soccer, cross country, and sprint football, while the women are active in cross country, volleyball, and soccer. With the exception of sprint football, which competes in the Eastern Sprint Football League, and varsity football, all other fall sports are members of the Patriot League.

The winter months are the busiest, athletically, with 10 squads competing on the intercollegiate level. While men participate in basketball, hockey, gymnastics, rifle, indoor track, wrestling, and swimming, women are active in basketball, swimming, indoor track, and rifle. Army's hockey team competes in the Atlantic Hockey League, while wrestling maintains its longtime membership in the Eastern Intercollegiate Wrestling Association. The gymnastics squad competes in the Eastern College Athletic Conference and Rifle is a member of the Great American Rifle Conference. All others compete in the Patriot League. During the spring, Army teams compete in baseball, lacrosse, tennis, golf, and outdoor track on the men's level, while the academy sponsors women's sports in softball, tennis, and outdoor track. All spring teams are members of the Patriot League.

Athletics remains an essential part of the academy's mission to develop leaders of character for our nation's future.

USMA intercollegiate athletic teams:

FALL

Men	Women
Cross Country*	Cross Country*
Football	Volleyball*
Soccer*	Soccer*
Sprint Football	

WINTER

Men	Women
Basketball*	Basketball*
Gymnastics	Rifle
Hockey	Swimming*
Indoor Track*	Indoor Track*
Rifle	
Swimming*	
Wrestling	

SPRING

Men	Women
Baseball*	Outdoor Track*
Golf*	Softball
Lacrosse*	Tennis*
Outdoor Track*	
Tennis*	

** Denotes membership in the Patriot League.*

APPENDIX A

I. Oath of Allegiance

I, _____, do solemnly swear that I will support the Constitution of the United States, and bear true allegiance to the National Government; that I will maintain and defend the sovereignty of the United States, paramount to any and all allegiance, sovereignty, or fealty I may owe to any State or Country whatsoever; and that I will at all times obey the legal orders of my superior officers, and the Uniform Code of Military Justice.

II. Agreement to Serve

I, having been appointed a cadet of the United States Military Academy, do hereby agree, with the consent of my parents or guardian if I am a minor:

a. To complete the course of instruction at the United States Military Academy;

b. If tendered an appointment as a commissioned officer in one of the armed services upon graduation from the United States Military Academy, to accept such appointment and to serve under such appointment on active duty for at least five consecutive years immediately after such appointment; if my initial appointment hereunder is in a Reserve Component, to accept a commission in a Regular Component if subsequently tendered during the five consecutive years immediately after my initial appointment, and to serve on active duty for the remainder of such period under such appointment.

c. If I am permitted to resign my commission in a Regular Component of one of the Armed Services prior to the eighth anniversary of my graduation, to accept an appointment as a commissioned officer in a Reserve Component of one of the Armed Services and remain therein until such eighth anniversary.

d. To serve a total of eight (8) years from graduation from the United States Military Academy. Any part of that service not completed on active duty must be served in a Reserve Component (not on active duty), unless I am discharged from the Reserve Component by proper military authority.

e. That if I fail to complete the course of instruction of the United States Military Academy, breach my service agreement as defined in paragraph 1.g.(4), Statement of Policies, on the next page, or decline to accept an appointment as a commissioned officer, I will serve on active duty as specified in paragraphs 1.b. through 1.f., which are contained in the Statement of Policies on the next page;

f. That if I voluntarily fail, or because of misconduct fail, to complete the period of active duty specified in paragraphs II.b., c., d. or e. above, I will reimburse the United States in an amount that bears the same ratio to the total cost of advanced education provided me as the unserved portion of active duty bears to the total period of active duty I have agreed to serve;

g. If I am obligated to reimburse the United States for the cost of my advanced education, any subsequent enlistment in an Armed Service will not relieve me of this debt.

h. Further, that if I am separated from the United States Military Academy for breach of this service agreement, as defined in paragraph 1.g.(4), Statement of Policies on the next page, and the Army decides that I should not be ordered to active duty because such service would not be in the best interests of the Army, I shall be considered to have either voluntarily or because of misconduct failed to complete the period of active duty and may be required to reimburse the United States as described above;

i. For the purpose of this paragraph:

(1) The term "voluntarily fail" includes, but is not limited to, failure to complete the period of active duty because of conscientious objection, because of resignation from the United States Military Academy or United States Army, and marriage while a cadet.

(2) The term "because of misconduct" includes, but is not limited to, termination by the United States Army of my service because of criminal conduct, conduct violating the Cadet Honor Code, conduct deficiency under the Cadet Disciplinary System, and conduct violating regulations for the discipline of the Corps of Cadets.

(3) The term "course of instruction" is synonymous with the term "educational requirements" as the term is used in 10 USC 2005.

III. Marital Status

I am unmarried, do not presently have custody of a child, do not have a legal obligation of support from a prior marriage, and have no legal obligation to support a child or a former spouse. Furthermore, I understand that a cadet, who marries, has custody of a child, incurs a legal obligation of support from a prior marriage, or incurs a legal obligation to support a child or former spouse while a United States Military Academy cadet will be separated from the United States Military Academy. Divorce, annulment, or other dissolution of a cadet's marriage does not affect or preclude separation under this provision.

My signature constitutes the taking of the Oath of Allegiance, execution of the agreement to serve, my affirmation as to my marital status, the absence of child custody or a court-ordered child support obligation and my acknowledgment that I have read, understand, and agree to abide by the statement of policies on the next page. For all male cadets, signing this form also constitutes registration with the Selective Service System in accordance with the Military Selective Service Act. Incident thereto the Department of Defense may transmit my name, permanent address, Social Security number, and birthdate to the Selective Service System for recording as evidence of the registration.

PLEASE NOTE: The oath (USMA Form 5-50) new cadets will sign on Reception Day may vary slightly from this version.

Statement of Policies

1. Department of Defense Directive 1332.23, dated 19 February 1988, as implemented by Army regulations, provides the following direction concerning separation of cadets prior to the completion of the course of instruction or subsequent to graduation on refusal to accept an appointment as a commissioned officer.

a. A cadet who enters the United States Military Academy (USMA) directly from civilian status assumes a military service obligation of eight years (10 USC 651).

b. A cadet who is separated from the USMA because of demonstrated unsuitability, unfitness, or physical disqualification for military service will be discharged in accordance with the applicable Army regulations. Where such a discharge is caused by voluntary action or misconduct on the part of a cadet subject to an active duty obligation, the reimbursement provision of paragraph II.f. of the Agreement to Serve will apply.

c. A cadet who enters the USMA directly from a civilian status and resigns or is separated from the USMA prior to the commencement of the Second Class academic year will be discharged from the U.S. Army. A resignation tendered by a Fourth or Third Class cadet will be accepted when found to be in the best interest of the service. A cadet who tenders a resignation will be required to state a specific reason for the action.

d. A cadet who enters the Military Academy from the Regular or Reserve Component of any military service and who resigns or is separated from the USMA prior to the commencement of the Second Class academic year will revert to his or her former status for the completion of any prior service obligation. As an exception, Invitational Reservists (cadets who entered the United States Military Academy Preparatory School from a civilian status) who resign or are separated from the USMA prior to commencement of his or her second class academic year will be discharged from the Army. A cadet who entered the USMA from the Regular Army or any Reserve Component of the Army and who has at the time of separation a remaining prior service obligation of less than one year, may, upon the approval of the Secretary of the Army or his designee, be discharged with waiver of any prior service obligation. All service as a cadet is counted in computing the unexpired portion of the enlistment or period of obligated service.

e. A cadet who has commenced his or her Second Class academic year and who resigns or is separated prior to completing the course of instruction, except for physical disqualification, unfitness, or unsuitability, will normally be transferred to a Reserve Component in an enlisted status and, if deemed to have breached his or her service agreement, may be ordered to active duty for not less than two years (10 USC 4348(b)) but no more than four years. The Secretary of the Army or his/her designee will retain final authority to order the individuals to active duty. Completion or partial completion of service obligation acquired by prior enlistment in no way exempts a separated cadet from being transferred to a Reserve Component and ordered to active duty under these provisions.

f. Any First Class cadet who completes the course of instruction and declines to accept an appointment as a commissioned officer will be transferred to a Reserve Component in an enlisted status and ordered to active duty for four (4) years (10 USC 4348(b)).

g. The foregoing provisions will be applied in accordance with the following guidance:

(1) The Second Class academic year shall be deemed to have commenced at noon on the first day of regularly scheduled academic classes following the summer training period. As an exception, the Second Class year for a cadet who is designated a potential mid-year graduate will commence at noon on the first day of regularly scheduled classes in the term following the advancement of that cadet into the second class.

(2) In cases where it is necessary to determine whether a cadet resigned prior to or following the commencement of the Second Class year, the critical date is the date the resignation action is initiated by the cadet.

(3) In cases in which the academy discovers an incident giving rise to separation in one academic year, but separation is not initiated (or a resignation in lieu of the same is not forwarded by the chain of command) until the following year, the separation action will be deemed to have "started" on the date of discovery for purposes of computing the service obligation and pay grade under AR 612-205, table 3.

(4) "Breach of service agreement" includes separation resulting from resignation, for any of the bases for separation listed in AR 210-26, Table 7-1, including all additions to Table 7-1 subsequent to the date of this agreement, or from other willful acts or omissions (AR210-26, paragraph 7-9).

2. Normally, all graduates of the USMA will be appointed by the President as commissioned second lieutenants on active duty in the United States Army. However, cadets may state a preference for appointment, upon graduation, as a commissioned officer in either the U.S. Navy, U.S. Air Force, or U.S. Marine Corps (10 U.S.C. 541 [a]). Such appointment will be contingent upon the approval of both the Secretary of the Army and the Service Secretary of the gaining military department.

3. Any First Class cadet, including potential mid-year graduates, in either of the two terms prior to their anticipated graduation, who resigns or is separated, if fully qualified, may be recommended by the Superintendent and approved by the Secretary of the Army to be commissioned in a Reserve component. Such action may be appropriate in cases of separation for marriage or child support or similar circumstances. The effective date of rank in the Reserve component will be no earlier than the graduation date of the individual's class at the time of resignation or separation. These cadets may:

(a) Be commissioned in the USAR for service with a Reserve Component unit. There will be an eight-year military service obligation associated with this appointment; or

(b) After receipt of a baccalaureate degree, be commissioned in the USAR and compete with Reserve Officer Training Corps graduates for active duty or active duty for training. The military service obligation for those selected for active duty under this provision will be eight years, three of which will be on active duty.

APPENDIX B

Medical Standards and Disqualifications

DODI 6130.4 and DoDMERB requirements for a military appointment include medical standards of fitness. These requirements are contained in the Department of Defense Instruction 6130.03 (April 2010), "Medical Standards for Appointment, Enlistment, or Induction in the Military Services," and are used by the Department of Defense Medical Examination Review Board (DoDMERB). You can access that document here: www.dtic.mil/whs/directives/corres/pdf/613003p.pdf. DoDMERB determines the medical fitness of all applicants to the five United States service academies and for ROTC scholarship programs. The review by DoDMERB ensures that a candidate does not have a physical or mental condition that would preclude or be aggravated by his or her participation in the academic and military duties encountered during the training at West Point or would be an impediment to field duty after graduation.

After submitting your application to West Point, you will receive a letter with instructions on scheduling your medical exam. If you are in the continental United States (CONUS), you will receive the letter from their contractor. If you are overseas, you will receive it from DoDMERB. Do not delay. Schedule your medical exam immediately upon receipt of your scheduling information.

Medical Examination

Every candidate must take a medical examination given at authorized examining centers throughout the United States and at certain overseas bases. Examinations by private physicians and optometrists cannot be considered authorized medical examinations. Only examinations given at DoDMERB-authorized medical facilities are accepted examinations.

Each applicant's medical history is reviewed for information on illnesses, injuries, surgical procedures, congenital or familial diseases or other factors that could affect current or future medical status. Applicants may be asked to provide additional reports and/or records from a physician or hospital.

Medical conditions that are hidden or not reported for whatever reason can result in the candidate being denied entrance to West Point on Reception Day (R-Day).

Medical Requirements

The following are some common medical disqualifications. THIS LIST IS NOT ALL-INCLUSIVE. Any condition that in the opinion of the medical officer shall significantly interfere with the successful performance of military duty or training may be disqualifying. Medical disqualifications are addressed in an official document that you can access at http://www.dtic.mil/whs/directives/corres/pdf/613003p.pdf. Should you have any questions regarding causes for disqualification, this information may be obtained by writing to the Department of Defense Medical Examination Review Board, 8034 Edgerton Drive, Suite 132, USAF Academy, Colorado Springs, CO, 80840-2200, or by calling (719) 333-3562. Visit the website https://dodmerb.tricare.osd.mil for additional information.

Eye and Vision

Vision: Distant visual acuity not correctable to 20/20 in one eye and 20/40 in the other eye is disqualifying.

Muscle Balance: Esotropia over 15 prism diopters, exotropia over 10 prism diopters, or hypertropia over 5 prism diopters is disqualifying.

Color Vision: Inability to distinguish vivid red and vivid green is disqualifying.

Refractive Surgery: Procedures to change the refraction (refractive surgery) including but not limited to: Lamellar and/or Penetrating Keratoplasty, Radial Keratotomy and Astigmatic Keratotomy are disqualifying. Refractive surgery performed with an Excimer Laser, including but not limited to Photorefractive Keratectomy (PRK), Laser Epithelial Keratomileusis (LASEK), and Laser-Assisted in situ Keratomileusis (LASIK) is disqualifying if any of the following conditions are met: The pre-operative refractive error exceeded +8.00 or-8.00 diopters (spherical equivalent) in either eye; pre-operative astigmatism exceeded 3.00 diopters; at least a six-month recovery period has not occurred between last refractive surgery or augmenting procedure and DoDMERB medical exam; there have been complications and/or medications or ophthalmic solutions required; and post-surgical refraction in each eye is not stable.

Refractive Error: Myopia over -8.00 diopters in spherical equivalent, or hyperopia over +8.00 diopters equivalent is disqualifying. Astigmatism over 3 diopters is disqualifying.

Rigid Contact Lenses: Must be removed 21 days prior to the eye examination. This requirement also includes gas-permeable lenses. For those applicants undergoing Ortho-Keratology or Corneal Refractive Treatment, rigid lenses must be removed for 90 days prior to the eye examination.

Soft Contact Lenses: Must be removed 3 days prior to the eye examination.

Candidates who wear eyeglasses or contact lenses must have their eyeglasses or contact lenses with them at the time of their medical examinations.

Head, Scalp, Face, and Neck

Abnormalities that interfere with wearing military equipment or are disfiguring are disqualifying.

Nose and Sinuses

Malformations or deformities that interfere with speech or breathing, chronic rhinitis inadequately controlled, or an allergy desensitization program within one year of accession are disqualifying.

Ears and Hearing

Moderate hearing loss in the 500 to 4000 Hz frequencies, a history of middle ear surgery, abnormalities of the external ear, the use of hearing aids, a perforated eardrum (including a retained tympanostomy tube) or a perforated eardrum surgically repaired within 120 days of the DoDMERB physical exam will result in medical disqualification.

Lungs, Asthma, and Chest

A history of pneumothorax within the past year, if due to simple trauma or surgery, or a history within the past three years if spontaneous; asthma, including reactive airway disease; exercise-induced bronchospasm or asthmatic bronchitis, reliably diagnosed after the 13th birthday are disqualifying. A positive tuberculosis skin test is disqualifying, if not treated. Individuals who have a negative Quantiferon Gold test are not disqualified. Individuals taking prophylactic chemotherapy because of recent skin test conversion are not disqualified.

Skin

Disqualifications: A verified history of psoriasis; eczema or atopic dermatitis after the 9th birthday; pilonidal cyst with mass or discharging sinus. Treatment with Accutane is temporarily disqualifying until eight weeks post-therapy.

Heart and Vascular System

Disqualifications: History of hypertension, valvular, septal, congenital or other defects. Supraventricular tachycardia is disqualifying unless there is no recurrence during the preceding two years while off medication or post ablation.

Endocrine and Metabolism

Disqualifications: A history of thyroidectomy; current goiter; history of hyperthyroidism; thyroiditis, hyperparathyroidism, hypoparathyroidism, or diabetes mellitus. Hypothyroidism, if uncontrolled by medication, is disqualifying.

Spine and Other Musculoskeletal

Disqualifications: Scoliosis, kyphosis, or lordosis likely to impair normal function; herniated disc or history of operation for this condition; history of chronic or recurrent low back pain; fusion of the spine; spondylolysis or spondylolisthesis; symptomatic pes planus, or residual deformity from clubfoot or pes cavus; surgical repair of anterior or posterior cruciate ligament injuries of the knee must be evaluated at least six months after surgery for stability and symptoms. A history of all fractures, severe sprains, and any type of orthopedic or podiatric surgery (including arthroscopic surgery) must be documented in application medical examination.

Genitourinary System

Disqualifications: Horseshoe kidney or absence of one kidney; kidney stones; proteinuria, hematuria, or pyuria that is persistent or indicative of chronic renal disease; hydronephrosis; atrophy or absence of one or both testicles; undescended testicle. Hydrocele/varicocele will be evaluated. Congenital absence of the uterus. Irregularities of the menstrual cycle, including heavy menses, bleeding between menses, or lack of menses will be reviewed and evaluated. Severe dysmenorrhea, endometriosis, pregnancy are disqualifying.

Abdomen & Gastrointestinal System

Disqualifications: History of ulcer; gastroesophageal reflux disease; regional enteritis (Crohn's), ulcerative colitis or other inflammatory bowel disease; gallbladder disease; chronic hepatitis, including hepatitis B or C carriers. Current hernia or history of surgery for hernia within preceding six months is temporarily disqualifying.

Nervous System

Disqualifications: Diagnosed seizure disorder since the age of 5; anticonvulsant medications within five years of the examination; history of unexplained unconsciousness; documented history of headaches within the past three years that interfere with daily functions or require medical treatment. History of head injury resulting in unconsciousness will be evaluated and may require a complete neurological evaluation including electroencephalogram.

Psychiatric

History of academic skills or perceptual defects that interfere with work or school may be qualified if successful school and work performance can be demonstrated without utilization or recommendation of accommodations within the previous 12 months. Use of stimulant medication in the previous 12 months to improve or maintain academic skills (e.g. Ritalin, Adderall) is disqualifying. History of attempted suicide or other suicide behavior; psychoneurosis; personality disorders; other disorders of emotion, behavior, thought, mood; or substance misuse will be evaluated and may be cause for disqualification. Stuttering, eating disorders, and sleepwalking are disqualifying.

Dental

Active orthodontic appliances are disqualifying. Retainer appliances are permissible, provided all orthodontic treatment has been satisfactorily completed.

Perforation(s) of the hard palate; cleft lip, unless satisfactorily repaired by surgery, are disqualifying.

After the Exam

After the initial exam, your file will be reviewed at DoDMERB. They will find you either "Qualified" or "Disqualified" or place you in "Remedial" status. You can check your medical status on the DoDMERB web site at https://dodmerb.tricare.osd.mil.

If you are remedial status, DoDMERB will request additional tests, exams, or information to answer any questions they have. You should comply with any requests immediately. After receiving your additional information, DoDMERB will continue to review your file.

If you are disqualified, the academy will consider you for a waiver if you are competitive for an offer of admission to West Point. Do not send waiver requests to West Point; the academy will notify you of the waiver decision in writing as soon as the review process is complete.

In most cases, your entire file will be reviewed by DoDMERB before any disqualifications are formally applied and forwarded to West Point. DoDMERB no longer ceases the review process at the first disqualification to consult with West Point. It behooves you to immediately comply with any remedial requests from DoDMERB, since your disqualification(s) will not be forwarded for consideration for a waiver by the academy until all remedials are received by DoDMERB. If you are having difficulty obtaining medical records, inform DoDMERB of the situation. Other methods of obtaining information may be used.

Waivers

Some medical standards can be waived for applicants who are otherwise highly qualified. Once a medical disqualification status is applied by DoDMERB, the senior medical officer at West Point will have access to your same medical records originally sent to DoDMERB. The senior physician at West Point, after consultation with the Directorate of Admissions, may request additional information, such as a medical consult or study. This will come to you as a letter "At the request of the U.S. Military Academy … additional information is required," which will be sent to you from DoDMERB. When you are being considered for a waiver, you are dealing with West Point, using DoDMERB as the intermediary for information.

Please return all requested information/documentation to DoDMERB in Colorado Springs. DoDMERB will ensure all waiver-requested information is posted to the senior physician at West Point with every piece of information DoDMERB receives. DoDMERB does NOT apply any waivers, but will assist you with questions during the process of obtaining and completing the requested medical information. Questions regarding the status of your medical waiver should be directed to the Admissions Office at West Point. The academy will notify you of the waiver decision in writing as soon as the review process is complete.

Injury or Hospitalizations

If you are injured or hospitalized after your initial exam, or if you failed to report any medical conditions during your exam, you should contact DoDMERB immediately. Failure to disclose medical, dental, visual, or psychological conditions can be grounds for separation from West Point.

APPENDIX C

Candidate Fitness Assessment

Satisfactory completion of the Candidate Fitness Assessment (CFA) is one of the requirements for admission to the United States Military Academy. The CFA is a test of strength, agility, speed and endurance. It is used to predict a candidate's aptitude for the physical program at the service academies.

The results of this test are very important in the overall assessment of your admissions file, so you should become familiar with the six events in the CFA and practice them.

The examination consists of the following events: basketball throw (from kneeling position), cadence pull-ups or the flexed-arm hang (women's option), a shuttle run, modified sit-ups (crunches), push-ups, and a 1-mile run.

In order to qualify for admission, you must take the CFA. Your score is a combination of your best efforts on each of the six events. You should strive for excellence and the highest possible score.

CANDIDATE FITNESS ASSESSMENT

EVENTS	TEST START TIME	TESTING TIME	REST	TOTAL TIME
BASKETBALL THROW	0 MINUTES	2 MINUTES	3 MINUTES	5 MINUTES
CADENCE PULL-UPS	5 MINUTES	2 MINUTES	3 MINUTES	10 MINUTES
SHUTTLE RUN	10 MINUTES	2 MINUTES	3 MINUTES	15 MINUTES
MODIFIED SIT-UPS	15 MINUTES	2 MINUTES	3 MINUTES	20 MINUTES
PUSH-UPS	20 MINUTES	2 MINUTES	8 MINUTES	30 MINUTES
1-MILE RUN	30 MINUTES	UNTIL COMPLETED		UNTIL COMPLETED

TABLE 1. MAXIMUM PERFORMANCE SCORES BY EVENT AND GENDER

	BB THROW (FT.)	PULL-UPS	SHUTTLE RUN (SEC.)	MODIFIED SIT-UPS	PUSH-UPS	1-MILE RUN
MALE	102	18	7.8	95	75	5:20
FEMALE	66	7	8.6	95	50	6:00

TABLE 2. AVERAGE PERFORMANCE SCORES BY EVENT AND GENDER

	BB THROW (FT.)	PULL-UPS	SHUTTLE RUN (SEC.)	MODIFIED SIT-UPS	PUSH-UPS	1-MILE RUN
MALE	67	9	9.1	72	54	6:43
FEMALE	41	3	10	68	33	8:06

The six test events of the CFA are administered consecutively with specified start, finish, and rest times. Candidates should attempt to do their best on all six events, keeping in mind that the events are sequenced to produce a cumulative loading effect. In other words, after completing the first five events, it is doubtful a candidate will score his/her personal best on the 1-mile run. This has been considered in the development of the scoring standards, which will be used to evaluate performance in each of the six events.

APPENDIX D

Privacy Act Statement

Required candidate information is requested pursuant to 10 U.S.C. Section 4346, Cadets: requirements for admission. Providing the requested information, including Social Security Number, is voluntary, but without this information, the U.S. Military Academy may not be able to send a reply.

This information will be used in providing you a Candidate Questionnaire and additional candidate information forms, and to open a database candidate file for you; your Social Security Number is needed as a means of accessing and tracking your database entry.

Generally, government records are releasable to persons within the Department of Defense who have a need to know. Information you provide may be disclosed to members of Congress to assist them in nominating candidates, and to Admissions field representatives who handle candidate interviews and provide application assistance.

APPENDIX E

Restrictions on Personal Conduct in the Armed Forces

1. Military life is fundamentally different from civilian life. The military has its own laws, rules, customs, and traditions, including numerous restrictions on personal behavior. These are necessary because military units and personnel must maintain the high standards of morality, good order and discipline, and unit cohesion that are essential for combat effectiveness.

2. The Armed Forces must be ready at all times for worldwide deployment. Military law and regulations, including the Uniform Code of Military Justice, apply to service members at all times, both on base or off base, from the time the member enters the service until the member is discharged or otherwise separated from the Armed Forces.

3. Members of the Armed Forces may be involuntarily separated before their term of service ends for various reasons established by law and military regulations, such as:

(a) A member may be separated for a pattern of disciplinary infractions, a pattern of misconduct, commission of a serious offense, or civilian conviction.

(b) A member who has been referred to a rehabilitation program for personal drug and alcohol abuse may be separated for failure through inability or refusal to participate in, cooperate in, or successfully complete such a program.

(c) A member may be discharged by reason of parenthood, if it is determined the member, because of parental responsibilities, is unable to perform his or her duties satisfactorily or is unavailable for worldwide assignment or deployment.

(d) A member may be separated for failure to meet service weight control standards.

(e) A member may be separated for harassment or violence against any service member.