A. JAMES CLARK SCHOOL OF ENGINEERING

3110 Jeong H. Kim Engineering Building
Phone: 301-405-8335
http://eng.umd.edu

Dean: Samuel Graham, Ph.D.
Associate Deans: Akua Asa-Awuku, Ph.D.; Hugh Bruck, Ph.D.; Ken Kiger, Ph.D.; Jelena Srebric, Ph.D.; Min Wu, Ph.D.

Deploying artificial intelligence (AI) in a powerful, responsible, and ethical way. Setting trends in engineering and medicine. Launching companies that reshape the economy and improve people's lives.

When the world looks for solutions to society's grand challenges, it comes to Maryland Engineering.

As one of the country's top engineering schools, Maryland Engineering empower students to innovate for the public good. Located next to Washington, D.C., the Clark School is at the center of a network of high-tech companies and federal agencies and laboratories, offering students access to one of the most vibrant research environments in the country. With industry-leading expertise in quantum technology, semiconductors, AI, energy, robotics, health care, disaster resilience, intelligent transportation systems, and more, Clark School students conduct research relied upon by federal agencies, major companies, and other academic institutions.

We combine classroom learning with hands-on experiences; participation in national and international engineering competitions; a vibrant entrepreneurial ecosystem; and an extensive internship and career placement program.
Society needs solutions to its grand challenges; engineers will play a part in every solution: http://eng.umd.edu.

Admission Requirements

Freshmen Admission

Direct Admissions Requirements

Admission to the A. James Clark School of Engineering is limited. Freshmen applicants are reviewed and will be admitted directly on a competitive basis. Evaluation is based on an applicant's academic record, activities, leadership, and demonstrations of potential to succeed. An applicant may apply to any of the majors offered within the School. An applicant also has the option of entering as an Undecided Engineering major and will typically choose a degree program in the first year.

Directly admitted freshmen will be subject to an academic review at the end of the semester in which they attain 45 University of Maryland credits. In order to successfully complete the review, students must have an overall GPA of at least 2.0 and have completed the following sequence of gateway requirements: ENES100, MATH141, PHYS161, and CHEM135 or CHEM271 or the combination of CHEM131 and CHEM134 with a minimum grade of "C-."

Only one repeat of a single gateway course, either at the University of Maryland or at any other university or college, will be considered to meet the review requirements. A course in which a grade of "W" (withdrawn) is earned is counted as an attempt. Students who fail the 45 credit review will be required to change to a major not in the Clark School and may not reapply to any engineering major. Students who must leave the Clark School may appeal in writing to the Associate Dean of Undergraduate Student Affairs in the Clark School. Appeals are considered on a case-by-case basis and decisions are made based on the extenuating circumstances presented by the student. All appeals require relevant documentation, and decisions from the Associate Dean are final.

Transfer Admission

Direct Admissions Requirements

Admission to the Clark School of Engineering is limited for all majors with the exception of Biocomputational Engineering and Mechatronics Engineering. Internal and external transfer students will be directly admitted to the Clark School if they meet the following Gateway requirements: MATH141 with a "B-" or higher, PHYS161 with a "B-" or higher, either CHEM135 or CHEM271 or CHEM134 with a minimum grade of "C-" or higher (Students who take CHEM134 must also have completed CHEM131 with a minimum grade of "C-"). Students must also have a minimum cumulative GPA of 3.0 in all college-level coursework, and have not previously been admitted to the Clark School of Engineering. Only one repeat of a single Gateway course, either at the University of Maryland or at any other university or college, will be considered to meet the review requirements. A course in which a grade of "W" (withdrawn) is earned is counted as an attempt. Students should wait until all gateway requirements are complete before applying for admission to the School.

Transfer Admission Appeal Process

All students denied admission to the Clark School may appeal the decision in writing directly to the Associate Dean of Undergraduate Student Affairs in the Clark School.

Maryland Community College Transfer Students

Students who complete an associate's degree at a Maryland community college may be prepared to enter into the sophomore or junior year in engineering at the University of Maryland if they have completed the required engineering coursework. To ensure that you are enrolling in the correct courses to transfer, please consult the Engineering graduation plans and the Transfer Credit Services website. There may be some courses which are not offered at Maryland community colleges. Students should investigate the feasibility of completing these courses during the summer session at the University of Maryland before starting their junior course work in the fall semester. Students transferring in Fall 2022 and after may apply up to 70 credits from a MD community college to their degree. Any student transferring prior to Fall 2022 may apply up to one half of the degree credits (approximately 60 semester hours) to their degree.

DEPARTMENTS

Departments and Units

- Aerospace Engineering (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/aerospace-engineering/)
- Chemical and Biomolecular Engineering (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/chemical-biomolecular-engineering/)
- Civil and Environmental Engineering (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/civil-environmental-engineering/)

- Electrical and Computer Engineering (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/electrical-and-computer/)
- Fire Protection Engineering (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/fire-protection-engineering/)
- Fischell Department of Bioengineering (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/bioengineering/)
- Materials Science and Engineering (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/materials-science-engineering/)
- Mechanical Engineering (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/mechanical-engineering/)

ACADEMIC PROGRAMS

Majors

- Aerospace Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/aerospace-engineering/aerospace-engineering-major/)
- Biocomputational Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/bioengineering/biocomputational-engineering-major/)
- Biocomputational Engineering Major at Shady Grove (https://academiccatalog.umd.edu/undergraduate/colleges-schools/universities-shady-grove/engineering/biocomputational-engineering/)
- Bioengineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/bioengineering/bioengineering-major/)
- Chemical Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/chemical-biomolecular-engineering/chemical-biomolecular-engineering-major/)
- Civil Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/civil-environmental-engineering/civil-environmental-engineering-major/)
- Computer Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/electrical-and-computer/computer-engineering-major/)
- Cyber-Physical Systems Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/electrical-and-computer/cyber-physical-systems-engineering-major/)
- Cyber-Physical Systems Engineering Major at Shady Grove (https://academiccatalog.umd.edu/undergraduate/colleges-schools/universities-shady-grove/engineering/cyber-physical-systems-engineering/)
- Electrical Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/electrical-and-computer/electrical-engineering-major/)
- Electrical Engineering Major at USMSM (https://academiccatalog.umd.edu/undergraduate/colleges-schools/college-of-southern-maryland/electrical-engineering-usmsm/)
- Fire Protection Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/fire-protection-engineering/fire-protection-engineering-major/)
- Materials Science and Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/materials-science-engineering/materials-science-engineering-major/)
- Mechanical Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/mechanical-engineering/mechanical-engineering-major/)
- Mechanical Engineering Major at USMSM (https://academiccatalog.umd.edu/undergraduate/colleges-schools/college-of-southern-maryland/mechanical-engineering-usmsm/)
- Mechatronics Engineering Major (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/aerospace-engineering/mechatronics-engineering-major/)
- Mechatronics Engineering Major at Shady Grove (https://academiccatalog.umd.edu/undergraduate/colleges-schools/universities-shady-grove/engineering/mechatronics-engineering/)

Minors

- Computer Engineering Minor (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/electrical-and-computer/computer-engineering-minor/)
- Construction Project Management Minor (ENGR) (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/civil-environmental-engineering/construction-project-management-minor/)
- Global Engineering Leadership Minor (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/global-engineering-leadership-minor/)
- Nanoscale Science and Technology Minor (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/nanoscale-science-technology-minor/)
- Nuclear Engineering Minor (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/mechanical-engineering/nuclear-engineering-minor/)
- Project Management Minor (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/civil-environmental-engineering/project-management-minor/)
- Quantum Science and Engineering Minor (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/electrical-and-computer/quantum-science-engineering-minor/)
- Robotics and Autonomous Systems Minor (ENGR) (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/robotics-autonomous-systems-minor/)
- Science, Technology, Ethics and Policy Minor (ENGR) (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/science-technology-ethics-policy-minor/)
- Technology Entrepreneurship and Corporate Innovation Minor (https://academiccatalog.umd.edu/undergraduate/colleges-schools/engineering/technology-entrepreneurship-minor/)

COLLEGE REQUIREMENTS

Undergraduate Degree Requirements

Structure of Engineering Curricula: The section below describes the requirements and the prescribed credit hours leading to the Bachelor of

Science degrees awarded in the Clark School of Engineering. The courses in each curriculum may be classified in the following categories:

1. Courses in the General Education Program;
2. Courses in Basic Sciences (mathematics, chemistry, and physics);
3. Related technical courses, engineering sciences and other courses approved for one curriculum but offered by another department;
4. Courses in the major department. The courses in each engineering curriculum, as classified below, form a sequential and developmental pattern in subject matter. In this respect, curricula in engineering may differ from curricula in other colleges. Some regulations which are generally applicable to all students may need clarification for purposes of orderly administration among engineering students (see Academic Regulations (https://academiccatalog.umd.edu/undergraduate/registration-academic-requirements-regulations/academic-records-regulations/)). Moreover, the Clark School of Engineering establishes policies that supplement university regulations.

School Regulations

1. The responsibility for proper registration and for satisfying stated prerequisites for any course must rest with the student as does the responsibility for proper achievement in courses in which the student is enrolled. Each student should be familiar with the provisions of this catalog, including the Academic Regulations.
2. Required courses in mathematics, physics, and chemistry have highest priority. It is strongly recommended that every engineering student register for mathematics and chemistry or mathematics and physics each semester until the student has fully satisfied the requirements of the Clark School of Engineering in these subjects.
3. To be eligible for a bachelor's degree in the Clark School of Engineering, a student must have an overall cumulative grade point average of at least a 2.0 and a "C-" or better in all engineering degree requirements (including all technical coursework but not limited to courses taken in MATH, PHYS, CHEM). Students matriculating to UMD in the fall of 2012 or after must also have a 2.0 cumulative GPA in their major courses, minor courses and classes used to satisfy certificate programs.
4. A course taken at UMD in which a grade has been earned may not be repeated via transfer from another institution.
5. Students in the Clark School of Engineering must have a minimum 2.0 University of Maryland GPA to enroll in courses at another institution.
6. All students are required to complete a number of general education courses and must follow the university's requirements regarding completion of the General Education Program. Consult the Academic Regulations section of this catalog for additional information. Engineering students are required to complete a Professional Writing course.
7. All degree programs in the Clark School of Engineering require a minimum of 120 credits plus satisfaction of all department, School, and University general education program requirements (Aerospace Engineering majors are required to complete a minimum of 124 credits). Students should be aware that, for all currently existing engineering programs, the total number of credits necessary for the degree exceeds 120 by some number that depends on the specific major.

Curricula for the various engineering departments are given in this catalog to illustrate how the programs may be completed in four years. These curricula are rigorous and relatively difficult. It is not uncommon for a student to extend their curriculum; this may be necessary or desirable for a variety of reasons. However, students should seek academic advising in order to ensure that courses are taken in the proper sequence.

Another factor impacting the academic plan is the math placement exam. For entering freshmen, the math placement is determined solely by performance on the University math placement exam and not on the Math SAT score. Placement in MATH115 or lower will delay eligibility to take certain engineering courses by a semester.

All students are encouraged to utilize the university's degree auditing system, uAchieve, and to review the audit with their departmental advisor throughout the course of their academic career. The purpose of the audit is to discuss academic progress and to confirm that graduation requirements are met.

Departments and Degrees

The Clark School of Engineering consists of eight academic departments and offers the degree of Bachelor of Science in the following fields of study: Aerospace Engineering, Bioengineering, Biocomputational Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Cyber-Physical Systems Engineering, Electrical Engineering, Fire Protection Engineering, Materials Science and Engineering, Mechanical Engineering, and Mechatronics Engineering. All of the above programs are accredited by the Engineering Accreditation Commission(s) of ABET, https://www.abet.org (with the exception of Biocomputational Engineering, Cyber-Physical Systems Engineering, and Mechatronics Engineering).

Entering freshmen may enroll in the Clark School as Undecided Engineering. Students declared as Undecided Engineering are advised by the Undergraduate Advising & Academic Support Office. No later than their third semester a student should select an academic degree program. The student's newly declared major department assumes the responsibility for the student's academic guidance, counseling, and program planning from that point until the completion of the degree requirements. For the specific requirements, see the curriculum listing in each engineering department.

Pathways to Shady Grove Programs

The A. James Clark School of Engineering offers three degrees at the Universities at Shady Grove, located in Rockville, MD – Biocomputational Engineering, Cyber-Physical Systems Engineering, and Mechatronics Engineering. Because these degree programs are exclusively available at Shady Grove, students eligible for admission to the Clark School and who are currently attending the University of Maryland, College Park, may indicate interest in these degree programs by declaring the pre-major.

The Pre-Biocomputational Engineering, Pre-Cyber-Physical Systems Engineering, and Pre-Mechatronics Engineering majors are not degree-granting programs. Rather, these pre-majors are specifically designed for students who plan to transition from the College Park campus to the Shady Grove campus to pursue the Biocomputational Engineering , Cyber-Physical Engineering, and Mechatronics Engineering majors at Shady Grove.

The Universities at Shady Grove only offer the 300 and 400-level degree requirements. Therefore, prior to transitioning to the Shady Grove campus, students must complete all 100 and 200-level prerequisites and must complete their general education requirements.

Prospective freshmen and transfer students are invited to apply into the pre-majors. Applicants for the pre-major codes will be reviewed based on the Clark School of Engineering LEP requirements. If admissible to the college, they would be invited to pursue the pre-majors at College Park until the time when they are ready to transition to the Shady Grove campus.

Students who are pursuing the pre-major codes will be advised as follows: Pre-Biocomputational Engineering will be advised by Bioengineering, Pre-Cyber-Physical Systems Engineering will be advised by the Electrical & Computer Engineering Department, and Pre-Mechatronics Engineering will be advised by Aerospace Engineering.

Students may only remain in the pre-majors up until they have earned 60 cumulative credits (including any prior learning and/or transfer credit). Once 60 credits have been earned, students will be required to change their major to a degree-seeking program. Students will be advised on the steps necessary to transition to the majors at Shady Grove by the Program Coordinators. Any request for an extension on this timeline will be considered an Exception to Policy and must be reviewed by the college and department for consideration.

Students in the Pre-Biocomputational Engineering, Pre-Cyber-Physical Systems Engineering, and Pre-Mechatronics Engineering majors are welcome to change their major into any other engineering degree program.

Due to seat limitations on the College Park campus, the Pre-Biocomputational Engineering and Pre-Mechatronics Engineering major are Limited Enrollment Programs and require that students meet our minimum requirements for admission. However, the Biocomputational Engineering and Mechatronics Engineering degrees at Shady Grove are not limited. Therefore, students who meet the 100 and 200-level course prerequisites for Biocomputational Engineering and Mechatronics Engineering may apply directly to the Shady Grove program.

Freshmen-Sophomore Years

The freshmen and sophomore years in engineering are designed to lay a strong foundation in mathematics, physical sciences, and the engineering sciences upon which the student will later develop a professional program during the upper division (junior and senior) years. During the first two years, students are introduced to the concepts of engineering design and work in multidisciplinary teams. The Clark School course requirements for the freshmen and sophomore years are similar for all students, regardless of their intended academic program, thus affording the student maximum flexibility in choosing a specific engineering specialization.

Engineering Sciences

Engineering Science courses represent a common core of basic material offered to students of several different departments. All freshmen and sophomore students of engineering are required to take ENES100. Other ENES courses, ENES102, ENES220, ENES221, and ENES232 are specified by the different departments. The responsibility for teaching the engineering science courses is shared among faculty from different departments by means of the Keystone Program. In addition to the core courses noted above, several courses of general interest to engineering or non-engineering students have been given ENES designations.

ADVISING

Advising is mandatory prior to registration each semester for all students in the Clark School. Each engineering department has a representative who advises students in their respective discipline. Undecided Engineering students are advised by Engineering Academic Services until they have declared a major, typically in their first year. Refer to the individual program for additional advising information.

During orientation to the university, all students will receive advising from Engineering Academic Services in collaboration with departmental advising representatives.

OPPORTUNITIES

Living-Learning Programs

The Dr. Marilyn Berman Engineering Living-Learning Programs: Flexus & Virtus

0110 Easton Hall
Phone: 301-405-3931
https://eng.umd.edu/wie/current-students/communities (https://eng.umd.edu/wie/current-students/communities/)

Director: Paige Smith

Flexus and Virtus are two-year living and learning communities open to incoming first-year engineering students. These programs are devoted to providing a supportive environment for students studying engineering. Flexus is geared towards students who identify as women; Virtus is geared towards students who identify as men. These programs work together to promote community and inclusion in the field of engineering through curricular and co-curricular programs. Through the promotion of social, intellectual, and leadership development, Flexus and Virtus seek to provide the resources and structure for first- and second-year engineering students to be successful through graduation, positively impacting the retention and graduation of undergraduate students in the A. James Clark School of Engineering. To do so, Flexus and Virtus provide living and learning experiences that promote community, critical reflection, and creation of social impact. The Flexus and Virtus programs engage closely with one another.

College Park Scholars - Science, Technology, and Society

1125 Cumberland Hall
Phone: 301-405-7219
https://scholars.umd.edu/programs/science-technology-and-society (https://scholars.umd.edu/programs/science-technology-and-society/)

Director: David Tomblin

Co-sponsored by the Clark School of Engineering, the Science, Technology and Society (STS) program is one of 13 living-learning programs offered by the College Park Scholars Program. This two-year program for academically talented freshmen and sophomores welcomes all majors, who live together in Cambridge Hall. While building close relationships with program faculty, STS explores the influential social, ethical, and political relationships that drive research and innovation. The program delves into the challenges of living and innovating in a world where emerging science and technologies are becoming increasingly interconnected, pervasive, and powerful. The program's primary goal is to give students career development and analytical skills that help connect science and technology to broader social needs. STS pursues this goal through individual research projects, collaborative problem solving activities, user-centered design projects, and service-learning.

STS students participate in a number of field trips to further their understanding of the program themes and objectives. Sites include the National Institute of Standards and Technology, NASA Goddard Space Flight Center, United States Patent and Trademark Office and the National Building Museum. Students also have the opportunity to engage in service activities related to the program such as volunteering for Tech Literacy Workshops for Elderly Communities, Anacostia River Clean-Ups, Deep Roots Farm, Koiner Farm, Community Forklift, and BitCamp.

STS features three rewarding practicum opportunities:

1. Robotics service-learning program, students explore innovative ways of encouraging STEM education in Prince Georges County schools;
2. Infrastructure and Society, students work with professional engineers on a service-learning project that assesses the safety and viability of infrastructure;
3. Empowering communities with art and technology.

College honors program

Students in the A. James Clark School of Engineering may participate in the University's Honors College, College Park Scholars, Quest, and/or departmental honors programs (see the individual department section for details).

Clark School Engineering Honors Program (https://eng.umd.edu/engineering-honors-program/)

The Clark School offers an Engineering Honors Program that provides eligible students the opportunity to pursue an enriched program of studies that will broaden their perspectives and increase the depth of their knowledge. Engineering students meeting all of the following criteria are eligible to apply:

1. Upper fourth of engineering juniors and seniors;
2. Junior standing or 60 applicable credits;
3. Completion of at least one semester at UMD.

The requirements for completing the program are as follows:

1. An Honors Research Project which often can be used as a technical elective, a written report, and an oral presentation to a faculty panel of the EHP;
2. Successful completion of both Engineering Honors Seminars ENES480 and ENES481;
3. Maintenance of a GPA to remain in the upper third of the class.

For more information see http://eng.umd.edu/current/honors-program/.

Student Engagement and Service Units

Student Societies and Professional Organizations

Professional Societies

Each of the engineering departments sponsors student chapters or student sections of a national engineering society. The student chapters sponsor a variety of activities including technical meetings, social gatherings, and School or University service projects. All students are strongly encouraged to join one or more of these chapters.

These organizations are: American Institute of Aeronautics and Astronautics; American Institute of Chemical Engineers; American Nuclear Society; American Society of Civil Engineers; American Society of Heating, Refrigerating, and Air Conditioning Engineers; American Society of Mechanical Engineers; ASM International; Association for Energy Engineers (AEE); Black Engineers Society; BMES-UMD (Biomedical Engineering Society, UMD chapter); Engineers Without Borders; Institute of Electrical and Electronics Engineers (IEEE); Material Advantage (American Ceramic Society, ASM International and TMS joint chapters); Materials Research Society; Mechanical Contracting Association (MCA); National Fire Protection Association (NFPA); Out in Science, Technology, Engineering and Mathematics (oSTEM); Society of Asian Engineers; Society of Automotive Engineers; Society of Fire Protection Engineers; Society of Hispanic Professional Engineers; Society of Manufacturing Engineers; Society of Women Engineers; Theta Tau Professional Engineering Society; The Vertical Flight Society and Women in Aeronautics & Astronautics (WIAA).

Honors Societies

The Clark School of Engineering and each of the engineering departments sponsor honors societies. Nominations or invitations for membership are usually extended to junior and senior students based on scholarship, service, and/or other selective criteria. Some of the honors organizations are branches of national societies; others are local groups: Tau Beta Pi (College Honorary); Alpha Eta Mu Beta (Biomedical Engineering); Alpha Nu Sigma (Nuclear Engineering); Alpha Sigma Mu (Materials Science and Engineering); Chi Epsilon (Civil Engineering); Eta Kappa Nu (Electrical and Computer Engineering); Omega Chi Epsilon (Chemical Engineering); Pi Tau Sigma (Mechanical Engineering); Salamander (Fire Protection Engineering); and Sigma Gamma Tau (Aerospace Engineering).

student service units

Engineering Academic Services

1131 Glenn L. Martin Hall
Phone: 301-405-9973
engrhelp@umd.edu
http://eng.umd.edu/advising/

Director: Suzanne Ashour-Bailey

Engineering Academic Services provides a broad variety of services to assist students during their collegiate careers. Individual advising may focus on a number of student related issues including: schedule planning, course selection, university policy interpretations, career choices, social and personal adjustments, as well as support for students with specific academic concerns. The office also provides orientation to new students, certifies students for graduation, and is instrumental in helping students process administrative forms, and advises prospective internal and external transfer students. The staff works closely with other campus offices to identify resources that address the various needs of our students.

Engineering Career Services

1131 Glenn L. Martin Hall
Phone: 301-405-3863
CareerEngr@umd.edu
http://eng.umd.edu/careers/

Director: Veronica Perrigan

The Engineering Career Services Office assists students in finding cooperative education (co-op), internship, and post-graduation positions. Co-op and internship positions complement classroom learning

and provide students with professional-level experience, mentoring relationships, integration of theory and practice, confirmation of career choices, and financial compensation. To assist students in their job search we offer a wide variety of workshops on topics such as effective resumes, interview strategies, professionalism, career fair preparation, salary negotiation, and advanced job search techniques. We also provide one-on-one resume critiques, career advising appointments, mock interviews, job-search handouts, an e-newsletter, and a jobs database called Handshake. In addition, students have the opportunity to meet employers by participating in career fairs, networking events, employer information sessions, and special job search presentations conducted by engineering recruiters.

Office of Global Engineering Leadership

1131 Glenn L. Martin Hall
Phone: 301-405-0786
http://eng.umd.edu/global/

Director: Brian Dillehay

The Office of Global Engineering Leadership empowers engineering students to excel in a globalized world by fostering skills in global leadership, intercultural communication, and engagement on diverse teams. Through programs like the Clark in Madrid Program, engineering-led short-term abroad courses, and global exchange programs, students take part in immersive international experiences. The Minor in Global Engineering Leadership and associated courses allow students to explore and develop their capacities to engage in leadership and engineering practice in diverse environments. The Vertically Integrated Projects (VIP) Program, ENES Equity & Inclusion in Engineering Design courses, and ClarkLEAD undergraduate onboarding initiatives further enhance students' readiness to lead with cultural competence and inclusivity, preparing them for the global engineering landscape.

Undergraduate Recruitment and Scholarship Programs

1126 Glenn L. Martin Hall
Phone: 301-405-0287
http://eng.umd.edu/prospective-students/
http://eng.umd.edu/scholarships/

Director, Recruitment and Outreach Programs: Erin Wessell
Program Director, Undergraduate Student Affairs: Nicole P. Roop

The Office of Undergraduate Recruitment and Scholarship Programs is responsible for outreach and new student recruitment activities in the A. James Clark School of Engineering. Services include undergraduate recruitment, providing K-12 and community college outreach activities, and administering Clark School scholarships for incoming and current students.

The Center for Minorities in Science and Engineering

1131 Glenn L. Martin Hall
Phone: 301-405-3878
https://eng.umd.edu/cmse (https://eng.umd.edu/cmse/)

Director: Rosemary L. Parker

The Center is dedicated to increasing the enrollment and graduation rates of African American, Latinx/Hispanic, Native American and Alaskan Native/Pacific Islander students majoring in engineering. The Center provides a complete package of services designed to assist students from pre-college through the completion of their doctorate. Services include academic advising, tutorial assistance, scholarship information, outreach programs, job information, support of student organizations, the Louis Stokes Alliances for Minority Participation (LSAMP) BRIDGE Program, the LSAMP Transfer Connections Program, and the LSAMP Undergraduate Research Program.

Women in Engineering Program

1131 Glenn L. Martin Hall
Phone: 301-405-3931
wie@umd.edu
http://eng.umd.edu/wie/

Director: Paige Smith

The Women in Engineering (WIE) Program is dedicated to promoting student success in the field of engineering, offering a comprehensive variety of programs, services, opportunities, and resources with a focus on student recruitment and retention. WIE programs and services are designed for engineering students and all students are welcome. WIE offers outreach programs for prospective students in addition to opportunities for current students including community-building and professional networking events, the Dr. Marilyn Berman Engineering Living-Learning Programs: Flexus and Virtus, WIE Connect Peer Mentoring, the WIE Code Bootcamp, technical skills workshops, tutoring, a student advisory board, weekly newsletters, and support for student organizations.

Financial Assistance

The Clark School offers scholarships to talented undergraduate engineering students. Scholarship awards are competitive and are awarded based on merit, financial need, and a variety of other factors. Scholarship awards are available to both incoming and continuing students.

New freshmen are automatically considered for most Clark School scholarships if they apply to the University of Maryland by the November 1 early action deadline and complete the FAFSA by the university's deadline. Current and incoming students must complete the Clark School's online scholarships application by May 31 for best consideration. Log in to http://umd.scholarshipuniverse.com to complete your application and visit http://eng.umd.edu/scholarships/ and http://financialaid.umd.edu/resources-policies/scholarship-search/ for more information.

The Office of Student Financial Aid (OFSA) administers all types of federal, state, and institutional financial assistance programs and, in cooperation with other university offices, participates in the awarding of scholarships to deserving students. For more information, visit http://financialaid.umd.edu.

Within the Clark School, the Clark Foundation Scholarship Programs (https://eng.umd.edu/clark-scholarship-programs/) oversees three scholarship programs funded by the A. James & Alice B. Clark Foundation:

- The Clark Scholars Program
- The Clark Opportunity Transfer Scholars Program
- The A. James Clark Scholarships, which include the Clark Legacy, Clark Enterprises, William Barotti, Richard Getsinger, and Benjamin T. Rome scholarships.

Clark Scholars Program

The A. James Clark Scholars Program is the A. James & Alice B. Clark Foundation's signature academic program, combining engineering, business, leadership and community service. This prestigious, need-based scholarship program supports up to 10 new state of Maryland freshmen enrolled in the Clark School of Engineering each year. The minimum scholarship award amount will be $12,000 annually for four years (eight semesters) of study, and may be higher based on financial need from the FAFSA and other financial aid resources.

Clark Opportunity Transfer Scholars Program

The Clark Opportunity Transfer Scholars Program offers a scholarship for four semesters of study covering in-state tuition, mandatory fees, and differential tuition. It also includes comprehensive academic, career, and research support. Each year, the program supports up to 20 new transfer students enrolled in the Clark School of Engineering who previously attended state of Maryland community colleges.

Clark Legacy Scholarships

The A. James Clark Legacy Scholarship is awarded to entering freshmen based on both financial need and merit. The Clark Legacy Scholarship is typically a $5,000 scholarship for in-state students or a $15,000 scholarship for out-of-state students, and is renewable for an additional year, provided the recipient is an undergraduate engineering student, maintains good academic standing, and makes progress toward an engineering degree. There is no application for the scholarship; students selected for the award will be considered and selected based on their freshman application.

Clark Enterprises Scholarship

The Clark Enterprises Scholarship is awarded to one student each year based on merit. The Clark Enterprises Scholarship is a $7,500 scholarship award and is renewable for up to three additional years provided the recipient is an undergraduate engineering student, maintains good academic standing, and makes progress toward an engineering degree. There is no application for the scholarship; students selected for the award will be considered and selected based on their freshman application.

William Barotti and Richard Getsinger Scholarships

The William Barotti Scholarship and the Richard Getsinger Scholarship honor two of Mr. Clark's longtime employees. These two scholarships are each awarded to a student every year and are based on merit. Both the William Barotti and the Richard Getsinger Scholarships are $7,500 scholarship awards and are renewable for up to three additional years, provided the recipients are undergraduate engineering students who maintain good academic standing and make progress towards an engineering degree. There is no application for these scholarships. Students selected for the awards will be considered and selected based on their freshman application.

Benjamin T. Rome Scholarship

The Benjamin T. Rome Scholarship is awarded to one entering freshman student each year based on merit. The Benjamin T. Rome Scholarship covers all expenses (tuition and fees, room and board) plus a book allowance and a stipend. The award is renewable for up to three additional years provided the recipient is an undergraduate engineering student, maintains good academic standing, and makes progress toward an engineering degree. There is no application for the scholarship; students selected for the award will be considered and selected based on their freshman application.

Undergraduate Research Programs

Undergraduate research programs offer students the opportunity to collaborate with research laboratory directors and faculty across various departments, providing a unique experience in research and engineering design. These projects enable students to conduct research under the mentorship of faculty members in areas of mutual interest.

At Maryland, there are numerous ways to engage in research. Your academic department can provide information on opportunities specific to your major. The Office of Undergraduate Research (https://our.umd.edu/) serves as the central hub for all research-related inquiries.

Vertically Integrated Projects (VIP@Maryland (https://eng.umd.edu/experiential/vipmaryland/)) invites sophomores, juniors, and seniors to apply each semester to join faculty-led, long-term, multidisciplinary research teams—no prior experience required.

Engineering Information Technologies (EIT)

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Keeping pace with the latest developments in the area of information technologies worldwide, the Clark School of Engineering provides a state of-the-art computing environment that will be the standard for engineers in the years ahead. Faculty and students have access to computer workstations with a wide range of engineering software and technology enabled classrooms with the latest presentation capabilities. In addition, EIT provides access and support on the latest tools and services for online collaboration, presentation technologies, and infrastructure services.

EIT, Instructional Technologies

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Instructional Technologies provides distance education technology and AV support service to the A. James Clark School of Engineering and the UMCP campus. We serve over 1,000 students per year by providing graduate and undergraduate courses in engineering and other related fields. In addition, we also provide technical services to the campus such as video conferencing, video capturing, and more.