



A. JAMES CLARK
SCHOOL OF ENGINEERING



The A. James Clark School of Engineering is a catalyst for high-quality research, innovation, and learning, providing students the resources to be engaged problem-solvers and entrepreneurial thinkers. Pursue a degree tailored to your career interests through the top-ranking Maryland Applied Graduate Engineering programs.

DON'T WAIT TO FURTHER YOUR CAREER



MARYLAND APPLIED
GRADUATE ENGINEERING

GRADUATE ENGINEERING DEGREES IN

ROBOTICS

FOR MORE INFORMATION

We welcome your interest. For complete information, including course descriptions, deadlines, and schedules please contact us.

WEBSITE: mage.umd.edu

TEL: 855-309-8379

EMAIL: mage@umd.edu

Acquire the knowledge and technical expertise you need to advance in one of the fastest-growing fields in engineering.

The Robotics degree at Maryland Engineering taught me the underlying principles and engineering that are behind many modern robotic control systems and showed me how the field of robotics is using new developments in computer science to improve robotic control.

ANIRUDH KRISHNAN KOMARALINGAM
M.ENG., ROBOTICS SPRING '23

TOP ROBOTICS ROLES

- Software Developer
- Robotics Operator
- Sales Engineer
- Robotics Engineer
- Electrical Maintenance Engineer
- Process Engineer
- Machine Learning Specialist

TOP STUDENT EMPLOYERS

- Accenture
- Cognizant Technology Solutions
- U.S. Department of Defense
- Hi-Tech Engineers
- Infosys Ltd
- Naval Air Systems Command (NAVAIR)
- Raytheon
- U.S. Navy

DON'T WAIT TO FURTHER YOUR CAREER

Discover how Maryland Applied Graduate Engineering (MAGE) programs prepare you to solve the most daunting engineering challenges and give you a competitive edge in today's market.

- Focus on a specialized area of engineering and target coursework to your interests.
- Learn from industry leaders who incorporate the latest education tools to create collaborative, interactive learning environments.
- Balance work and family through the flexibility of online or in-person classes.
- Access student services online to quickly receive the support you need regarding admissions, financial aid, or career services.

A leader in graduate engineering education for professionals, we are proud to serve the region's engineering community. Through our programs, advance your career with a degree from the A. James Clark School of Engineering, consistently ranked among the top 20 in the U.S. Located just a few miles from Washington, D.C., Maryland Engineering is at the center of a constellation of high-tech companies and federal laboratories, offering students and faculty access to unique professional opportunities.



ROBOTICS AT MARYLAND

Our graduate engineering programs are run in conjunction with the nationally recognized **Maryland Robotics Center**, an interdisciplinary research center with more than 45 faculty members from nine academic departments. The center's research activities encompass all aspects of robotics, including design of component technologies (e.g., sensors, actuators, structures, and communication), novel robotic platforms, and intelligence and autonomy for robotic systems. The Maryland Robotics Center has earned ARM Institute Endorsement, which recognizes programs that prepare students for manufacturing careers working with robotics.

Center facilities include three collaborative spaces for aerial robotics, robotic manipulators, and robotics realization; three affiliated venues, including the largest neutral buoyancy research facility on a university campus; and more than 25 faculty research laboratories with state-of-the-art technologies. Students have access to Maryland Robotics Center facilities and a range of seminar series, symposia, and workshops offered through the center and the **Pathways Program**, which supports research experiences and internship opportunities.

GRADUATE PROGRAMS IN ROBOTICS

Maryland Applied Graduate Engineering programs in robotics are designed for engineering professionals who have a passion for discovering how robotics can help solve complex engineering problems. The **Graduate Certificate in Engineering** program in robotics, earned in as little as two years, meets the needs of engineering professionals looking to obtain additional credentials in robotics. The certificate requires completion of four introductory graduate-level courses, and certificate credits can be applied to the **Master of Engineering** degree. **The Master of Engineering** program in robotics takes an interdisciplinary approach and spans a range of disciplines, including computer engineering, computer science, mechanical engineering, systems engineering, and aerospace engineering. Faculty and professionals teaching our courses bring years of experience, pioneering breakthroughs in the field that are incorporated into the robotics program curriculum.

ADMISSION REQUIREMENTS

- A bachelor's degree, GPA of 3.0 or better, in a STEM field from an accredited institution
- Two letters of recommendation (M.Eng applicants only)
- Unofficial copies of transcripts
- Successful completion of all of the following courses (or their equivalent):
 - ▶ Math: Calculus I, II, Differential Equations, and either Calculus III or Linear Algebra
 - ▶ Programming: one college-level computer programming class covering basic data structures and commonly used programming languages (preferably C++, Python, or Java) taught at an accredited institution
- For those with non-engineering undergraduate degrees, foundational knowledge in mechanics and circuits is strongly recommended. In addition to the above requirements, non-engineering applicants are encouraged to have completed the following courses (or their equivalent):
 - ▶ Intro to Mechanics
 - ▶ Basics of Electronics
- For international students: an official English proficiency score report that meets the full admission requirements
- Official GRE scores considered but not required
- Completed applications considered for admission on a case-by-case basis

DEGREE REQUIREMENTS

MASTER OF ENGINEERING

- 10 courses (30 Credits)
- No thesis / no research
- No comprehensive exam

GRADUATE CERTIFICATE IN ENGINEERING

- 4 courses (12 credits)

FOR MORE INFORMATION
Visit mage.umd.edu/robotics or scan here for more specific requirements, available courses, and degree planning sheets.



APPLICATION DEADLINES

ON-CAMPUS DOMESTIC

- FALL** July 31
- SPRING** December 15
- SUMMER** May 15

ON-CAMPUS INTERNATIONAL

- FALL** March 8
- SPRING** September 24

ONLINE DOMESTIC AND INTERNATIONAL

- FALL** July 31
- SPRING** December 15
- SUMMER** May 15

TAKE THE NEXT STEP

Are you ready to take the next step in your engineering career journey? Explore program options, application requirements, and deadlines through virtual and in-person open house sessions.

TO LEARN MORE, VISIT
mage.umd.edu/robotics