

ROBOTICS ENGINEERING (Z084)

Graduate Certificate Program
College: Engineering

Abstract

The Graduate Certificate in Engineering program is designed to assist engineers and technical professionals in the development of their careers and to provide the expertise needed in the rapidly changing business, government, and industrial environments.

Our program curriculum is designed to build understanding and expertise in robotics design, modeling, control systems, autonomous vehicle planning and perception, machine learning, and human-robot interaction. With a range of technical electives, students pursuing a robotics engineering degree are able to tailor their coursework towards their area of interest in robotics including artificial intelligence, computer vision and perception, space and planetary robotics, robot kinematics and dynamics, control, networked robotic systems, robotics at micro and Nano scale, and rehabilitation robotics.

Financial Assistance

Students in this program pay a special tuition rate, which does not differ between residents and non-residents of Maryland. This rate is not fully covered by graduate assistantships, fellowships or the tuition remission. Additional graduate student fees are charged. **Tuition and fees are subject to change.**

This program does not provide departmental assistantships or fellowships. Loans, work-study and need-based grants for citizens and permanent residents with demonstrated financial need may submit a Free Application for Federal Student Aid (FAFSA) by appropriate FAFSA deadlines. For more information on this process, visit: <https://fafsa.ed.gov/deadlines.htm>.

Contact

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Website: www.mage.umd.edu (<https://mage.umd.edu/>)

Courses: ENPM (<https://academiccatalog.umd.edu/graduate/courses/enpm/>)

Admissions

General Requirements

- Statement of Purpose (<http://advancedengineering.umd.edu/apply/>)
- Transcript(s)

- TOEFL/IELTS/PTE (international graduate students (<https://gradschool.umd.edu/admissions/english-language-proficiency-requirements/>))

PROGRAM-SPECIFIC REQUIREMENTS

- Letters of Recommendation (optional): Two (2) Letters of Recommendation are required for anyone with an undergraduate GPA below 3.0. Anyone with a GPA 3.0 or above should contact the MAGE with a request to waive this requirement.
- Graduate Record Examination (GRE) (optional)
- CV/Resume (optional)

***Visa Eligibility:** This program is not eligible for I-20 or DS-2019 issuance by the University of Maryland.

APPLICATION DEADLINES

Type of Applicant	Fall Deadline	Spring Deadline
Domestic Applicants		
US Citizens and Permanent Residents	August 1, 2023	December 15, 2022
International Applicants		
F (student) or J (exchange visitor) visas; A,E,G,H,I and L visas and immigrants	N/A	N/A

RESOURCES AND LINKS:

Program Website: mage.umd.edu (<https://mage.umd.edu/>)

Application Process: gradschool.umd.edu/admissions (<https://gradschool.umd.edu/admissions/>)

Requirements

- Robotics Engineering, Post-Baccalaureate Certificate (P.B.C.) (<https://academiccatalog.umd.edu/graduate/programs/robotics-engineering-z084/robotics-engineering-pbc/>)

Facilities and Special Resources

This program is currently offered in-person at the College Park Campus and at off-campus centers via video-teleconferencing. The Clark School of Engineering's Distance Education Technology and Services (DETS) office administers a live interactive distance education system and webcast course capture for students to take courses as they are happening or at a time convenient for their schedule. Remote sites around the State of Maryland where our courses can be taken live via DETS are at the Universities at Shady Grove in Montgomery County, and the Southern Maryland Higher Education Center in St. Mary's County. In addition to lecture dissemination, DETS provides state-of-the-art chat, bulletin board, video chat, group presentation, and discussion technologies that give our distance students the same, if not more access to faculty and their fellow students.

The Clark School's Engineering Information Technology group also provides access to needed software and computer resources through dedicated virtual computer terminals that allow distance students full access to licensed software, libraries, databases, and specialized programs.