# 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

Anna Damm  
Coordinator for Admission and Recruitment  
Office of Advanced Engineering Education  
2105 J.M. Patterson Building  
4356 Stadium Drive  
University of Maryland  
College Park, MD 20742  
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**Email:** adamm1@umd.edu  
Website: http://www.advancedengineering.umd.edu

## 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

- 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 Office of Advanced Engineering Education with a request to waive this requirement.

For additional program-specific admission requirements, please visit: https://advancedengineering.umd.edu/robotics.

**Visa Eligibility:** This program is not eligible for I-20 or DS-2019 issuance by the University of Maryland. For anyone needing these documents, consider applying for a full-time master's program offered on campus (https://gradschool.umd.edu/engineering/meng-campus).

Applicants with an undergraduate GPA of less than 3.0 may be admitted on a provisional basis if they have demonstrated satisfactory performance in another graduate program and/or their work has been salutary.

Applicants with foreign credentials must submit academic records in the original language with literal English translations. Allow at least three months for evaluation of foreign credentials. International applicants are advised to review the Graduate School English requirements to learn whether or not the submission of TOEFL or IELTS scores is required. For more information on the Office of Advanced Engineering Education admissions process: https://advancedengineering.umd.edu/application-process.

For more admissions information or to apply to the program, please visit our Graduate School website: www.gradschool.umd.edu/admissions

## Application Deadlines

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<thead>
<tr>
<th>Type of Applicant</th>
<th>Fall Deadline</th>
<th>Spring Deadline</th>
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<tbody>
<tr>
<td>Domestic Applicants</td>
<td></td>
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<tr>
<td>US Citizens and Permanent Residents</td>
<td>26 July</td>
<td>14 Dec</td>
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<tr>
<th>International Applicants</th>
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<tr>
<td>F (student) or J (exchange visitor) visas; A,E,G,H,I and L visas and immigrants</td>
<td>This certificate is not currently accepting applications</td>
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## Other Deadlines: **Please visit the program website at http://www.advancedengineering.umd.edu**

## 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.