Robotics and Autonomous Systems (Systems Engineering), MS

ESRASEEMS

This is an advanced degree emphasizing system-level competency in the rapidly growing fields of robotics and autonomous systems.

Program Description

Degree Awarded: MS Robotics and Autonomous Systems (Systems Engineering)

One of four concentrations in the multidisciplinary MS program in robotics and autonomous systems, which emphasizes robotics, controls, autonomous systems, artificial intelligence and related fields, is the systems engineering concentration. This concentration is appropriate for students who wish to focus on applications in systems engineering.

At a Glance

- **College/School:** Ira A. Fulton Schools of Engineering
- **Location:** Polytechnic campus

Accelerated Program Options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an accelerated bachelor's and master's degree with:

- Engineering (Automotive Systems), BSE
- Engineering (Electrical Systems), BSE
- Engineering (Mechanical Engineering Systems), BSE
- Engineering (Robotics), BSE
- Manufacturing Engineering, BS
Acceptance to the graduate program requires a separate application. During their junior year, eligible students will be advised by their academic departments to apply.

**Degree Requirements**

30 credit hours and a portfolio, or
30 credit hours and a thesis, or
30 credit hours including the required applied project course (EGR 593)

**Required Core (6 credit hours)**

MAE 501 Linear Algebra in Engineering (3)
MAE 547 Modeling and Control of Robots (3)

**Concentration (6 credit hours)**

**Electives or Research (12-18 credit hours)**

**Culminating Experience (0-6 credit hours)**
EGR 599 Thesis (6), or
EGR 593 Applied Project (3), or
portfolio (0)

**Additional Curriculum Information**

Students are required to select one of the approved culminating experiences for the concentration.

Students should see the academic unit for the approved concentration coursework as well as the available elective and research courses. Elective or research coursework must be selected from among the courses listed for the other three concentrations. Additional electives must be graduate courses in science, engineering, mathematics, or others approved by the Graduate Program Committee. Three credit hours of internship may be included among the electives.

A defense is required for the thesis option.

The applied project requires a written report and an oral presentation.

The portfolio includes a summary of the graduate program and a report highlighting three projects from the program.

**Admission Requirements**
Applicants must fulfill the requirements of both the Graduate College and the Ira A. Fulton Schools of Engineering.

Applicants are eligible to apply to the program if they have earned a bachelor’s or master’s degree in engineering, science, mathematics or related field, from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

Applicants are required to submit:

1. graduate admission application and application fee
2. official transcripts
3. GRE scores
4. letter of intent or written statement
5. professional resume
6. proof of English proficiency

Additional Application Information
An applicant whose native language is not English (regardless of current residency) must provide proof of English proficiency.

Contact Information

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