# Robotics and Autonomous Systems (Biomedical Engineering), MS

ESRASBEMS

## **Program description**

#### Degree awarded: MS Robotics and Autonomous Systems (Biomedical Engineering)

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

This is an advanced degree that emphasizes competency in the rapidly growing fields of robotics and autonomous systems and with applications in biomedical engineering and medicine.

Biomedical engineers work at the interface of technology and medicine on challenges that are critical to the advancement of health and scientific discovery.

## At a glance

- College/School: Ira A. Fulton Schools of Engineering
- Location: Polytechnic, Tempe

## **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 (BME 593)

#### **Required Core (6 credit hours)**

EGR 501 Applied Linear Algebra for Engineers (3) or MAE 501 Linear Algebra in Engineering (3) EGR 545 Robotic Systems I (3) or MAE 547 Modeling and Control of Robots (3) or RAS 545 Robotic Systems I (3)

#### **Concentration (6 credit hours)**

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

#### **Culminating Experience (0--6 credit hours)**

BME 593 Applied Project (3) or BME 599 Thesis (6) 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 or research courses. Elective or research coursework must be selected from among the courses listed for the other concentrations. Additional electives must be graduate courses in science, engineering, mathematics or others approved by the graduate program committee.

# **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 a 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 a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

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

#### **Additional Application Information**

An applicant whose native language is not English must provide <u>proof of English proficiency</u> regardless of their current residency.

# **Tuition information**

When it comes to paying for higher education, everyone's situation is different. Students can learn about <u>ASU tuition and financial aid</u> options to find out which will work best for them.

## **Career opportunities**

Graduates are prepared for doctoral study and for industrial positions in numerous and varied industries, such as manufacturing, transportation, aerospace, defense and health care.

# **Contact information**

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