Biomedical Engineering, MS

ESBIOENMS

Program Description

Degree Awarded: MS Biomedical Engineering

The School of Biological and Health Systems Engineering faculty offer a graduate program leading to the MS in biomedical engineering.

Areas of study include:

- biomaterials, biosensors, biomarkers and biomimetic materials
- biomedical imaging
- molecular, cellular and tissue engineering
- neural and rehabilitation engineering
- synthetic and systems biology

Biomedical engineering offers an accelerated BSE/MS in biomedical engineering degree for students in the Bachelor of Science in Engineering program who have maintained a GPA of 3.50 (scale is 4.00 = "A") into their junior year. The program allows up to 12 credit hours of graduate-level coursework taken during the senior year to be applied toward both the undergraduate and graduate degrees.

At a Glance

- **College/School:** [Ira A. Fulton Schools of Engineering](#)
- **Location:** [Tempe](#)

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:
Biomedical Engineering, BSE
Biomedical Engineering (Biological Devices), BSE
Biomedical Engineering (Biomedical Devices), BSE

Acceptance to the graduate program requires a separate application. During their junior year, eligible students are advised by their academic departments to apply.

**Degree Requirements**

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

All candidates pursuing a master's degree in biomedical engineering are required to complete an approved plan of study. Special course requirements for the different areas of study are established by the faculty.

A candidate whose undergraduate degree is in a field other than biomedical engineering may be required to complete more than the required credit hours of the program of study.

The following are program requirements for the applied project option:

- biomedical engineering coursework (13)
- biomedical engineering seminar (2)
- general electives (6)
- quantitative electives (6)
- applied project (3)

The following are program requirements for the thesis option:

- biomedical engineering coursework (9)
- biomedical engineering seminar (3)
- general electives (6)
- quantitative electives (6)
- thesis (6)

**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 any 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.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. resume or curriculum vitae
4. a statement of purpose
5. two letters of recommendation
6. proof of English proficiency

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

Application Deadlines

Fall
Spring

Career Opportunities
Professionals who specialize in biomedical engineering research areas are in high demand across sectors and industries, including business, academia, hospitals, government agencies and research facilities. The skill sets gained by graduates of the Master of Science program in biomedical engineering are sought by local, national and international employers.

Career examples include:

- biochemical engineer
- bioinformatics scientist
- biomedical engineer
- geneticist
- health sciences manager
- medical scientist
- molecular biologist
- nanosystems engineer

Contact Information
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