Biomedical Engineering, PhD

Program Description

Degree Awarded: PHD Biomedical Engineering
The School of Biological and Health Systems Engineering faculty offer a graduate program leading to the PhD 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

The doctoral degree in biomedical engineering is conferred upon evidence of excellence in research resulting in a scholarly dissertation that is a contribution to knowledge.

At a Glance

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

Degree Requirements

84 credit hours, a written comprehensive exam, an oral comprehensive exam, a prospectus and a dissertation

Required Bioengineering Courses (at least 18 credit hours)
Doctoral students are required to complete six credit hours from each of the following three areas:
BME graduate courses (BME prefix) (6)
life science/biology graduate courses (6)
quantitative math or engineering (6)

Other Requirement (3 credit hours)
BME 780 Teaching Practicum (3)

Technical Electives (9 credit hours)
No fewer than nine credit hours of coursework (as determined by the student's supervisory committee) must be selected from the list of 400- to 700-level courses that are not selected as required BME courses.

Research (37 credit hours)
BME 792 Research (37)

Seminar (5 credit hours)
BME 591 Seminar (5)

Culminating Experience (12 credit hours)
BME 799 Dissertation (12)

Additional Curricular Requirements
Up to six credit hours of the required biomedical engineering courses and technical electives combined may be at the 400 level.

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 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. a statement of purpose
4. resume or curriculum vitae
5. three 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.

Students should view the School of Biological and Health Systems admissions checklist on the Arizona State University website for specific admission procedures and deadlines.

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 set gained by graduates of the doctorate program in biomedical engineering are sought by local, national and international employers.

Career examples include:

- biomedical engineer
- molecular biologist
- bioinformatics scientist
- geneticist
- medical scientist
- professor

Contact Information

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