BIOMEDICAL ENGINEERING, MASTER OF SCIENCE IN ENGINEERING

The master's degree program is designed for students who wish to pursue careers in research and development, or as a step toward Ph.D. or M.D./Ph.D. education. The program has two degree options: a course-based plan consisting of 30 credits and a thesis-based track that requires 30 credits plus a thesis project which is completed in a second year.

Admission Requirements

Admission and Financial Aid

Students with undergraduate degrees in engineering are eligible to apply. Exceptional students with degrees in basic sciences may also apply, but would normally have to take a number of courses to overcome deficiencies in their curriculum.

Students do not receive departmental financial aid. However, external financial aid is available for qualified students and partial tuition remission may be available for previous Johns Hopkins students. In addition, thesis-track students (once selected for the thesis track) may be provided with additional financial aid to facilitate the research component of their degree (each financial aid package will be negotiated on an individual basis but typically will include either (or a combination of) tuition waivers or a monthly stipend.

Applications for admission are due by the appointed deadline (usually in early January).

For more information and to apply online, go to http://www.bme.jhu.edu/graduate/mse/apply.

Program Requirements

Course-Based Degree Option

The course-based degree option will require the completion of 30 credits that meet the following stipulations:

- A minimum of five graduate-level courses focused in a selected biomedical engineering sub-discipline (biomedical data science, computational medicine, imaging and medical devices, immunoengineering, genomics and systems biology, neuroengineering, or translational cell and tissue engineering) as approved by the student’s advisor.

- Additional classes that will consist of math, science, medicine, or technology coursework related to biomedical engineering, which can also include the JHU Center for Leadership’s Professional Development Courses. Additional classes must be approved by the student’s advisor.

Thesis-based Degree Option

Each student will take 30 credits at the graduate-level (the same as first year students), including one or more research/practicum courses.

Thesis track students must also complete a thesis based on a research topic requiring application of quantitative or applied engineering principles to biomedical engineering.