MS in Biomedical Engineering

Admission

The minimum requirements for admission to the Master of Science in biomedical engineering include:[1]

- A bachelor's degree in a discipline relevant to BME;
- Transcript from each institution attended;
- Minimum undergraduate grade point average (GPA) of 3.000;
- Statement of purpose including a section on research interests;
- Graduate Record Examination scores;
- Three letters of recommendation; and
- Acceptable, official score on the TOEFL, IELTS or PTE-Academic as proof of English proficiency.

[1] Applicants may request a waiver of some of the above requirements (e.g., undergraduate GPA less than 3.000, bachelor's degree not relevant to biomedical engineering, etc.) for admission if sufficient evidence is provided to the BME graduate admissions committee for review.

Prerequisite Courses

Students entering the biomedical engineering MS program are expected to have already completed the following courses or their equivalents:[2]

Course	Title	Hours
Biology I		
Anatomy and Physiology		
General Chemistry (Chemistry I & II)		
Physics I		
Math		
Calculus I		
Calculus II		
Differential Equations		
Circuits		
Thermodynamics		
Statics		
Statistics		
Programming		

[2] If prior coursework deficiencies exist, the student may be admitted on a conditional basis. It is recommended that as much of the deficient coursework as possible be completed prior to beginning graduate study.

Program Requirements

Students must select one of the following options for completion of MS BME program 1) thesis or 2) directed/independent project.

Degree Options

Thesis Option

Course	Title	Hours
BME Courses		
Select 9 credit hours of 700-level or above graduate level BME courses (excluding BME 890, Independent Study)		9
BME 877	BME Graduate Seminar	0
Elective Courses		
In consultation with an advisor, select 15 credit hours of elective courses from the following subjects: BME, ME, ECE, CS, IME, AE, BIOL, CHEM, HPS and PSY.		15
Research		
BME 876	Thesis	6
Total Credit Hours		**30**

Directed/Independent Project Option

Course	Title	Hours
BME Courses		
Select 21 credit hours of 700-level or above graduate level BME courses (excluding BME 890, Independent Study)		21
BME 877	BME Graduate Seminar	0
Elective Courses		
In consultation with an advisor, select 9 credit hours of elective courses from the following subjects: BME, ME, ECE, CS, IME, AE, BIOL, CHEM, HPS and PSY.		9
Directed/Independent Project		
BME 878	MS Project in BME (Must include a written report and an oral presentation)	3
Total Credit Hours		**33**

Applied Learning

Students in the MS in biomedical engineering program are required to complete an applied learning or research experience to graduate from the program. The requirement can be met by successfully completing the master's thesis (BME 876) or master's directed project (BME 878).