

# MD/MS in Biomedical Engineering

## Admission Requirements

Applicants are considered on an individual basis. In addition to the Graduate College minimum requirements, applicants must meet the following program requirements:

- **Baccalaureate Field:** Physical sciences, engineering, computer science, mathematics, biology, or medicine. Students must have completed math through Calculus I (MATH 180 ), Calculus II (MATH 181 ), Calculus III (MATH 210 ), Differential Equations (MATH 220 ), and Applied Linear Algebra (MATH 310 ) prior to entering the program. Linear algebra can be waived upon request and with appropriate justification.
- For MD students applying to the MS as part of the joint MD/MS in Biomedical Engineering, academic progress in the College of Medicine's M1 curriculum is reviewed and approved by the College of Medicine's Senior Associate Dean for Educational Affairs or Dean's designee.
- **Tests Required:** The GRE is waived for applicants. However, strong GRE scores (Quantitative >80th percentile, Verbal > 70th percentile, Analytical writing >4) can enhance your application. Thus, GRE scores will be accepted and, if provided, evaluated as part of your application.
- **Letters of Recommendation:** Three are required.
- **Personal Statement:** Required.

## Degree Requirements

In addition to the Graduate College minimum requirements, students must meet the following program requirements:

- Students in the program must satisfy requirements of the Masters of Science in Biomedical Engineering, a 36-semester-hour program, and satisfy four years of the required Medical Degree program of study.
- For the MS in Biomedical Engineering, students must adhere to all relevant Graduate College policies, including minimum GPA requirements and limits on transfer credit.
- **Minimum Semester Hours Required** College of Engineering: MS-BME 36. College of Medicine All Campuses: Specific courses vary by campus.
  - M1 Year—34 to 36 semester hours
  - M2 Year—44 to 48 semester hours
  - M3 Year—48 semester hours
  - M4 Year—32 to 38 semester hours, with the opportunity for shared hours
  - A maximum of 8 hours of credit of MS-BME courses may be applied as a research elective in M4 elective requirement. With proper planning and prior approval by the MS-BME advisor, joint degree students may take a nonclinical medical elective during their M4 year and receive independent study credit toward the MS degree. Per Graduate College policy, 600-level courses cannot be applied to the MS-BME. No more than 8 total hours will consist of shared course work.
- **Course Work for MS in Biomedical Engineering** At least 28 hours (with thesis) or 36 hours (course work only). With thesis, at least 12

hours must be at the 500 level, excluding BME 595 and BME 598. With course work only, at least 16 hours must be at the 500 level, excluding BME 595 and BME 596. Limited hours in BME 596 are allowed upon departmental approval.

Code	Title	Hours
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### Required Courses

BME 595	Seminar on Biomedical Engineering	
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Additional required courses vary by area; contact the department for the specific requirements of each area.

- **Comprehensive Examination:** None.
- **Thesis, Project, or Course-Work-Only Options:** Thesis or course work only. No other options are available.
  - Thesis: Students must earn at least 8 hours in BME 598.
  - Course Work Only: Students must earn 36 hours from course work only as described in Course Work heading above, with the addition that 16 of the 36 hours must be BME course offerings at the 500 level.
- **Other Requirements:** None.