

BIOMEDICAL ENGINEERING, B.S. TO BIOMEDICAL ENGINEERING, M.S. ACCELERATED PROGRAM (BEGINNING FALL 2026)

The accelerated B.S. to M.S. program (ABM) in biomedical engineering enables top students to earn both a bachelor's and a master's degree in a five-year period. This accelerated path provides the technical depth and specialization needed for expanded career opportunities, increased responsibilities, and preparation for doctoral studies.

For additional information, see the catalog entries for the following SLU programs:

Biomedical Engineering, B.S. (<https://catalog.slu.edu/colleges-schools/science-engineering/biomedical/biomedical-engineering-bs/>)

Biomedical Engineering, M.S. (<https://catalog.slu.edu/colleges-schools/science-engineering/biomedical/biomedical-engineering-ms/>)

Requirements

Admission Requirements

To apply to the Accelerated BS-MS in Biomedical Engineering (BME) program, undergraduate students in the BME department must have an overall cumulative GPA of 3.25 or higher after completing their fifth semester of study or 75 credit hours of coursework.

The application should be submitted in the fall semester of the junior year.

Students selecting the thesis option must first seek approval from their tentative research advisor before applying.

For non-thesis BS-MS students, the application includes a Statement of Purpose and a Program of Study. For thesis BS-MS students, the application also includes a plan for integrating the Senior Project with the Thesis project - to be written in collaboration with the tentative research advisor, along with a Statement of Purpose and a Program of Study.

Program Requirements

If admitted, students are permitted to register for a maximum of 15 credit hours per semester during their spring of junior year and both semesters senior year. Students may apply a maximum of 15 credits of graduate coursework (5000-level and above) taken during the accelerated program toward both their B.S. and M.S. degrees.

Students must satisfy the B.S. and M.S. degree requirements separately, with the exception that a maximum of 15 credit hours of qualifying coursework (5000-level) taken to satisfy B.S. requirements can also be used to fulfill 15 credit hours of the M.S. degree requirements. Up to 6 additional credits of qualifying coursework (4000- or 5000-level) completed while a senior, but that are not required for earning the B.S. degree, can be used towards the M.S. degree.

Both thesis and non-thesis M.S. options are available to students in the accelerated BS-MS program, with distinct requirements detailed below.

Thesis Option

Students in the accelerated BS-MS program should select a research advisor for the thesis option before applying to the accelerated program. Students who choose the thesis option are encouraged to start their research at the beginning of their junior year but must start their research by the summer between junior and senior year. A delay in starting the thesis research may result in a corresponding delay in finishing the M.S. portion of the accelerated BS-MS degree program.

Thesis BS-MS students should take BME 5010 (<https://courseleaf.slu.edu/search/?P=BME%205010>) Research Analysis (2 cr) during their senior year and BME 5040 (<https://courseleaf.slu.edu/search/?P=BME%205040>) Technical Communication in the Discipline (1 cr) during the spring semester of their M.S. year.

Non-Thesis Option

For students opting for the non-thesis M.S. option, the primary requirement is selecting a graduate mentor during the junior year. Students who wish to gain independent research experience under the non-thesis option could choose to take 3 credits (both maximum and minimum) of BME 5960 (<https://courseleaf.slu.edu/search/?P=BME%205960>) Master's Project (1-3 cr) during the first semester of their master's year. Students must obtain permission/acceptance from a research advisor to enroll in the course.

Timeline and Completion

Students in the accelerated BS-MS program are expected to complete their M.S. degree within three semesters, plus a summer in residence, as a graduate student. For the thesis option, the oral thesis proposal should be taken within 6 months of completion of BME 4960 (<https://courseleaf.slu.edu/search/?P=BME%204960>) Senior Project II (3 cr) and at least one full semester before the thesis defense. The M.S. thesis is expected to be defended within 12 months after passing the oral thesis proposal.

Contact Us

For more information about biomedical engineering programs, please contact:

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