

Biomedical Engineering, M.S.Bm.E., Ph.D.

Degrees Offered

- Masters of Science in Biomedical Engineering (M.S.Bm.E.)
- Doctor of Philosophy, Biomedical Engineering (Ph.D.)

Nature of the Program

The focus of the graduate program will be to prepare students to be skilled in learning and discovering of processes that aim to integrate engineering and life sciences for the advancement of human health and medical technologies. Just as importantly, the program will build upon current collaborative efforts with local and regional clinicians, industry and academic leaders engaged in state-of-the-art biomedical engineering research. Lastly, the program will foster the production and application of new knowledge in areas that impacts the health and well-being of all West Virginia (WV) citizens, as well as contribute to the providing skilled local workers in biomedical engineering (BMEG), thus driving development of the WV's economy in this exciting area.

Admissions for 2026-2027

MASTER ADMISSIONS

Students applying for admission to the graduate program in biomedical engineering (BMEG) must meet the general requirements of admission of the WVU graduate school. Admission is expected to be competitive and students will be selected on the basis of their scholastic preparation and intellectual capacity as demonstrated in the application.

To be eligible for admission into the Masters of Science in Biomedical Engineering degree program, a candidate must fulfill the following requirements:

- Applicant has a bachelor's degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall and 3.0/4.0 grade point average in the last 2 years of undergraduate study;
- Strong quantitative skills and background in life sciences, as evidenced by coursework or research experience should be demonstrated;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of recommendation;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely BMEG faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in the CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/information-for/international-students/>).

DOCTORAL ADMISSIONS

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- Applicant has a bachelor's degree from a recognized 4-year university or an M.S. degree, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall and 3.0/4.0 grade point average in the last 2 years of undergraduate study;
- Strong quantitative skills and background in life sciences, as evidenced by coursework or research experience should be demonstrated;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of recommendation;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely BMEG faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in the CBE

and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.

- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/information-for/international-students/>).

DIRECT-TRACK BS-PHD ADMISSIONS

To be eligible for admission into the direct-track doctoral program, a candidate must fulfill the following requirements:

- Applicant has a bachelor's degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall and 3.0/4.0 grade point average in the last 2 years of undergraduate study;
- Strong quantitative skills and background in life sciences, as evidenced by coursework or research experience should be demonstrated;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of recommendation;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely BMEG faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in the CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/information-for/international-students/>).

MSBmE Major Code: 3008

PhD Major Code: 3007

For specific information on the following programs, please see the links to the right:

- Biomedical Engineering, M.S.Bm.E.

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- Biomedical Engineering, Ph.D.