Our Mission
The Department of Biomedical Engineering (BME) offers the following degrees and programs: Bachelor of Science, undergraduate minor, one-year non-thesis Master of Science, two-year thesis-based Master of Science, and doctorate degree programs. Our research and education missions focus on applications of engineering principles and technologies to medical and life sciences for the betterment of human health and society.

Degrees Awarded [2018-19]
- 8 Master’s
- 7 Ph.D.
- 102 Bachelor’s

117 TOTAL DEGREES IN BME

In 2019, the Chemical and Biomedical Engineering Building opened on the University Park campus, housing both the BME department and the Department of Chemical Engineering. This building features state-of-the-art classrooms, lecture halls, student common areas, and laboratory suites.
Research Areas
- Biomaterials and Drug Delivery
- Biomechanics and Mechanobiology
- Biomedical Devices
- Biomedical Imaging
- Computational Modeling of Biological Systems
- Regenerative Medicine

Outreach Groups
- Biomedical Engineering Society
- Physicians for Human Rights
- Women in Engineering Program
- Multicultural Engineering Program

Minors and Degrees Offered

Bachelor of Science (B.S.)
- Biomedical engineering with 4 specialized degree options (biochemical, biomaterials, medical imaging and devices, and biomechanics)

Master of Science (M.S.)
- Biomedical engineering: one-year, non-thesis resident path
- Bioengineering: two-year, thesis-based path

Doctor of Philosophy (Ph.D.)
- Bioengineering

Doctor of Philosophy (Ph.D.)/Doctor of Medicine (M.D.)
- Dual degree bioengineering and medicine

Affiliated University Centers and Institutes
- Center for Structural Oncology
- Center for Mathematics of Living and Mimetic Matter
- Clinical Translational Science Institute Heart and Vascular Institute
- Huck Institutes of the Life Sciences
- Institute for CyberScience
- Institute for Computational and Data Science
- Penn State Cancer Institute
- Penn State Center for Biodevices
- Penn State Hershey Medical Center
- Social, Life, and Engineering Sciences Imaging Center

Student Engagement

Approximately 75%

Penn State BME students participate in experiential learning: Co-ops, internships, undergraduate research opportunities, study abroad opportunities, and global capstone projects