The Department of Biomedical Engineering (BME) administers the undergraduate major (B.S. degree) and minor, and 1-year non-thesis based M.S. degree. The department’s graduate program is a part of the University-wide Intercollege Graduate Degree Program, offering both M.S. and Ph.D. degrees in bioengineering.

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.

---

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

---

Faculty (2018-19)

- Professors: 9
- Associate Professors: 3
- Assistant Professors: 7

---

Approximately 75% Student Engagement

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

---

[URL] bme.psu.edu
Outreach Groups

- Biomedical Engineering Society (BMES)
- Physicians for Human Rights (PHR)
- Women in Engineering Program (WEP)
- Multicultural Engineering Program (MEP)

University-wide Centers and Institutes:

- Clinical Translational Science Institute (CTSI)
- Heart and Vascular Institute
- Huck Institutes of the Life Sciences
- Institute for CyberScience
- Materials Research Institute
- Penn State Cancer Institute
- Penn State Hershey Medical Center
- Social, Life, and Engineering Sciences Imaging Center (SLEIC)

Research Areas:

- Biomechanics
- Biomedical Imaging
  - Neuroimaging
  - Photoacoustic Imaging
  - Optical and Single-Molecule Imaging
- Biomaterials
  - Drug Delivery and Nanomedicine
  - Tissue Engineering and Regenerative Medicine
- BioMEMS/NEMS and Medical Devices
  - Biological Micro/Nano Electro-Mechanical Systems
  - Artificial Heart Research
- Cell, Molecular and Systems Bioengineering
- Neural, Immune and Cardiovascular Engineering

For more information about our research areas, please go to tinyurl.com/bme-research

New building for biomedical engineering and chemical engineering to open in 2019

$150M  194k+
ESTIMATED TOTAL COST  ESTIMATED SQ FT
chemebiomedbuilding.engr.psu.edu