BIOMEDICAL ENGINEERING
Master’s Degree Programs

DEVELOPING LEADERS IN BIOMEDICAL ENGINEERING

READY TO JOIN OUR RANKS?

Boston University College of Engineering
Department of Biomedical Engineering
The Department of Biomedical Engineering offers master’s programs that prepare students for careers in industry or further graduate study. Whether it’s a technically-focused Master of Science program, or the flexible Master of Engineering degree that combines advanced technical work with leadership and management skills, all programs emphasize advanced technical coursework and include a practicum design project or thesis. Students also have a range of opportunities to gain practical experience, including company or research internships.

**Degree Programs:**
- Master of Engineering (MEng)
- Master of Science (MS)

**Areas of Specialization:**
- Instrumentation & Imaging
- Signals
- Molecular
- Tissue
- Physiological Systems

### Master of Science in Biomedical Engineering (MS)

The Master of Science in Biomedical Engineering (MS) degree program is designed to provide advanced training in biomedical engineering. The program requires students to establish the necessary foundation in molecular- or systems-level biology/physiology and mathematics, in addition to advanced biomedical engineering coursework. All students are required to complete a practicum, which can be satisfied by completing an approved project. Alternatively, students may satisfy the practicum requirement by developing a research focus and carrying out original research that culminates in a written thesis.

- 36 credits
- Can be completed in one calendar year
- Required practicum

More information about the MS program at [bu.edu/bme/graduate/ms_prog](http://bu.edu/bme/graduate/ms_prog)
Master of Engineering (MEng)
A professional master’s degree program for students focused on careers in industry, the MEng offers a graduate curriculum of advanced technical courses in an area of specialization and a practical hands-on product development project which engages the clinical community to identify and develop novel engineering solutions to medical problems.

- 32 credits
- Advanced technical coursework
- Technology leadership fundamentals
- Advanced Biomedical Design and Development project course-
- Can be completed in as little as one year

More information about the MEng at:
bu.edu/bme/graduate/master-of-engineering

Advanced Biomedical Design and Development course
All students in the MEng degree program complete this two-semester, hands-on, graduate biomedical engineering course. A complete experiential opportunity to work directly with the clinical community, students analyze real-world medical needs, design innovative engineering solutions, build working prototypes and reduce these concepts to practice. Students will also develop regulatory, IP, and realistic implementation plans for commercializing their designs. Students progress through the complete product development cycle: Discovery, Design, Development, and Deployment.

- Select and analyze technology-based problems presented by practicing clinicians
- Clinical observerships at Boston Medical Center related to the problem
- Coursework in needs finding, intellectual property, regulatory, and safety methods
- Design concepts considering competitive analysis, intellectual property strategies, preliminary market trends, and economic variables and constraints
- Develop working prototypes and business models, along with regulatory, marketing, and financial plans for implementing technology into clinical practice
- Presentations to clinicians

ONE OF THE FIRST. ONE OF THE BEST
Founded in 1966, the Biomedical Engineering Department at Boston University is an elite program attracting exceptional graduate and undergraduate students nationally and internationally. Consistently ranked among the top BME Departments in the nation by US News & World Report, our 36 full-time primary faculty members put us among the largest departments in the country. The BME department is known for its highly quantitative approach to biomedical science with a focus on applying engineering, computational, and analytical techniques to biological systems. Experiential learning opportunities, including opportunities to work with clinicians at the Boston University School of Medicine and other Boston-area hospitals, deepen students’ knowledge base, preparing them for careers in companies producing cutting edge products and technologies.
Students in our master’s programs have exclusive access to the Master’s Professional Development Workshop Series. We tap our own experts, career professionals, and employers to deliver a series of workshops designed to support students through the entire job search process and ultimately help them find their ideal professional position. In addition, The College of Engineering has a dedicated Career Development Office focused on building relationships with some of the hottest technology companies in the world.

WHERE DO OUR BME MASTERS GRADUATES END UP?

78% of 2014 graduates were employed in their field one month following graduation.

Companies employing BME Masters graduates include:

- Accenture
- Allen Medical
- Applied Analytics
- Becton Dickinson
- DePuy Spine
- Draeger Medical
- Humedica
- Intuitive Surgical
- GE Healthcare
- Medica Corp
- Partners Healthcare
- Philips Healthcare

Visit our website at bu.edu/bme