

BIOMEDICAL ENGINEERING

B.S., M.S., PH.D.

REGULATORY BIOMEDICAL ENGINEERING

M.S.

School of Engineering
& Applied Science

THE GEORGE WASHINGTON UNIVERSITY

Biomedical Engineers apply knowledge of engineering, biology, and biomechanical principles to the design, development, and evaluation of biological and health systems products. They may work with artificial organs, prostheses, instrumentation, medical information systems, and health management/care delivery systems. They frequently work in research and development or in quality assurance, helping to coordinate work across engineering and medical domains.

Regulatory Biomedical Engineers (rBME) study the fundamentals of regulatory science in order to advance medical devices, imaging diagnostics, and therapy. They study the fundamentals of global regulatory affairs, regulatory strategy in the development of devices and diagnostics, regulatory compliance, engineering patent law, medical measurements, and instrument design.

KEY SKILLS & SAMPLE JOBS

- Communicate clearly to various audiences
- Design instruments, devices, and software
- Develop new procedures and recommendations from research and technical sources
- Evaluate the safety, efficiency, and effectiveness of biomedical equipment
- Install, maintain, or repair biomedical equipment

Sample Job Titles: Biomedical Engineer, Biomedical Equipment Technician, Regulatory Specialist, Research Engineer

BIOMEDICAL ENGINEERING DEPARTMENT

11 full-time faculty

\$4.2 million annual research expenditures

40% of GW engineering undergraduates are women, which is double the national average of 21%

DEPARTMENT ENROLLMENT

194 undergraduate
55 BME graduate
10 rBME graduate

RESEARCH AREAS

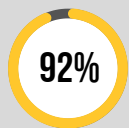
Biomedical Signal Processing and Signal Analysis
Bio-integrated Electronics
Biosensors
Cancer Detection and Therapy
Cardiac Optogenetics
Cardiovascular Engineering
Disease and Pathogen Detection
Drug Delivery
Electrophysiology
Heart Disease and Heart Failure
Medical Imaging and Image Analysis
Microfluidics and Nanotechnology
Nanomedicine, Cellular Therapeutics, and Diagnostic Platforms
Physiological fFows
Robotics and Human-Robotic Interactions
Simulation and Modeling
Therapeutic Ultrasound

EMPLOYERS

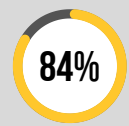
WHO HAVE HIRED GW STUDENTS

Accenture
General Electric
IBM
U.S. Dept of Health & Human Services
U.S. Food and Drug Administration
U.S. Patent & Trademark Office

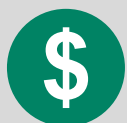
2018 CAREER OUTCOMES



92% of SEAS students were satisfied with the career programs and services



84% of BME seniors were employed or enrolled in graduate school within 6 months



67% of BME undergraduates earned a salary of \$70,000 or more

44% of SEAS graduate students earned a salary of \$100,000 or more

W. SCOTT AMEY CAREER SERVICES CENTER

careers.seas.gwu.edu

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