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.

**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 Flows
- Robotics and Human-Robotic Interactions
- Simulation and Modeling
- Therapeutic Ultrasound

**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

**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