

BIOMEDICAL ENGINEERING

DESCRIPTION

Biomedical engineers apply knowledge of engineering, biology, and biomechanical principles to the design, development, and evaluation of biological and health systems products, such as artificial organs, prostheses, instrumentation, medical information systems, and health management/care delivery systems.

SAMPLE WORK SETTINGS

Medical Equipment Suppliers
Pharmaceutical Manufacturers
Colleges or Universities
Federal Government
Hospitals
Research Laboratories
Medicine Manufacturing
Professional Schools

SAMPLE OCCUPATIONS

Biochemist	Clinical Engineer
Bioengineering Researcher	Engineering Professor
Biomechanical Engineer	Medical Equipment Repairer
Biomedical Engineer	Nanosystems Engineer
Biomedical Manager	Research Engineer
Biomedical Technician	Research Assistant
Biophysicist	Technical Sales Engineer

ONLINE RESOURCES

SAMPLE EMPLOYERS

3M Co.	Howard Hughes Medical Inst.
Abbott Laboratories	Johnson & Johnson
Baxter International Inc.	Kimberly Clark
Bayer AG	Lake Region Medical
Biomet Inc.	Life Technologies
Boston Scientific Corp.	Medimmune
Brainlab Inc.	Medispec
Bristol-Myers Squibb	Medtronic Inc.
Cardinal Health Inc.	Merck
Celera Corporation	Momenta Pharmaceuticals
Cook Medical	Nestlé
Cynosure	Quidel Corporation
Dana-Farber Cancer Institute	Raytheon
Dexcom Inc.	Siemens AG / Siemens Health
General Electric Co.	St. Jude Medical Inc.
Genzyme	Stryker Corp.
Hospira	Thermo Fisher Scientific
	US Veterans Administration

JOB SEARCH RESOURCES

www.engcen.com
www.engineerjobs.com
www.graduatingengineer.com
www.thecareerengineer.com
www.mechanicalengineer.com
www.tcetoday.com
www.usajobs.gov

PROFESSIONAL ORGANIZATIONS

[American Institute of Chemical Engineers](#)
[American Society for Engineering Education](#)
[Biomedical Engineering Society](#)
[Institute of Industrial Engineers](#)
[International Engineering Consortium](#)
[National Society of Black Engineers \(NSBE\)](#)
[Society of Women Engineers](#)
[American Society of Agricultural and Biological Engineers](#)

STUDENT ORGANIZATIONS

[The Biomedical Engineering Society \(BMES\)](#)
[The Engineer's Council](#)
[Society of Women Engineers](#)
[Engineers Without Borders](#)



Center for
Career Services

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EDUCATION

The George Washington University, Washington, DC
Bachelor of Science in Biomedical Engineering, Minor in Chemistry, December 2016
GPA: 3.5

RELEVANT TECHNICAL SKILLS

Languages: C, C++, Java, JavaScript, COBOL, SQL, FORTRAN, HTML

Applications: Cadence, Verilog

Operating Systems: Windows, UNIX, Linux, Mac OS

Database Systems: SQL Server, MySQL

Software: Adobe Photoshop, Illustrator, Dreamweaver; Microsoft Office, AutoCAD, MATLAB

TECHNICAL PROJECTS

Blood Analyzer Calibration (Team of 3), Spring 2015

- Led student team through the challenges of calibrating a blood analyzer machine
- Created multiple process configurations to analyze the outputs of each to determine significant factors
- Wrote project report to describe and validate each step of the simulation and provide a proposal for an optimal solution to the production problem

Accomplishment: Presented findings at a 2014 regional conference for biomedical engineering students

Introduction to Electrical/Computer/Biomedical Engineering, (Team of 4), Fall 2014

- Led team on project to utilize InteractiveC to create a code for fluid separator

Accomplishment: Received an honorable mention in the junior research project competition

RELEVANT EXPERIENCE

Howard Hughes Medical Institute, Janelia Research Campus, Ashburn, VA

Undergraduate Summer Scholar, June-August 2014

- Recorded from salamander retinal ganglion cells to learn about the motion tracking system
- Collaborated with senior scientists to develop computer programs for automated image analysis
- Observed scientists in designing labeling molecules to use with sophisticated microscopy

Accomplishment: Designed poster presentation for summer conference of molecular scientists

ChemRisk, San Francisco, CA

Health Science Intern, June-August 2013

- Provided creative and scientifically rigorous approaches to answering questions about human health hazards posed by chemical, biological, pharmaceutical, and radiological agents
- Reorganized main company website to ensure integrity

Accomplishment: Co-authored a journal article with Principal Investigator, Dr. Bioeng

LEADERSHIP ROLES

Society of Women Engineers, GW Chapter, President, September 2012-Present

Accomplishment: Initiated a workshop series in collaboration with the Center for Career Services on social media use

EXTRACURRICULAR ACTIVITIES

GW Engineers without Borders, Member, September 2013-Present

GW Club Soccer, Member, October 2012-Present

SAMPLE RESUME



Center for
Career Services

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