

## Robert R. McComsey Career Development Center



### Careers In...Biomedical Materials Engineering and Science

Alfred University  
Alfred NY 14802

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*Hours: 8:30-4:30 Monday-Friday*  
*Walk-in hours: 1:00-4:30 Tues., Wed., and Thurs.*

### The Industry

Biomedical Materials Engineering and Science majors study the interaction between nonliving materials and biological systems. Our graduates will develop next generation biomaterials devices for applications such as:

- New diagnostic instruments (including bimolecular materials hybrid devices such as gene chips).
- Novel therapeutic strategies such as tissue engineering and implants for biosensors and targeted/controlled drug delivery systems
- New biomaterials for classic applications such as orthopedic devices.

Nationally, about a third of biomedical materials undergraduates go straight on to the job market, a third to graduate school (law, business, etc.), and a third to medical school.

### Biomedical Materials Engineers and Scientists can be found in all these industries:

- Pharmaceutical
- Orthopedics
- Dentistry
- Sensors
- Bioinformatics
- Medical equipment manufacturing
- Federal agencies
- Patent law
- Genomics
- Ethics and Government
- Genetic counseling
- Pharmacology and Toxicology
- Space exploration
- Health technologies
- Colleges and universities
- Prosthetics

### Our Graduates...Where Are They Now?

*Within the past few years, graduates have obtained jobs at...*

Quality Control Engineer -- Alveolus

Technician III – Adecco Technician at Corning, Inc.

Orthopedic Surgery, Biomedical Materials Engineer – Medical College of Ohio at Toledo

Research Specialist – Dental Materials – American Dental Association

Associate Development Program – Nobel Biocare Procera, Inc.

Bristol Meyers Squibb – Project Analyst

Battelle at Pacific Northwest National Labs – Research Chemist

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Corning, Inc. – Process Engineer  
General Electric- Inorganic Chemistry Research Contractor  
Schott Inc. – Research Engineer  
U.S. Navy- Nuclear Power School Instructor

***...and have attended graduate school at:***

University of Kentucky (Biomedical Engineering)  
University of Vermont (Mechanical Engineering & Biomechanics)  
University of Washington (Bio-engineering & Material Science)  
Downstate Medical (Biomedical Engineering)  
Alfred University (Ceramic Engineering)  
Alfred University (Material Science & Engineering)

***Alumni who graduated several years ago in related majors are currently employed as...***

Executive Director of Research – Zimmer Orthopedics  
Science and Technology Coordinator – American Dental Association  
Senior Research Scientist – E.I. DuPont de Nemeurs  
Senior Scientist – Charles River Labs  
Senior Materials Scientist – American Competitiveness Institute  
Honeywell - Engineer  
Bausch & Lomb – Surface Engineer

**Get Experience on Campus**

Although co-ops and internships are considered the best preparation for your job search, you can get a head start by gaining experience on campus.

- Become a laboratory or teaching assistant, or a tutor
- Participate in a student chapter of a professional organization such as IEEE (Institute of Electronic and Electrical Engineers), SWE (Society of Women Engineers), ASME (American Society of Mechanical Engineers), ACerS (American Ceramic Society), Keramos, etc.
- Get involved in undergraduate research with a faculty member or a graduate student
- Submit your resume for the BMES Industrial Internship program through the CDC
- Assist in the planning of Engineering Week at Alfred
- Become part of the Science on Wheels program, to take your knowledge to area elementary schools
- Plan to attend the annual meetings of the American Ceramic Society and Materials Research Society, and to get your research published at other conferences and symposia. Your faculty members will assist you with this.

**Where to go from here?**

- Individual career counseling for anything from choosing a major to getting a job
- Saxon JobLink web services ([www.alfred.edu/cdc](http://www.alfred.edu/cdc)) to research internships and co-ops, post a resume and more
- Saxon Career Volunteer network – speak to alumni in your career field
- Choices CT computerized program for searching graduate schools
- Web resources: Try <http://recruit.sciencemag.org> or <http://www.sciencejobs.com>, or ask us for a list.

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