



**CASE**

CASE WESTERN RESERVE UNIVERSITY

**Biomedical Engineering**

### **Why a Biomedical Engineer . . . .**

So building bridges, designing aircraft, or purifying petroleum is just not fulfilling enough for you? Do you want to have a significant impact on another human being's life? Then a career in Biomedical Engineering is for you. A Biomedical Engineer (BME) applies engineering principles and methods to solve problems in biomedical research, healthcare, medical diagnosis, medical therapy, and the prevention and treatment of disease and injury.

### **About our Biomedical Engineering Program . . . .**

The Biomedical Engineering Program at Case Western Reserve University (CWRU) is one of the oldest and most prestigious programs in the country and is consistently ranked in the top four BME programs according to U.S. News and World Report. We have approximately 20 primary faculty who are committed to undergraduate education and involved in cutting-edge research and collaborations. Close relationships with the School of Medicine, and surrounding medical institutions, including University Hospitals of Cleveland, VA Medical Center, MetroHealth Medical Center, and the Cleveland Clinic Foundation provide unique educational and research experiences for our students.

### **About the BME as a major . . . .**

A major in Biomedical Engineering will make you a strong engineer who understands the application of engineering to biological systems. Our program gives you breadth through cross training with our BME core courses and depth through BME specialty track sequences. These include: Polymer Biomaterials, Tissue Engineering Biomaterials, Orthopedic Biomaterials, Biomechanics, Computing and Imaging, Bioelectricity, Instrumentation, and Systems & Controls.

### **Where BME's go after graduation . . . .**

Upon graduation, BME go directly into industry for a professional career, to graduate school, to medical school, or other professional schools (veterinary, law, optometry, etc).

### **Careers for Biomedical Engineers . . . .**

According to the Department of Labor, BME jobs will increase by 31.4 percent through the year 2010. Careers include jobs in industry, government, medical facilities, research institutes, or universities. Some professions include, but are not limited to, the following: Design Engineer; Physician; Research Scientist; Test Engineer; Regulatory Affairs Specialty; Sales Executive; Technical Marketing Consultant; Professor; or Quality Engineer.

### **Student Employment Program . . . .**

The Case BME Department offers a Student Employment Program, which provides assistance to BME majors in finding full-time, part-time, co-op, and internship opportunities in both industry and research. The program continually cultivates relationships with employers, which has profoundly increased the pool of employers for our graduates.

### **About the undergraduate Biomedical Engineering Society (BMES) . . .**

The BMES is a great way for students to learn more about majoring in BME. BMES has a mentoring program, which pairs upper classmen mentors with underclassmen mentees. Guidance is provided on class selection, BME sequences, and other basic information about the major. Additionally, BMES sponsors social events to foster comradery among students.