Biomedical engineers at Northwestern are trained to apply engineering techniques to the analysis of biological systems, providing full integration of biology and engineering. As part of the BME program, students receive thorough pre-professional training. This prepares them not only for medical and dental schools but also jobs in biomedical industries and hospitals. The biomedical engineering industry offers the possibility of developing, testing and marketing products ranging from medical lasers and pacemakers to drug delivery systems and beyond.

**UPPER-LEVEL COURSES**
- BMD ENG 349: Bioregenerative Engineering
- BMD ENG 366: Biomechanics of Movement
- BMD ENG 343: Biomaterials and Medical Devices

**RESEARCH AREAS**
- Cell and Molecular Engineering
- Biomaterials and Biointerfaces
- Imaging and Biophotonics
- Neural Engineering and Rehabilitation

**QUICK FACTS:**
- 42 faculty members
- Over 300 undergraduate students
- 40 average students per course

**5 CHALLENGES in the NEXT 5 YEARS**
1. Using nanotechnology to diagnose and cure disease
2. Addressing the rising cost of healthcare
3. Improving brain-machine interfaces
4. Creating advanced, non-invasive diagnostics
5. Mapping of the human brain

**HOW STUDENTS report that they SPEND THEIR TIME**
- Giving/preparing for presentations
- Group projects
- Working on problem sets
- Studying for/taking written exams
- Building things
- Working in a Lab
- Computer programming

**INDUSTRY: Examples of Positions held by ‘12 Grads**
- Implementation Consultant/Epic Systems
- Teach For America
- Health Business Analyst/Medtronic

**WANT TO LEARN MORE?**
Take: BME 101 Introduction to Biomedical Engineering
Join: Biomedical Engineering Society, Engineers for a Sustainable World, Engineering World Health
Ask: Prof. Timothy Carroll
Explore the Department website