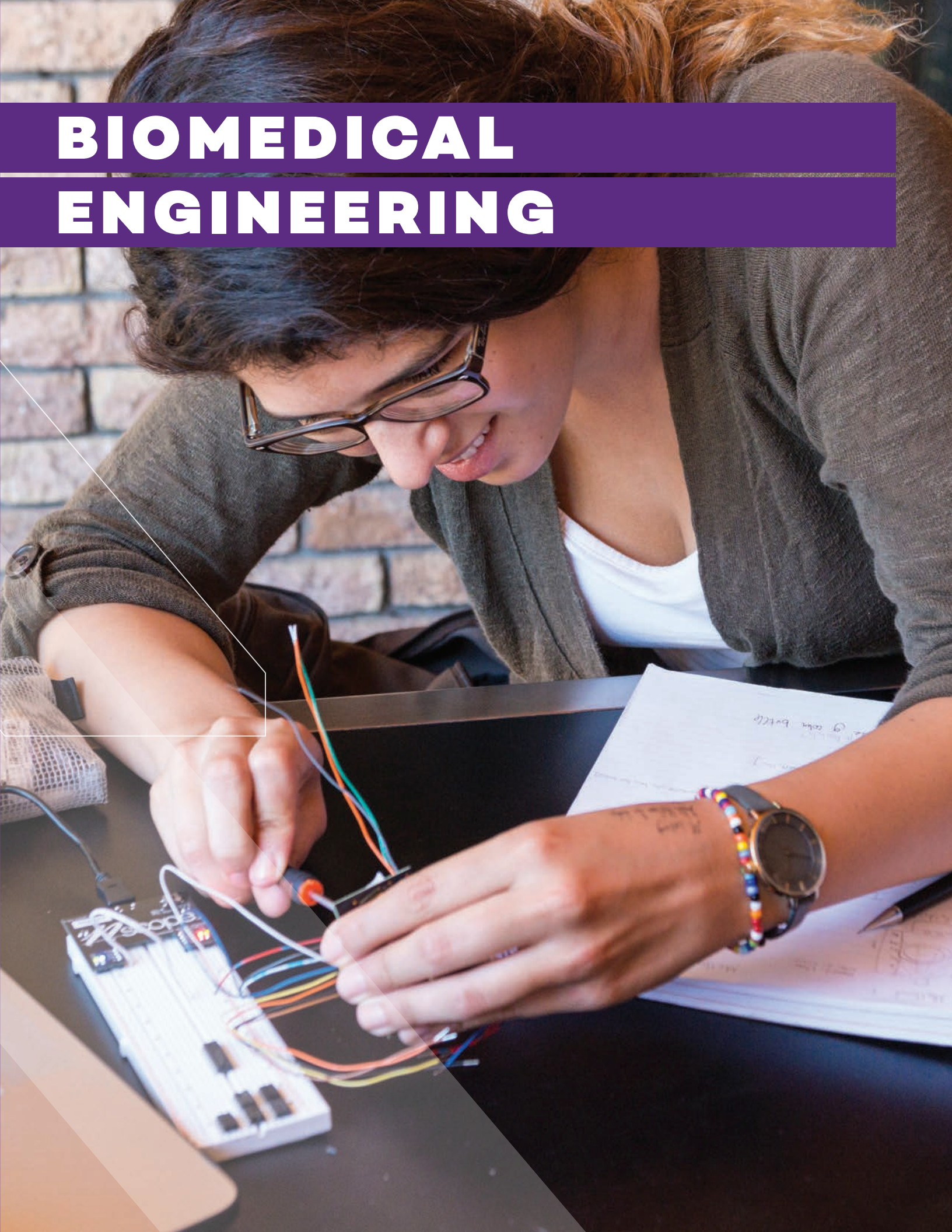
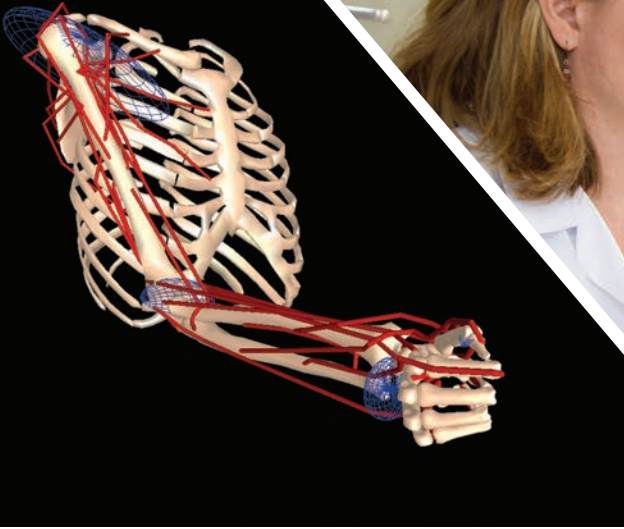


BIOMEDICAL ENGINEERING





BIOMEDICAL ENGINEERING

The **DEPARTMENT OF BIOMEDICAL ENGINEERING (BME)** consistently ranks among the top biomedical engineering programs in the country. With cutting-edge research in **neural engineering and rehabilitation, biomaterials and regenerative medicine, and imaging and biophotonics**, the department attracts top faculty and graduate students alike.

Faculty have joint appointments in 12 departments within engineering, medicine, arts and sciences, and communication. Students in the program study engineering, life sciences, and mathematics while participating in hands-on design and research.

UNDERGRADUATE STUDY

DEGREE PROGRAM

- \ Bachelor of science in biomedical engineering

EXAMPLE COURSES

- BME 271 *Introduction to Biomechanics*
- BME 301–303 *Systems Physiology*
- BME 307 *Quantitative Experimentation and Design*
- BME 327 *Magnetic Resonance Imaging*
- BME 349 *Bioregenerative Engineering*

OUTSIDE THE CLASSROOM

STUDY ABROAD \

Many students take advantage of study abroad programs such as the Global Health Technologies Program in Cape Town, South Africa.

UNDERGRADUATE RESEARCH \

More than 70 percent of BME undergraduate students work with faculty on cutting-edge research.

BIOMEDICAL ENGINEERING SOCIETY \

This undergraduate student chapter offers a great way to meet classmates and to learn about career and graduate school opportunities.

ENGINEERING WORLD HEALTH \

Members repair, build, and learn about medical devices for developing countries.

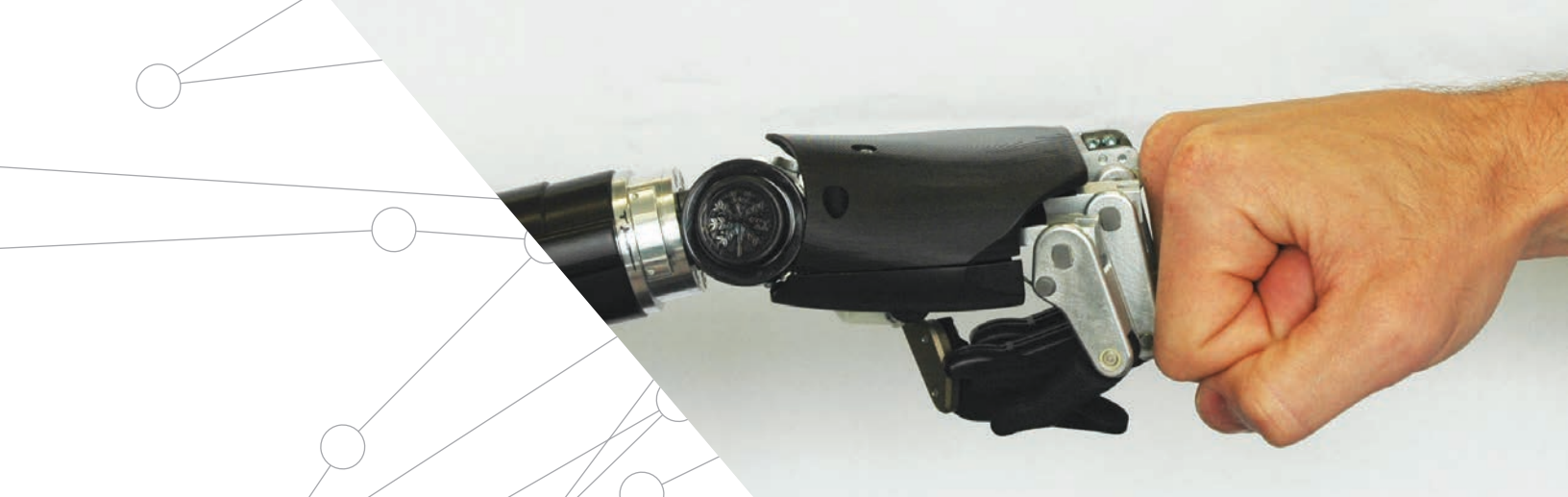
GRADUATE STUDY

PROGRAMS

- \ Master of science in biomedical engineering, with and without thesis
- \ Certificate in Global and Ecological Health Engineering
- \ PhD in biomedical engineering

RESEARCH AREAS

- \ Biomaterials and regenerative medicine
- \ Imaging and biophotonics
- \ Neural engineering and rehabilitation



“I LIKE HOW YOU CAN SEE YOUR WORK HELPING PEOPLE AND IMPROVING THEIR LIVES. THAT’S THE WAY I WANT TO USE MY KNOWLEDGE.”

SHANICE TAYLOR \ BIOMEDICAL ENGINEERING

CAREERS IN BIOMEDICAL ENGINEERING

WHAT’S NEXT?

- \ Roughly 20 percent of BME students enroll in medical school.
- \ Nearly 25 percent pursue an advanced degree in science or engineering.
- \ More than half pursue an industry career.

Primary industries for biomedical engineering careers

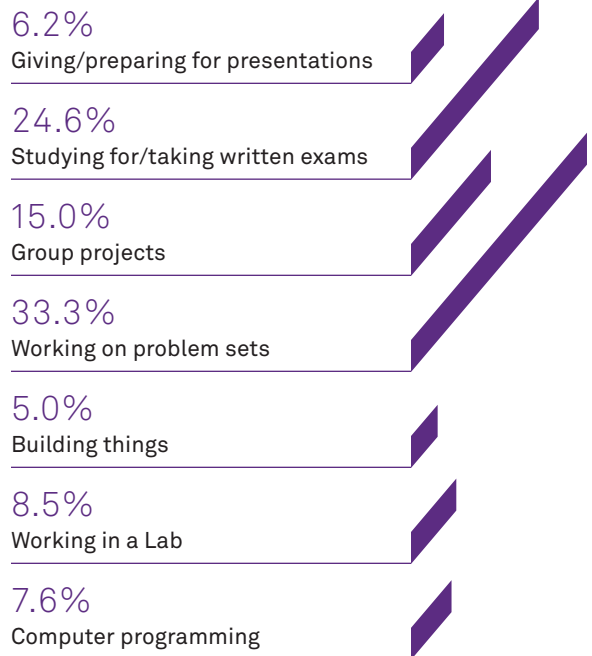
Medical devices \ Hospital products \ Diagnostics \ Healthcare and management consulting

RECENT GRADUATE PLACEMENTS

- \ Product development engineer at **Bemis**
- \ Business analyst at **OptumInsight**
- \ Engineer in the **US Army**
- \ Technical services analyst at **Epic**
- \ Software engineer at **Google**
- \ Principal engineer at **Baxter**
- \ Research and design engineer at **CareFusion**
- \ Research and development engineer at **Fresenius-Kabi**
- \ Engineer at **Edge One Medical**
- \ Systems verification engineer at **Hospira**

HOW YOU SPEND YOUR TIME IN THIS PROGRAM

BASED ON A SURVEY OF CURRENT STUDENTS.



ENVISION WHAT'S POSSIBLE

NORTHWESTERN ENGINEERING STUDENTS
CONSTANTLY EXPLORE NEW PATHWAYS
IN BIOMEDICAL ENGINEERING. IMAGINE YOURSELF:



- \ Designing a device to help treat jaundice in infants in the developing world
- \ Helping develop a prototype of the human knee that gives instant feedback to trainee surgeons during practice procedures
- \ Spending the summer gaining valuable industry experience at companies like Baxter International
- \ Developing non-invasive technologies for early cancer detection



FIND YOUR DIRECTION HERE



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ENGINEERING

www.bme.northwestern.edu