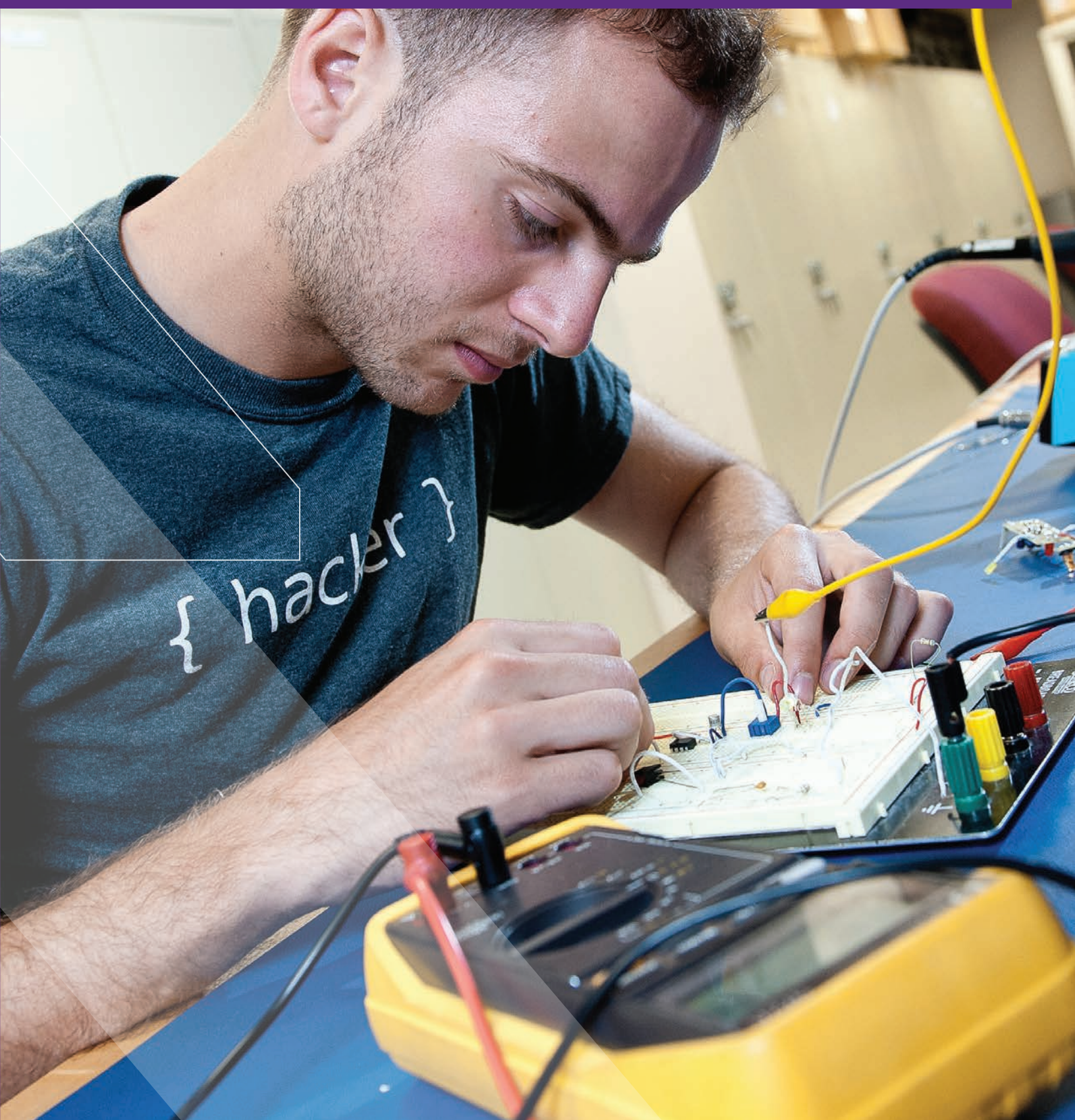


ELECTRICAL ENGINEERING





ELECTRICAL ENGINEERING

The **DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE (EECS)** has a well-earned reputation for excellence exemplified by its internationally renowned faculty, advanced research capabilities, and the considerable resources of a great university.

In close collaboration across disciplines, faculty and students transform bold new ideas into groundbreaking results in **electronic circuits, solid-state electronics, electromagnetics, optics, lasers, controls, digital signal processing, communications, and networks**. The ever-evolving curriculum seamlessly spans the broad disciplines of electrical engineering and computer science.

UNDERGRADUATE STUDY

PROGRAMS OF STUDY

\ Bachelor of science in electrical engineering

Areas of specialization include:

- \ Circuits and electronics
- \ Solid-state engineering
- \ Electromagnetics and photonics
- \ Systems

\ Bachelor of arts in computing and information systems through the Weinberg College of Arts and Sciences

\ Combined BS/MS option, through which students to earn both degrees simultaneously

EXAMPLE COURSES

EECS 100 *Electrons, Photons and Bits: Adventures in Electrical and Computer Engineering*

EECS 221 *Fundamentals of Circuits*

EECS 346 *Microprocessor System Design*

EECS 379 *Introduction to Lasers and Fiber Optics*

EECS 384 *Solid State Electronic Devices*

OUTSIDE THE CLASSROOM

UNDERGRADUATE RESEARCH \ Working on exciting research projects alongside graduate students and faculty members helps build a solid foundation of experience.

JOBS AND INTERNSHIPS \ The EECS Jobs Board points students and alumni to new tech-related opportunities through the McCormickConnect database.

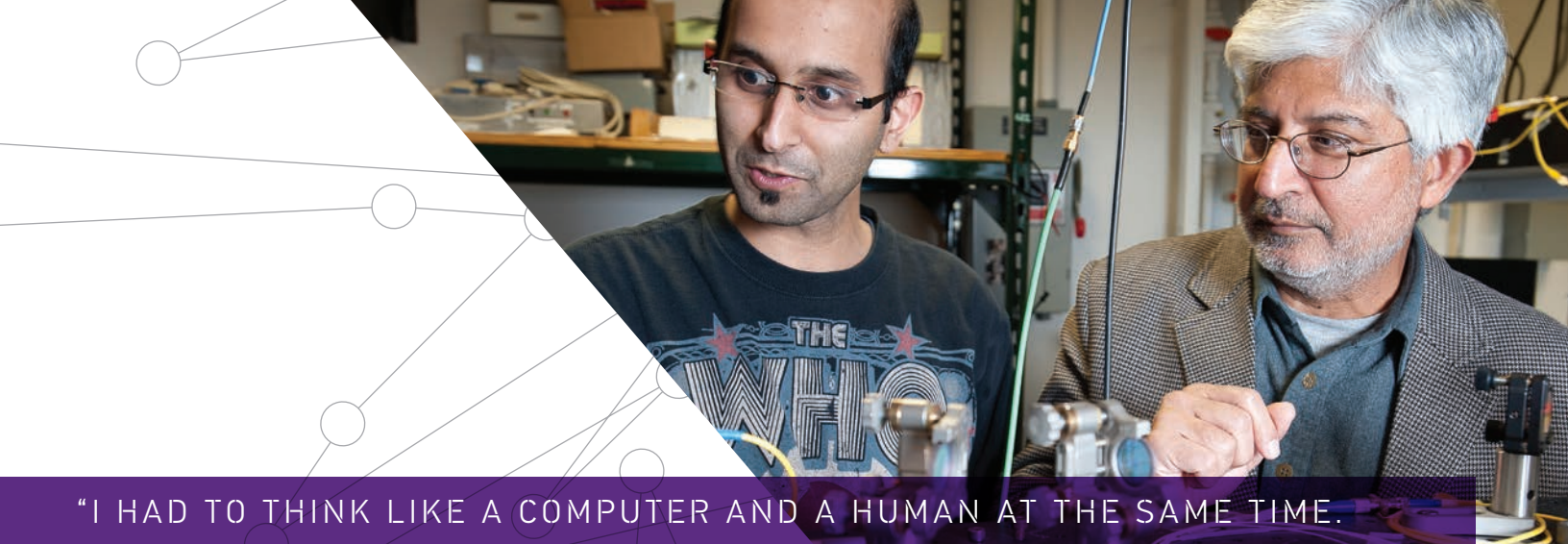
ETA KAPPA NU, ELECTRICAL AND COMPUTER ENGINEERING HONOR SOCIETY \ The student honor society of the Institute of Electrical and Electronics Engineers (IEEE) encourages and recognizes excellence through a variety of service programs and leadership training.

IEEE-NU \ This student chapter of the IEEE strives to embody the Institute's ideals, bringing together students with shared interests in technology to develop professional and technical skills.

GRADUATE STUDY

PROGRAMS OF STUDY

- \ Master of science in electrical engineering
- \ PhD in electrical engineering



“I HAD TO THINK LIKE A COMPUTER AND A HUMAN AT THE SAME TIME.

I LOVED THE CREATIVITY OF IT.”

MAGAN OMAR \ ELECTRICAL ENGINEERING

RESEARCH AREAS

Solid-state devices \ Quantum electronics \
Fiber optics \ Lasers \ Digital signal processing \
Communication systems and networks

CAREERS IN ELECTRICAL ENGINEERING

WHAT'S NEXT?

Electrical engineers pursue careers in many areas of commerce, industry, and academia, including:

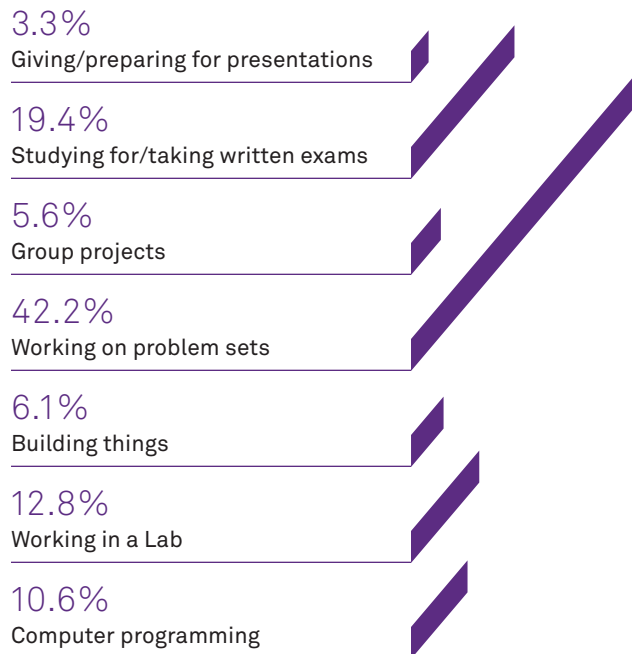
System design and specification \ Component design, research, and development \ University teaching and research \ Consulting, production, and quality control \ Sales \ Cost analysis \ Management

RECENT GRADUATE PLACEMENTS

Avionics integration engineer at **SpaceX** \
Electrical engineer at **Boeing** \
RAN engineer at **AT&T** \ Engineer at **Northrop Grumman** \
Engineer at **GE Energy** \ Software engineer at **Google** \
Electrical engineering specialist at **Shusaku Yamamoto** \
Project engineer at **ITW** \
Investment analyst at **Goldman Sachs**

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 ELECTRICAL ENGINEERING. IMAGINE YOURSELF:

-
- \\ Designing and analyzing electronic and optical technologies that can generate, communicate, and process information
 - \\ Exploring the intricacies of electronic circuits, solid-state electronics, electromagnetics, optics, lasers, controls, and digital signal processing
 - \\ Exercising your intellectual muscles by mastering new concepts and identifying new directions to respond to the needs of a rapidly changing world
-

FIND YOUR DIRECTION HERE

Northwestern | McCORMICK SCHOOL OF
ENGINEERING

www.eecs.northwestern.edu