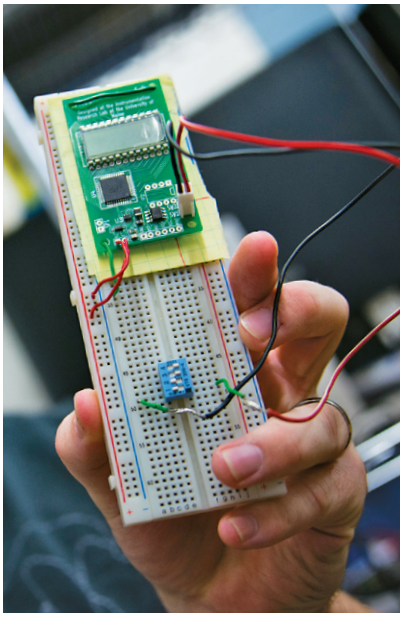

UMaine's ADVANTAGE

- UMaine's Foster Center for Student Innovation offers courses in innovation engineering
- Professors with Ph.D. degrees, not graduate students, teach classes
- Opportunities for research and fieldwork
- Top-notch pre-professional advising
- Excellent placement rates in top graduate programs
- Our students work everywhere from small startup companies to leading companies including Google, IBM, Intel and NVIDIA
- Home to one of the country's oldest honors programs

Department of Electrical and Computer Engineering
5708 Barrows Hall, Room 101
University of Maine
Orono, ME 04469-5708
207.581.2223

ece.umaine.edu
To apply: umaine.edu

1865 THE UNIVERSITY OF MAINE

COLLEGE OF ENGINEERING

Computer Engineering

WHY COMPUTER ENGINEERING?

We all know what a computer is, but did you know that your portable gaming system, car and microwave oven have as much or more computational power as the building-sized computers used for code breaking in World War II? Nearly everything electrical has, or soon will have, one or more computers at its core. From airplanes and rockets to industrial machines and robots, smart handheld devices with cameras, music players, multitouch displays, GPS navigation systems, medical devices, toys, and even household appliances such as autonomous vacuum cleaners all have computers and supporting software.

Computer engineering is a discipline dedicated to the design, construction and programming of computers and computer-based systems. It is focused on the study of digital hardware systems design and software development to control and interact with real-world devices.

Computer engineering is one of the most rapidly growing engineering fields. Jobs are plentiful and salaries are high. Recent computer engineering graduates earn an average starting salary of more than $70,000 — among the highest for graduates of all four-year degree programs.

WHAT'S THE DIFFERENCE BETWEEN ELECTRICAL AND COMPUTER ENGINEERING AND COMPUTER SCIENCE?

Our department offers bachelor of science degrees in both computer and electrical engineering. Computer engineering centers around hardware and hardware/software integration, including digital hardware design, microprocessors, microcontrollers and programming in a variety of languages. Electrical engineering focuses on electronics, energy conversion, communication theory, signal processing and electromagnetic field theory. In computer science, students learn the more formal theory of programs, languages and algorithms.

WHY UMAINE?

At UMaine, engineering classes are small. Our programs in electrical and computer engineering (ECE) are accredited. UMaine's College of Engineering offers a five-year B.S.–M.B.A. degree with the Maine Business School, as well as an engineering leadership and management minor. We offer state-of-the-art teaching and research facilities. Undergraduates have the opportunity to do meaningful research alongside faculty. Professors, not graduate students, teach classes. We have a high placement rate in top graduate programs.

UMaine graduates work in areas such as microchip design, system software development and embedded technologies at leading companies including Google, AMD, NVIDIA, Microsoft and IBM.

Since 2004, two UMaine electrical and computer engineering students have been named the nation's Outstanding Electrical and Computer Engineering Student by the Eta Kappa Nu and Tau Beta Pi engineering honor societies. In the last 44 years, only 48 students have received this award, including UMaine's first Eta Kappa Nu honoree in 1979.

Computer Engineering undergraduate students from UMaine continue to compete and excel in the IEEEXtreme international programming competition- the largest annual programming competition in the world. UMaine placed No. 1 and No. 2 in the Northeast USA (Maine, New York, Massachusetts, Vermont, New Hampshire, Connecticut, and Rhode Island) in its inaugural year in the competition (2011). Most recently (2016) a UMaine team had the second highest ranking of all Northeast USA teams.

OUTSTANDING FACULTY

Our faculty are recognized nationally and internationally for their research. They receive

ABOUT UMAINE

The University of Maine, founded in Orono in 1865, is the state's premier public university. It is among the most comprehensive higher education institutions in the Northeast and attracts students from across the U.S. and more than 60 countries. It currently enrolls more than 11,000 total undergraduate and graduate students. UMaine students directly participate in groundbreaking research working with world-class scholars. The University of Maine offers doctoral degrees in 30 fields, representing the humanities, sciences, engineering and education; master's degrees in 85 disciplines; 90 undergraduate majors and academic programs; and one of the oldest and most prestigious honors programs in the U.S. The university promotes environmental stewardship on its campus, with substantial efforts aimed at conserving energy, recycling and adhering to green building standards in new construction. For more information about UMaine, visit umaine.edu.

explore

Bachelor of Science in
Electrical Engineering

Computer Engineering

Minor in
Engineering Leadership and Management

Master of Science in
Electrical Engineering

Computer Engineering

Professional Science Master in
Engineering and Business

Ph.D. in
Electrical and Computer Engineering

Five-Year Master of
Business Administration

Anin Maskay of Kathmandu, Nepal, was the outstanding Graduating International Student in the College of Engineering. For three years he was involved in wireless sensing research in UMaine's NASA lunar habitat and in the Wireless Sensor Networks Laboratory on campus.

major grant funding from such agencies as National Science Foundation, NASA, Department of Defense, Department of Energy and National Institutes of Health. Industrial sponsors include IBM, Texas Instruments, On Semiconductor, BAE Systems, Sappi and International Paper.

RESEARCH

There are many research opportunities for computer engineering undergraduates during regular semesters and summers in areas such as supercomputing, scientific visualization, robotics, digital signal processing, embedded systems design and high-performance data systems.

INTERNSHIPS AND CO-OPS

Our students have the opportunity to work in organizations such as Texas Instruments, On Semiconductor, IBM, Analog Devices, Kepware Technologies, General Electric and NASA research centers, as well as industries such as pulp and paper and electric utilities.

SCHOLARSHIPS

In addition to first-year scholarships, active students in Computer Engineering compete for a large number of donor or industrially sponsored scholarships directed specifically at ECE students.

HOW DO I APPLY?

Visit umaine.edu for an application, as well as information about academics and life at UMaine.

Accredited ABET Engineering Accreditation Commission
ABET.org

ENGINEERING

The University of Maine does not discriminate on the grounds of race, color, religion, sex, sexual orientation, including transgender status and gender expression, national origin, citizenship status, age, disability, genetic information or veteran status in employment, education, and all other programs and activities. Contact the Director, Equal Opportunity, 5754 North Stevens Hall, Room 101, Orono, ME 04469-5754 at 207.581.1226 (voice), TTY 711 (Maine Relay System), equal.opportunity@maine.edu with questions or concerns.