

Electrical Engineering Technology

Bachelor of Science Degree

Contact

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Admission Requirements

(In years as established by the college)

A high school diploma with the following specific courses:

- 4 English
- 1 Biology (recommended)
- 2 Algebra I & II
- 1 Geometry
- 1 Pre-Calculus
- 2 Lab Science (chemistry and physics)
- 2 History/Social Studies
- Academic electives (to equal at least 17 total credits)

To ensure current mathematical skills, students should take a mathematics course during their senior year of high school.

Did You Know?

- The UMaine EET Program is a recognized leader in Maine for quality education with a goal of producing highly skilled, highly valued graduates who immediately can make a difference in the industry.
- Our graduates are business leaders who have the necessary tools to excel in their careers.
- We have great job opportunities in and out of state, as well as internationally.

College of Engineering

Program Description

The Electrical Engineering Technology (EET) Program prepares students for professional electrical engineering careers in industry. The program provides students with the theory and hands-on experience necessary for them to quickly become productive in their jobs after graduation. EET offers two distinct paths to pursue the degree — the electrical option and the information technology option. One of the unique aspects of the Electrical Engineering Technology Program is its focus on the application of theory to engineering problems. In EET, students work with electrical equipment they may use in their professional careers from the very first class they take all the way through their senior year. Further, EET faculty are expected to maintain currency with the field of electrical engineering and some consult on a regular basis. Students gain exposure to current design methods and faculty practice what they preach. It's this practical approach to learning that makes theoretical concepts come to life, and gives our students an edge when they graduate — they are all ready to hit the ground running — as many employers of UMaine EET graduates have commented. Another feature unique to UMaine EET is its focus on power and alternative energy. We are the only power program in Maine and one of a handful in the nation. Despite the high overall unemployment rate, EET graduates have nearly 100 percent job placement upon graduation, and many of them stay in the state of Maine. That's because power engineers are in high demand, and will continue to be in demand over the next decade.

Specialized Information

We strive to create lab environments that mimic real world experiences. Most labs in the EET program continue to use hardware as opposed to transitioning to software for simulations. Students will utilize this equipment while they are UMaine EET undergraduates. Cooperative job experiences are encouraged after the sophomore year, and the EET faculty help students get placed in jobs where they can gain valuable experience working in the field. This makes our students more valuable upon graduation and also gives employers a trial run to determine how the student will fit into the organization. Many of our co-op students report that they have already been offered positions at their companies well before they graduate. This is a huge stress relief and makes up for all the hard work they've put in during their undergraduate career. Another opportunity for our students is the ability to take the first two years of courses at community colleges and then transfer into the EET Program with only two more years to complete their degree. This synergy between EET and the community colleges is being emphasized by policymakers.

NEBHE Program

Applicants to this program who reside in Connecticut, New Hampshire, Vermont or Rhode Island are eligible for reduced tuition (in-state plus 50 percent) under the New England Regional Student Program, administered through the New England Board of Higher Education (nebhe.org).

Representative Courses

EET 100 Introduction to Electrical Engineering Technology
EET 111 DC Circuit Analysis
EET 112 AC Circuit Analysis
EET 174 Introduction to Microcontrollers
EET 241 Analog Circuit Fundamentals
EET 275 Digital Electronics
EET 242 Advanced Analog Circuit Design

EET 276 Programmable Logic Controllers
EET 321 Power I
EET 323 Power II
CHB 350 Statistical Process Control and Analysis
MET 433 Thermodynamics
EET 452 Senior Design Project III
MET 484 Engineering Economics

Associated Honor Societies and Student Organizations

Internships are a big part of the UMaine EET Program, as most students find jobs in the field during summers and sometimes during academic semesters. These jobs give both the students and employers a chance to evaluate each other's potential for a longer-term commitment; many of our students are offered jobs upon graduation from the employers who hired them during internship experiences. Research opportunities are primarily for applications. In particular, we are always updating our labs and this gives motivated students the opportunity to design and construct systems. Further, our faculty are heavily involved in wind energy and our students have been working on evaluating sites for wind power potential. Students are encouraged to join the Institute of Electrical and Electronics Engineers (IEEE). UMaine has a chapter of Tau Alpha Pi, the national engineering technology honor society and the Society for Women Engineers.

Career and Graduate Opportunities

Careers for graduates of the EET program include positions in project management, power generation and transmission, design, production, manufacturing, field service, product testing and quality control, just to name a few. Jobs are available in the state of Maine, throughout New England and the rest of the United States, and even worldwide.

Graduate programs are available to our students as well. There are a number of institutions in the U.S. that offer master's degrees in EET. Our students can take a few additional courses and be accepted into an engineering master's program. In fact, some of our faculty have first-hand experience with this and are ready and willing to help our undergraduates if they choose to pursue a higher degree in electrical engineering.

UMaine Graduate Programs

Master of Science in Electrical Engineering
Doctor of Philosophy in Electrical Engineering

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 12,000 total undergraduate and graduate students who can directly participate in groundbreaking research working with world-class scholars. Students are offered 88 bachelor's degree programs, 64 master's degree programs, 25 doctoral 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, go online (umaine.edu). Equal opportunity information also is available online (umaine.edu/eo).

How do I apply?

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



Academic Programs 2011-12

The latest versions of the UMaine fact sheets are online (factsheets.umaine.edu). This fact sheet is intended for informational purposes only and is subject to change.

