

College of Engineering

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?

At UMaine, you'll work with and learn from nationally and internationally recognized innovators in their fields. At UMaine, engineering classes are small. The College of Engineering offers a five-year B.S.-M.B.A. degree with the Maine Business School, as well as a minor in engineering leadership and management. 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. UMaine's Foster Center for Student Innovation offers courses in innovation engineering.

About the College

Engineering is an exciting profession, but one of its greatest advantages is having a positive effect on everyday life. Engineers solve problems and design things that matter. You can come up with solutions no one else has thought of. Cars are safer, sound systems deliver better acoustics, medical tests are more accurate, and computers and cell phones are a lot more fun. You'll be giving back to your community.

Engineering is a great outlet for the imagination—the perfect field for independent thinkers. Creative problem solving will take you into uncharted territory, and the ideas of your colleagues will expose you to different ways of thinking. Be prepared to be fascinated and to have your talents stretched in ways you never expected.

Engineering takes teamwork, and you'll work with all kinds of people inside and outside the field. Whether they're designers or architects, doctors or entrepreneurs, you'll be surrounded by smart, inspiring people.

An engineering degree offers you lots of freedom in finding your dream job. It can be a launching pad for jobs in business, design, medicine, law, and government. To employers or graduate schools, an engineering degree reflects a well educated individual who has been taught ways of analyzing and solving problems that can lead to success in all kinds of fields.

Imagine what life would be like without pollution controls to preserve the environment, life-saving medical equipment, or low-cost building materials for fighting global poverty. All this takes engineering. In very real and concrete ways, engineers save lives, prevent disease, reduce poverty, and protect our planet.

For detailed descriptions of engineering careers, check out our brochures on individual programs at www.engineering.umaine.edu.

The college also offers Bachelor of Science degree programs in Engineering Technology, curricula which place less emphasis on design and theoretical principles, but stress the application of engineering practice and the implementation of technological advances for the benefit of humanity. Engineering technology education focuses primarily on analyzing, applying, implementing, and improving existing technologies and is aimed at preparing graduates for the practice of engineering closest to the product improvement, manufacturing, and engineering operational functions.

A series of minors is designed to enhance the basic undergraduate degree. For example, mechanical engineering majors are earning a minor in electrical or computer engineering or robotics to build on their basic competency in mechanical engineering. Other popular minors include engineering leadership, biomedical engineering, construction management, power, and innovation engineering.

The college also offers graduate study leading to Master of Science and Doctor of Philosophy degrees.

Student Awards and Recognition

UMaine engineering students excel at both serious academics and fun competitions. Engineering majors have received nationally competitive scholarships, such as the Udall Scholarship and Tau Beta Pi Fellowships. Three have been named the National Outstanding Student in Electrical Engineering. In national competitions, UMaine engineering teams have consistently placed near the top in events such as human-powered submarine, chemical car, clean snowmobile, concrete canoe and coaster car.

Degree Programs

Biological Engineering
Chemical Engineering
Civil Engineering
Computer Engineering
Electrical Engineering
Engineering Physics
Mechanical Engineering
Pulp and Paper Technology

School of Engineering Technology
Construction Management Technology
Electrical Engineering Technology
Mechanical Engineering Technology
Surveying Engineering Technology

Undergraduate Research and Scholarship

Thanks to faculty success in garnering research grants exceeding \$25 million per year, the college has multiple opportunities for its students to participate in research. Based on their research participation, undergraduates have presented papers at national conferences, published in leading professional journals, and even received patents. Co-ops also are a popular venue for building industrial experience.

Engineering awards a variety of scholarships to incoming students based on their academic achievements in high school. Students are encouraged to apply online (engineering.umaine.edu/prospective-students/scholarships) for consideration for the fall. Annually, the college awards more than \$100,000 with awards ranging from \$500 to \$2,000. In addition, departments and the Pulp and Paper Foundation also make awards.

About Our Graduates

UMaine graduates find excellent job placement with two-thirds staying in Maine, and find themselves nationally competitive for jobs around the country. About 20 percent decide to go on to graduate school, winning teaching and research assistantships to fund their advanced studies at UMaine and other top engineering schools. Demand for UMaine engineering graduates is significant and the campus hosts a special job fair just for engineering companies to meet, interview, and hire our graduates.

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.

