WHY STUDY RENEWABLE ENERGY AT UMAINE?
Within a short drive, imagine being able to see the first floating offshore wind turbines in the United States. Imagine innovative solar energy research taking place a short walk from your dorm room. At UMaine, this is not simply imagination, it is reality. Our faculty are involved in numerous types of renewable energy research and work closely with private sector partners, providing students frequent opportunities to observe the industry firsthand. As a leading renewable energy research center, UMaine regularly hosts international experts, sponsors conferences and seminars, and invites policymakers and legislators to visit campus. Such events offer networking opportunities while exposing students to the most pressing issues in the energy sector.

OUR PROGRAMS
Each day we see energy generated, stored and converted in a variety of devices, yet specific scientific principles and technologies form the foundation of the entire energy system. Through our programs, students are not only exposed to the scientific components of energy, but also consider the social and environmental implications of energy production and consumption. UMaine offers three minors and a concentration, which enable students from diverse backgrounds to add marketable skills to their degree.

Renewable energy engineering minor is rooted in the science behind energy, including a comprehensive understanding of thermodynamics and electrical circuits. With these skills, students will learn how to design and implement energy production, storage and transmission systems — from grid-scale wind farms to wood-based biofuels.

Renewable energy science and technology minor focuses on diverse subjects, including electricity production, climate change and life cycle analysis. This program provides students with a rigorous foundation in renewable energy science, both in terms of generation and lasting environmental impacts. The minor complements degrees in engineering technology, as well as those in the physical, life and social sciences.

Renewable energy economics and policy minor focuses on the important financial, ethical, political and legal considerations that influence energy decisions. This program provides an understanding of energy science and detailed exposure to the diverse impacts of energy systems. The minor complements degrees in social sciences, humanities and business.

Renewable energy concentration (available with B.A., B.S. in economics) develops the core skills required for economic and policy analysis, while also building focused knowledge of issues specific to renewable energy.

OUR FACULTY
UMaine faculty are widely recognized for their innovative energy research. From offshore wind and biofuels to smart grid and tidal power, our engineers and scientists are designing viable solutions to meet society’s growing energy needs. UMaine economists and policy experts are working to implement new technology in ways that are both cost-effective and socially responsible. Many of our faculty are internationally recognized and hold prestigious joint appointments with foreign universities, such as Iceland’s School for Renewable Energy Science and Finland’s Distinguished Professor Programme.

OPPORTUNITIES TO EXCEL
Our undergraduate students have access to multiple energy laboratories. The Advanced Structures and Composites Center’s offshore wind laboratory enables the design, manufacture and testing of wind blades and
components. The College of Engineering has state-of-the-art laboratories to design and test biofuels, solar panels, tidal energy and smart grid technologies. Our social scientists actively involve undergraduate students in field research taking place in Maine, nationally and overseas. Students pursuing a minor or concentration in renewable energy also have access to paid summer internships.

WHAT CAN I DO WITH A MINOR OR CONCENTRATION IN RENEWABLE ENERGY?

A minor or concentration in renewable energy helps students access the growing number of jobs in the green economy. There are numerous renewable energy-based careers with public agencies, utilities, nonprofits and private businesses. Students with a background in renewable energy may work as energy engineers and technologists, smart grid and energy conservation specialists, environmental communication and outreach coordinators, and public policy consultants. Experts in renewable energy will also be qualified for emerging careers in carbon mitigation and carbon credits trading.

WHAT OTHER SUSTAINABILITY INITIATIVES DOES UMAINE HAVE IN PLACE?

Princeton Review ranks the University of Maine as one of the nation’s most environmentally responsible colleges and universities. UMaine leads the Sustainability Solutions Initiative, a statewide interdisciplinary effort to help solve Maine’s most pressing economic and environmental problems through research and scholarship. While this project focuses on Maine, it has broad implications for the nation as a whole. On campus, green is a way of life. Students reclaim used bicycles and make them available free of charge for riding around campus or in town. UMaine Dining’s GreenToGo allows students to purchase takeout items in reusable containers. Dining facilities use biodegradable plates and utensils, recycled-paper napkins and bioplastic cups. And food scraps are used as compost.

HOW DO I APPLY?

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

I knew I needed a specialty to set my resume apart, and I found my niche in renewable energy. At UMaine, I’ve been able to craft my educational experience to align with my career goals.”
— Peter Drown, Class of 2011, Economics