



BACHELOR OF SCIENCE IN MARINE AND ENVIRONMENTAL BIOLOGY AND POLICY

To provide tomorrow's scientists and managers with expertise that balances ocean use with sustainability, Monmouth University offers an interdisciplinary Bachelor of Science in Marine and Environmental Biology and Policy degree program involving the study of marine and terrestrial ecosystems, ecosystem processes, and relevant environmental laws and policies.

Focusing on the Environment

New Jersey's ecosystems are among the most complex and diverse in the nation. The state's 127 miles of shoreline experience extreme environmental pressure from natural and man-made stresses. You can participate in maintaining, conserving, and strategically managing our marine and coastal resources.

Curriculum

The marine and environmental biology and policy program includes a multidisciplinary curriculum in which students gain a solid foundation in the biological, chemical, and physical sciences, together with an understanding of their application to environmental problems. Core courses include ecology, botany, zoology, environmental biology, biological oceanography, ecosystems analysis, marine biology, environmental policy, natural resource conservation and management, and coastal zone management.

In addition, you can choose from a series of guided electives including fisheries management, applied microbiology, environmental geography, global environmental problems, and others that will allow you to focus on your own area of special interest.

State-of-the-Art Facilities

Monmouth University offers students access to fully equipped classrooms and teaching laboratories during their studies. These facilities

are complemented by an array of state-of-the-art sampling equipment, small research vessels, and undergraduate faculty research laboratories where students gain hands-on experience in applied science by participating in faculty-sponsored research projects. The Monmouth campus is within a mile of the Atlantic Ocean and close to a number of the state's productive estuarine ecosystems. This location provides a wealth of natural outdoor classrooms and laboratories for study.

Monmouth students have the opportunity to work with the faculty on sponsored research in these local waters. Recent projects include:

- Tracking sources of bacteria in local estuaries
- Assessing the impact of stormwater discharges on bathing beach water quality
- Characterization and assessment of fish and invertebrate communities in local streams, lakes, and estuaries
- Assessments of the impacts of land and water use on natural resources
- Development and implementation of restoration strategies for degraded coastal ecosystems

Students also participate in collaborative research projects with other colleges and universities, government agencies, community and civic organizations, and environmental organizations through the University's Urban Coast Institute. Our affiliation with institutions such as the New Jersey Marine Sciences Consortium and the Cape Eleuthera Institute provide students with opportunities to study at field stations on Sandy Hook, New Jersey, and the Island of Eleuthera in the Bahamas.

Real World Experience

The University offers experiential education and internship opportunities with various off-campus partner organizations like the Surfrider Foundation, the Barnegat Bay National Estuary

Program, the Monmouth Coastal Watersheds Partnership, the New Jersey Division of Fish and Wildlife Endangered and Nongame Species Program, and environmental consulting firms. Interns work closely with host scientists in developing a project, carrying out the work, and preparing research results for publication.

Career Potential

By completing this program of study, students will be ready for careers in government, education, consulting, or industry, or to enter a graduate program.

Recent graduates are employed by government agencies including the New Jersey Department of Environmental Protection and the National Oceanic and Atmospheric Administration; regional and national environmental consulting firms such as Weston Solutions Inc., Science Applications International Corporation, and ENSR International; private research laboratories of the American Water Supply Authority; and local, non-profit environmental organizations.

In addition, several graduates have completed, or are currently pursuing, graduate degrees in the marine and environmental sciences at the following institutions: Rutgers University, the University of Medicine and Dentistry of New Jersey, the University of North Carolina, and the Oregon Health and Science University.

valuable online resources

- Apply Online
- Curriculum Charts
- Department Faculty Members
- www.monmouth.edu/MEBP

For complete information on all undergraduate programs within the School of Science, please visit www.monmouth.edu/science.