

CORNING SCHOOL OF

OCEAN STUDIES

B.S. DEGREES

Marine Biology
Marine Science
***Dual Degrees with**
Small Vessel Operations

PROGRAMS OVERVIEW

The Corning School of Ocean Studies at Maine Maritime Academy will engage your interest in science while building skills you will need for an ocean-related career. Our broad-based approach allows you career flexibility as you work toward a Bachelor of Science degree.

Marine Biology

The Marine Biology major focuses on the biological component of Ocean Studies. This major provides instruction in essential biology (biology, ecology, physiology, cell biology and genetics) and more specialized topics relevant to the study of marine organisms. Graduates find employment in a diversity of fields including fisheries, aquaculture, environmental management, consulting, public education, or pursue graduate education.

Marine Science

The Marine Science major prepares students in the field of marine science, with an emphasis on problem solving and decision making in an ocean setting. The curriculum encompasses the study of chemistry, biology, physics, geology, writing and communications, computer science, mathematics, humanities, and social sciences. Graduates find employment in the various fields of ocean sciences (resource management, aquaculture, research, environmental protection, science education, or oceanography) or pursue graduate education.

*Dual Degree Options

Ocean Studies offers two majors leading to a dual degree in Ocean Science and Small Vessel Operations.

Marine Biology & Small Vessel Operations Dual Degree or Marine Science & Small Vessel Operations Dual Degree: Each dual major enables students to complete all of the requirements for the Bachelor of Science degree in Marine Biology or Marine Science and the requirements for an Associate in Science degree in Small Vessel Operations, as well as a USCG license as mate of vessels not more than 200 gross tons, Near Coastal (200 miles offshore). Either program may be completed in 5 years and is designed for students who plan to work in the marine biology or marine science field and may need the capability to operate small vessels.

Scientific Diving

Maine Maritime offers a variety of diving courses including basic and advanced scuba, rescue diver and an Ocean Studies capstone AAUS Scientific Diving certification course. The Scientific diving course is designed to acquaint certified recreational divers with multiple and practical scientific diving techniques and to qualify them to undergo scientific diving under the auspices of MMA. Students possessing an AAUS Scientific Diver Certification have the opportunity to work with other research institutions around the world, conducting scientific explorations in varied aquatic environments. Current topics under investigation include shark biology, coral reef ecology, effects of climate change on ocean chemistry, and underwater archaeology.

Tropical Field Study

The Corning School's tropical marine science class is a field-based course that explores fish behavior and biodiversity, coral reef biology, mangrove habitat surveys, jellyfish productivity, and turtle grass bed communities. Students develop skills in field work, experimental design and analysis, and scientific writing as they work both as student groups, and individually, to conduct research in the tropical marine environment. Previous locations visited include several sites in the Bahamas, Belize, and Tobago. Students earn departmental elective credit for the course.

LETTERS FROM GRADUATES

"I'm convinced that the strong points of my undergraduate experience were the well-rounded education, technical hands-on experience, and the availability of practical sea time. That's what made us competitive in the job market." — **Jeremy W.**

"The marine biology program at MMA not only paved the way for my career, but also provided me with unique opportunities and experiences I wouldn't have found at other schools, as well as lifelong friends with students and teachers alike." — **Amy S.**

"I chose MMA because I didn't want to be 'just a number', another face in a classroom. I wanted my professors to know my name – and they still do." — **Colleen P.**

CORNING SCHOOL RESEARCH



In addition to assisting faculty with ongoing research projects, all Corning School students develop and conduct an independent senior research capstone project. Some student research topics include:

- Effects of guided nature walks on the nesting behavior and hatching success of loggerhead turtles (*Caretta caretta*)
- Do variable quantitative food resources affect appendage regeneration of the brittle star (*Ophiopholus aculeata*)?
- The effect of synthetic estrogen on the gonadosomatic index of male and female mummichogs (*Fundulus heteroclitus*)
- Does the bushy-backed sea slug (*Dendronotus frondosus*) contain chemical defenses against predation by the crab (*Carcinus maenas*)?
- Evaluating feeding preferences of *Elysia chlorotica*: Is *Vaucheria litorea* the preferred alga?
- The effects of protein level on growth rates of the common mummichog, *Fundulus heteroclitus*
- The difference in profiles of beaches as a function of grain size and slope in Maine
- Looking below the surface at Narragansett Bay phytoplankton community respiration rates
- The effect of ultraviolet radiation on the growth rates of New England macroalgal species in Castine harbor
- Characterization of current flow in northern Penobscot Bay on either side of Islesboro

CAREER CHOICES

Professional careers in marine biology and marine science encompass a wide variety of jobs. Some of the careers Ocean Studies alumni are currently employed in include:

- Laboratory Manager
- Fishery Biologist
- Research Assistant
- Hydrographic Survey Technician
- Environmental Consultant
- High School Science Teacher
- NOAA Corps Officer
- Naturalist
- Aquaculture Technician
- Congressional Staff
- Medical Technologist
- Aquarist
- Marine Technician
- Environmental Educator



ALUMNI ADVANTAGE

The Loeb-Sullivan School of International Business & Logistics offers a special graduate school incentive option for all MMA alumni regardless of their undergraduate major. The On Campus Masters of Science degree in Global Logistics & Maritime Management is offered as an accelerated 10-month full-time program while the Online Masters of Science degree in International Logistics Management is accessible anytime, anywhere in the world in a part-time format – perfect for the working professional. The Alumni Advantage program offers all MMA alumni preferential tuition rates substantially lower than the normal graduate tuition rate.

WHY MAINE MARITIME ACADEMY?

Compare Maine Maritime Academy to other marine science colleges and see what sets us apart from the rest:

- Hands-on approach to the marine sciences
- Unparalleled water access and oceanfront location
- Advanced research equipment
- Research vessel *Friendship*
- Individual research opportunities
- Navigation and seamanship training
- SCUBA certification available, including AAUS Scientific Diver certification
- Modern wet labs with running seawater system
- Small classes and lab sessions
- At-sea experience, research cruises
- Tropical Marine Science field experience option
- Strong academic reputation
- Internship opportunities
- Professional job placement center
- Small, safe campus setting
- Regiment or independent lifestyle options
- Reasonable annual costs
- NROTC opportunities



LEARN MORE

Visit mainemaritime.edu for helpful information on all aspects of Maine Maritime Academy academics, student life and admissions. Admissions counselors are always available to speak with you — simply give us a call. Our online catalog is regularly updated and should be referred to for complete programming.

