

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 refine and direct your science skills for use in a career related to the oceans. Our broad-based approach allows you career flexibility as you work toward a Bachelor of Science degree.

Marine Biology

The Marine Biology major focuses its training and experiences on the biological component of Ocean Studies. This major provides instruction in essential biology courses (biology, ecology, physiology, cell biology and genetics) as well as more specialized topics relevant to marine organisms. Graduates may pursue graduate education as well as careers in fisheries, aquaculture, environmental management, consulting, and public 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. This broad-based marine science curriculum encompasses the study of chemistry, biology, physics, geology, writing and communications, computer science, mathematics, humanities, and social sciences. Graduates of the program may pursue employment in the various fields of ocean sciences (resource management, aquaculture, research, environmental protection, science education, or oceanography) or graduate education.

Dual Degree Options

Ocean Studies offers two majors leading to a dual degree which includes an Associate in Science degree in 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.

Secondary Education Certificate

This program prepares students to teach at the secondary school level. Maine Maritime Academy, in a cooperative effort with the University of Maine, offers a Secondary Education Teaching Certificate to teach biological, environmental, and physical sciences at the high school level.

Which major is for you? All Corning School students build a solid science foundation and receive instruction in math, physics, and humanities.

MMA ALUMNI ADVANTAGE GRADUATE SCHOOL

The Loeb-Sullivan School of International Business and Logistics offers special options for all MMA alumni regardless of their major for obtaining a graduate degree. The LSS On Campus MS degree program in Global Logistics & Maritime Management is offered as an accelerated 10-month full-time program while the LSS Online MS degree program in International Logistics Management (pending NEASC approval) is accessible anytime, anywhere in the world in a part-time format—perfect for the working professional. The Alumni Advantage offers all MMA alumni preferential tuition rates substantially lower than the normal graduate tuition rate; one more exceptional reason to enroll in the IBL program at MMA.

CORNING SCHOOL RESEARCH

Corning School students have many opportunities to help faculty with research, and conduct independent research projects as well. 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*)?

(Research continued)

- The effect of synthetic estrogen on the gonadosomatic index of male and female mummichogs (*Fundulus heteroclitus*)
- Does the bushy-backed sea slug (*Dendro-notus 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

Tropical Field Study

The Corning School's tropical marine science class heads south to well-known marine laboratories in the Caribbean between semesters. Topics and field experiences in the course include fish behavior and biodiversity, coral reef biology, mangrove habitat surveys, jellyfish productivity, turtle grass bed communities, limestone caves, and hypersaline ponds.

Scientific Diving

The AAUS Scientific Diving course at MMA 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 a Scientific Diver Certification from AAUS 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.

LETTERS FROM OUR 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.**



CAREER CHOICES

Professional careers in marine biology and marine science encompass a wide variety of jobs. Depending on your interests, you may find yourself working as a:

- 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
- Oceanographer



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
- Oceanfront location
- Advanced research equipment
- Research vessel *Friendship*
- Individual research opportunities
- Navigation and seamanship training
- SCUBA certification available, including AAUS Scientific Diver certification
- Modern aquaria and wet labs
- 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 www.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.