

OCEAN ENGINEERING (M.S.)

<https://ceps.unh.edu/ocean-engineering/program/ms/ocean-engineering>

Description

Programs in Ocean Engineering are by definition interdisciplinary and require students to interact with the ocean science community as well as the traditional engineering disciplines. In this context, students are exposed to the broad-based issues of working engineering problems in the ocean environment. They are trained to develop responsible solutions to problems that will lead to sustainable activity and life in the ocean.

Requirements

Degree Requirements

The Master of Science in Ocean Engineering requires the completion of at least **30 graduate credits**.

Code	Title	Credits
Core Courses		2
OE 990 & OE 991	Ocean Seminars I and Ocean Seminars II	
Select one of the following:		3-4
BIOL 855	Biological Oceanography	
or ESCI 852	Chemical Oceanography	
or ESCI 858	Introduction to Physical Oceanography	
or ESCI 859	Geological Oceanography	
or ESCI 868 & ESCI 869	Applied Physical Oceanography for Hydrographic Surveyors and Marine Geology and Geophysics for Hydrographic Surveyors	
Select four courses from the following:		13-16
ESCI 820	Ocean Measurements Lab	
OE 817	Marine Robotics and Applications	
OE 853	Ocean Hydrodynamics	
OE 854	Ocean Waves and Tides	
OE 857	Coastal Engineering and Processes	
OE 858	Design of Ocean Structures	
OE 864	Spectral Analysis of Geophysical Time Series Data	
OE 865	Underwater Acoustics	
OE 874	Integrated Seabed Mapping Systems	
Select an additional two 800-900 level CEPS courses		6-8
Complete a master's thesis:		6
OE 899	Master's Thesis	
Total Credits		30-36

Student Learning Outcomes

Students graduating with a MS or MEng in Ocean Engineering should be able to :

- Use their ocean engineering graduate education for success in technical careers in industry, academia, government, or for advanced ocean-related research in engineering and the physical sciences.
- Rigorously apply fundamentals of science and engineering to professional practice that enhances our understanding of and/or contributes to the sustainable development of the oceans.
- Contribute their ocean engineering problem solving skills to society through participation and leadership in groups dedicated to serving both professional associations and the public interest.