

# OCEAN ENGINEERING: OCEAN MAPPING (M.S.)

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

## Description

### Ocean Mapping Option

This option is offered in conjunction with the Joint Hydrographic Center/Center for Coastal and Ocean Mapping. Students follow a more structured path through this program, which incorporates all aspects of hydrography as required by the International Hydrographic Organization (IHO).

## Requirements

Code	Title	Credits
<b>Core Courses</b>		
OE 990 & OE 991	Ocean Seminars I and Ocean Seminars II	2
ESCI 820	Ocean Measurements Lab	4
OE 865	Underwater Acoustics	3
OE 871	Geodesy and Positioning for Ocean Mapping	4
OE 874	Integrated Seabed Mapping Systems	4
OE 875	Advanced Topics in Ocean Mapping	4
OE 972	Hydrographic Field Course	4
<b>Select at least 3 additional credits from the following electives:</b>		<b>3-4</b>
OE 854	Ocean Waves and Tides	
OE 857	Coastal Engineering and Processes	
OE 864	Spectral Analysis of Geophysical Time Series Data	
OE 895	Special Topics	
ECE 814	Introduction to Digital Signal Processing	
ESCI 858	Introduction to Physical Oceanography	
ESCI 896	Topics	
<b>Complete a master's thesis for 6 credits</b>		
OE 899	Master's Thesis	6
<b>Total Credits</b>		<b>34-35</b>

Students may fulfill the Category A (professional) International Federation of Surveyors/International Hydrographic Organization/International Cartographic Association (FIG/IHO) Standards of Competence for Hydrographic Surveyors by completing, in addition to the core courses, some additional specialized requirements. For more information, please visit the [Center for Coastal and Ocean Mapping website](#).

## 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.