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

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

M.S. Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>OE 990</td>
<td>Ocean Seminars I</td>
<td>2</td>
</tr>
<tr>
<td>&amp; OE 991</td>
<td>and Ocean Seminars II</td>
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<tr>
<td>ESCI 850</td>
<td>Biological Oceanography</td>
<td>3-4</td>
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<tr>
<td>ESCI 852</td>
<td>Chemical Oceanography</td>
<td></td>
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<tr>
<td>ESCI 858</td>
<td>Introduction to Physical Oceanography</td>
<td></td>
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<tr>
<td>ESCI 859</td>
<td>Geological Oceanography</td>
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Select four of the following courses: 13-16

- ESCI 820 Ocean Measurements Lab
- OE 817 Marine Robotics and Applications
- 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
- ESCI 868 Applied Physical Oceanography for Hydrographic Surveyors
- ESCI 869 Marine Geology and Geophysics for Hydrographic Surveyors

Select an additional two 800-900 level CEPS courses 6-8

Complete a master’s thesis for 6 credits

OE 899 Master’s Thesis 6

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.