MARINE SCIENCES, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Requirements for the Minor</td>
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</table>

Courses offered by other institutions may be substituted for any of the required courses listed below, if accepted for transfer by the student's major department and approved by the Marine Sciences Committee. This includes up to 16 transfer credits from SOC. Upon completion of the requirements and no later than the tenth week of the semester in which the student is to graduate, he or she must verify in the Marine Sciences program office that the requirements have been met.

Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Prescribed Courses: Require a grade of C or better</td>
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<tr>
<td>GEOSC 40</td>
<td>The Sea Around Us</td>
<td>3</td>
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</tbody>
</table>

Supporting Courses and Related Areas: Require a grade of C or better

Select at least 6 credits of field studies of the following: ¹ ⁶

- BIOL 450W  Experimental Field Biology
- BIOL 483  Coastal Biology Travel Experience
- BIOL 499A  Tropical Field Ecology
- EARTH 240  Coral Reef Systems
- EMSC 440  Science Diving
- EMSC 441  Advanced Science Diving
- ERM 496  Independent Studies
- GEOSC 410  Marine Biogeochemistry
- BIOL 496  Independent Studies
- GEOSC 496  Independent Studies
- METEO 496  Independent Studies ²

Select 10 credits from the following list: ¹⁰

- BIOL 406  Symbiosis
- BIOL 417  Invertebrate Zoology
- BIOL 482  Coastal Biology
- GEOSC 419  The Organic Geochemistry of Natural Waters and Sediments
- GEOSC 440  Marine Geology
- METEO 451  Introduction to Physical Oceanography
- WFS/ERM 435  Limnology
- WFS/ERM 436  Limnological Methods
- WFS/ERM 450  Wetland Science and Sustainability

¹ Students may also wish to transfer 6 credits of field-oriented coursework from another institution with prior approval of the chair of the Marine Sciences minor.
² Students may select METEO 496 with consent of instructor and Marine Sciences minor.