PH.D. IN MARINE BIOLOGY AND ECOLOGY

Curriculum Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The MBE Ph.D. degree requires 60 total credits. 1</td>
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</tr>
<tr>
<td>Electives</td>
<td>2</td>
<td>24</td>
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<tr>
<td>Dissertation Research</td>
<td>MBE 830</td>
<td>Doctoral Dissertation</td>
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</tbody>
</table>

**Additional Requirements**

- RSM 700  Research Ethics
- Qualifying Examination 3
- MBE Seminar 4
- Educational Training Program (TA) 5
- RSM 771  Educational Training 1
- RSM 772  Educational Training 2
- RSM 773  Educational Training 3

**Total Credit Hours** 60

1 Minimum of 24 course credits and 12 dissertation credits.
2 No core courses are required. Students choose courses with the advice of their committee.
3 At the end of the second year, a written qualifying examination is required of all Ph.D. students that focuses on the subject matter needed to complete the research proposed for the dissertation.
4 The purpose of the qualifying examination is to demonstrate that the MBE doctoral student has the necessary understanding and expertise in research and related fields to complete the dissertation research. The topic areas should be agreed upon by the student, chair, and the dissertation committee soon after the proposal defense. The student is strongly encouraged to discuss the specific topics with each member of the dissertation committee, well in advance of the examination, to clarify the expected questions. The committee is encouraged to provide specific reading or areas of knowledge they will test the student on.
5 The qualifying exam is 4 - 5 partial days (4 hours per day) on questions written by their committee. It is the advisor’s responsibility to provide the test and to have the student’s committee grade it in a timely manner. The scheduling of the exam sessions is the responsibility of the student’s advisor, but in all cases the written portion of the examination shall be completed within one week.
6 An additional oral qualifying examination may be required by the student’s committee, but may not serve as a substitute for the written examination, which is a Graduate School requirement.
7 The decision of passing or failing the qualifying examination rests with the dissertation committee. The qualifying examination (written and, if required, oral) must be successfully completed, as documented by the dissertation committee, before the student can be admitted to candidacy.
8 In the event of a failure, a student may be re-examined once upon the recommendation of the student’s committee in consultation with the academic committee. If permitted, the reexamination must be given before the end of the following semester.

**Mission**

The mission of the Marine Biology and Ecology (MBE) PhD program is to train the next generation of scientists in the fundamental skills, knowledge, and practice of biology of the oceanic environment. Through coursework and independent research, we strive to prepare our students for positions in academia, government, or industry in jobs that leverage their skills in critical thinking, current technical knowledge such as statistical analysis and modeling, and understanding of the global marine environment. Our program commits to inspire graduates to continued scholarship, service, and innovation in an environment that is inclusive and diverse.

**Goals**

The goal is for PhD students to demonstrate mastery of the fundamental skills, knowledge, and practice of biology of the oceanic environment, and commitment to scholarship, service, and innovation in an environment that is inclusive and diverse.
Student Learning Outcomes

- Students will demonstrate a broad understanding of marine and atmospheric science and an awareness of how scientific research in their topical areas bears on current human and societal issues.
- Students will be able to critically evaluate scientific literature, review previous knowledge on a topic, formulate testable hypotheses, and skillfully use available data and tools to advance knowledge in a topical area. They will be able to conduct high-quality, doctoral research as evidenced by their dissertation research.
- Students will demonstrate advanced oral and written communication skills, and be able to effectively communicate scientific information to a peer audience.