Marine Science
Cumulative GPA Requirement to continue to CAS: 2.00 or higher

Sample Pathway

<table>
<thead>
<tr>
<th>Gap Semester</th>
<th>Semester I</th>
<th>Semester II</th>
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</thead>
<tbody>
<tr>
<td>Freshman Year</td>
<td>CGS Core</td>
<td>CAS MA124 (Calculus II) or MA122 (Calculus for the Life and Social Sciences II) CGS CH101 (General Chemistry I)</td>
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<tr>
<td>Sophomore Year</td>
<td>CGS Core*</td>
<td>CAS ES144 (MP or MR Section) CGS CH102 (General Chemistry II)</td>
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<tr>
<td>Junior Year</td>
<td>CAS ES331 (Marine Breadth)</td>
<td>CAS BI260 (or other Marine Breadth Course) CAS PY211 (General Physics) or PY105 (Elementary Physics I) CAS Foreign Language (if needed) Elective</td>
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<tr>
<td>Senior Year</td>
<td>Marine Semester (4 Marine courses)</td>
<td>CAS Marine Breadth Course CAS Foreign Language (if needed) Elective</td>
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*CGS NS201 fulfills the CAS BI107 requirement (minimum grade of 'C')

**Prospective majors in good standing should consult with their CGS advisors about taking BI108 in place of NS202. It is strongly recommended students complete CAS CH101 before this course.

Major Requirements
The major in Marine Science is 16 courses. The major provides a strong foundation in science and math via eight required related courses in Chemistry (2), Biology (2), Physics (1), Calculus (2) and Statistics (1). All students take Introductory Oceanography (CAS ES 144), three “marine breadth” courses, and the Marine Semester. A grade of ‘C’ or higher is required in all of the aforementioned courses to receive credit in the major.

For more information, please see: www.bu.edu/academics/cas/programs/marine-science/ba/.

CAS CH109 and CH110, or CH111 and CH112, or CH171 and either CH172 or CH174 may be taken in place of CH101 and CH102. The CH101/102 sequence is recommended for Marine Science majors.

The Marine Science major requires participation in at least one Marine Semester. For more information, please see: www.bu.edu/bump/marine-semester/.

Marine Breadth Requirement: Three courses are to be chosen from the following four options:
- One course in marine biology: BI260, including discussion section
  Note: CAS BI260 (or other Marine Breadth Course) could be taken during Semester II of sophomore year to participate in the Marine Semester in Semester I of junior year. At least one Marine Breadth course must be completed prior to the Marine Semester. Please consult with Julia Hammer Mendez (hammer@bu.edu) in the Marine Science department for course planning and advice.
- One course in marine chemistry: ES/BI423
- One course in marine geology: ES331 or ES440
- One course in physical oceanography: GE/ES 507

Please see reverse side.
### Pre-Medical Students
Pre-Medical students are strongly advised to take BI108. Pre-Medical students are required to take CH101, 102, 203, and 204. One year of Physics (with laboratory) is required. Courses in biochemistry, psychology, and sociology are required for the new MCAT exam. Students planning to attend medical school should consult with advisors in the Marine Science department and in the Pre-Medical Advising Office (100 Bay State Road, Room 428) for information on the selection and sequencing of courses.

### CAS Graduation Requirements

**Foreign Language Requirement:** Students must fulfill the foreign language requirement, which may be satisfied by:
- Satisfactory completion of a foreign language course at the 212-level, or
- A score on an advanced placement foreign language test that awards credit for the fourth semester level or higher, or
- A score of 560 or higher on the SAT: Foreign Language Subject Test.

**Mathematics Proficiency Requirement:** Students must demonstrate basic mathematics skills, which may be satisfied by:
- A score on the SAT-I: Math of 580 or above, or
- An advanced placement score in mathematics or statistics of 4 or higher, or
- A score of 23 or above on the ACT (math), or
- Satisfactory completion of a CAS mathematics course numbered 109 or higher.

**Mathematics/Computer Science Divisional Requirement:** Students must take two math/computer science courses from the approved list of CAS divisional courses. CAS MA courses (with the exception of MA118) that are required by majors may also be counted toward the CAS MA/CS Divisional Requirement.

*Note: Students who successfully complete the requirements of the Marine Science major will automatically satisfy the CAS Mathematics Proficiency and Mathematics/Computer Science Divisional Requirements.*