### MARINE BIOLOGY AND COASTAL SCIENCES MAJOR (B.S.)

A minimum of 120 credits of coursework is required for the baccalaureate degree with a minimum 2.0 overall GPA, and a minimum 2.0 major GPA. However, more than 120 credits may be required depending upon the major field of study.

#### Program Requirements

Students must complete 42 credits of General Education requirements (http://catalog.montclair.edu/undergraduate-graduate-degree-requirements/general-ed-ba-bs) and 3-9 credits of World Languages and Cultures Requirements (http://catalog.montclair.edu/undergraduate-graduate-degree-requirements/world-languages-cultures-requirement).

#### Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA 351</td>
<td>Aquatic Biological Processes</td>
<td>4</td>
</tr>
<tr>
<td>BIMS 220</td>
<td>Introduction to Marine Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 113</td>
<td>Principles of Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 213</td>
<td>Introduction to Ecology</td>
<td>4</td>
</tr>
<tr>
<td>EAES 105</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>EAES 230</td>
<td>Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>EAES 322</td>
<td>Environmental Geochemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 4

- AQUA 495: Research in Aquatic and Coastal Sciences
- BIMS 490: Field Methods in the Marine Sciences
- BIOL 418: Biology Independent Research
- EAES 494: Independent Study in Geoscience

#### Major Electives

Select three courses from the list (see below) 8-12

#### Collateral Requirements

**Chemistry Collateral**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 120</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 121</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 230</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 232</td>
<td>Experimental Organic Chemistry I</td>
<td>2</td>
</tr>
</tbody>
</table>

**Physics Collateral**

Select one of the following sequences: 8

- PHYS 191 & PHYS 192: University Physics I and University Physics II
- PHYS 193 & PHYS 194: College Physics I and College Physics II

**Mathematics Collateral**

Select one of the following sequences: 8

- MATH 111 & MATH 116: Applied Precalculus and Calculus A
- MATH 122 & MATH 221: Calculus I and Calculus II

**Statistics Collateral**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 401</td>
<td>Applied Statistics for the Sciences</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Total Credits

70-74