MARINE SCIENCE/CHEMISTRY MAJOR, BS

Students pursuing a marine science degree typically demonstrate a strong interest in some aspect of the marine environment and in the sciences in general. High school preparation should include a solid background in mathematics and introductory biology and/or chemistry.

Department of Biological Sciences
1324 Science and Engineering Complex
bsc.ua.edu
marinescience@as.ua.edu
Department of Chemistry
206 Shelby Hall
bama.ua.edu/~chem
chemistry@as.ua.edu

Admission into the Major

Students are expected to formally declare both majors no later than the fourth semester of full-time enrollment (or at 61 semester hours for transfer students). Students can declare a major by completing the Change of Major/Minor Application online under the Student tab of myBama.

Special Opportunities

During the summer semester, a large suite of marine science courses is offered at the Dauphin Island campus of the Alabama Marine Environmental Sciences Consortium.

Students earning the bachelor of science (BS) degree in marine science/chemistry must complete all University, College and departmental degree requirements. These include the general education requirements, the following double major requirements and other sufficient credits to total a minimum of 120 applicable semester hours.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BSC 114</td>
<td>Principles of Biology I</td>
</tr>
<tr>
<td></td>
<td>&amp; BSC 115</td>
<td>Laboratory Biology I</td>
</tr>
<tr>
<td>4</td>
<td>BSC 118</td>
<td>Honors General Biology I</td>
</tr>
</tbody>
</table>

Select one of the following:

- BSC 116 Principles Biology II
- & BSC 117 Biology II Laboratory
- BSC 120 Honors Gen Biology II

- CH 101 or General Chemistry
- CH 110 Honors General Chemistry
- CH 102 or General Chemistry
- CH 118 Honors General Chemistry
- CH 223 Quantitative Analysis
- CH 231 Elem Organic Chemistry I
- CH 232 Elem Organic Chem II
- & CH 237 and Elem Organic Chem Lab
- CH 338 Elem Organic Chem Lab II
- CH 340 Elem Physical Chem
- & CH 343 and Elem Phy Chem Lab
- CH 461 Biochemistry I
- CH 462 Biochemistry II
- CH 463 Biochem-Clin/Foren/Chem
- GEO 101 The Dynamic Earth
- GEO 102 or The Earth Through Time

<table>
<thead>
<tr>
<th>Hours</th>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>GEO 105</td>
<td>Sustainable Earth</td>
</tr>
</tbody>
</table>

Select one of the following:

- PH 101 General Physics I
- PH 105 General Physics W/Calc I
- PH 125 Honors Gen Ph W/Calculus

Select one of the following:

- PH 102 General Physics II
- PH 106 General Physics W/Calc II
- PH 126 Honors Gen Ph W/Calc II
- MS 304 Marine Geology
- MS 306 Marine Biology
- MS 448 Intro Oceanography
- MS elective 300 or 400 level (Consult the Marine Science Coordinator for appropriate MS electives)

Credit Hours Subtotal: 75

Ancillary Courses

Grades in ancillary courses are not computed in the major GPA. The majors in marine science/chemistry require the successful completion of the following courses outside the major:

<table>
<thead>
<tr>
<th>Hours</th>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>MATH 125 or Calculus I</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>MATH 145 Honors Calculus I</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ST 260 Statistical Data Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 82

Grade Point Average

A 2.0 grade point average in each major is required for completion of the degree. Please see the Grades and Grade Points section of this catalog for an explanation on grade point average calculations.

Upper-level Residency

A minimum of 12 hours of 300- and 400-level courses in each major must be earned on this campus.

Required Minor

Marine science/chemistry does not require a minor.

Additional Major Requirements

Students are not permitted to count the same required major courses toward completion of a second major or minor. Students may count required ancillary courses for one major toward the requirements of another major. Students are responsible for ensuring that they have met all University, College, major and minor requirements. However, each student must meet with an adviser in the major department for academic planning and to be approved for registration each semester. College advisers are also available for additional assistance with minor, College and University requirements.

A dual major in Marine Science and biology/chemistry/ geology prepares students for a wide variety of employment opportunities in environmentally related fields, industries concerning utilization of marine resources, biotechnology, policy and education.

Types of Jobs Accepted

Recent graduates have worked in entry-level positions in government agencies, ecotourism (e.g., SCUBA divemasters, whale or dolphin
watching boats), and K-12 education. A large number of graduates enter professional school (e.g., medicine, dentistry, veterinary medicine, pharmacy) or graduate school (Master's degree, Doctor of Philosophy [Ph.D.]).

Jobs of Experienced Alumni
Marine biologist, marine geologist, conservation specialist, laboratory technician, teacher, professor, aquaculture industry specialist, oceanographer, environmental consultant, marine animal veterinarian.

Learn more about opportunities in this field at the Career Center