# MARINE SCIENCE/GEOLOGY 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.

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#### **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/ geology 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 128 applicable semester hours.

| Code and Title               | 9   | Hours |
|------------------------------|---|-------|
| Select one of the following: |   | 4     |
| BSC 114<br>& BSC 115         | Principles Of Biology I<br>and Laboratory Biology I |       |
| BSC 118                      | Honors General Biology I                            |       |
| Select one of the following: |   | 4     |
| BSC 116<br>& BSC 117         | Principles Biology II<br>and Biology II Laboratory  |       |
| BSC 120                      | Honors Gen Biology II                               |       |
| CH 101 or                    | General Chemistry                                   | 4     |
| CH 117                       | Honors General Chemistry                            |       |
| CH 102 or                    | General Chemistry                                   | 4     |
| CH 118                       | Honors General Chemistry                            |       |
| GEO 101                      | The Dynamic Earth                                   | 4     |
| GEO 102                      | The Earth Through Time                              | 4     |
| GEO 210                      | Mineralogy  | 4     |
| GEO 314                      | Ign. & Meta. Petrology                              | 4     |
| GEO 365                      | Structural Geology                                  | 3     |
| GEO 367                      | Sedimentology/Stratigraphy                          | 4     |
| GEO 495                      | Field Geology                                       | 6     |
| Select two of the following: |   | 6     |
| GEO 355                      | Invertebrate Paleontology                           |       |
| GEO 369                      | Introduction Geophysics                             |       |
| GEO 470                      | Introduction to Geochemistry                        |       |

| GEO electiv  | es                          | 6  |  |
|--|-----------------------------|----|--|
| MS 304   | Marine Geology              | 4  |  |
| MS 306   | Marine Biology              | 4  |  |
| MS 448   | Intro Oceanography          | 4  |  |
| MS elective 300 or 400 level (Consult the Marine Science coordinator for appropriate MS electives) |                             |    |  |
| Select one   | of the following:           | 4  |  |
| 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/Calculus II |    |  |
|  | Credit Hours Subtotal:      | 81 |  |
|  |                             |    |  |

#### **Ancillary Courses**

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

| MATH 125 or | Calculus I                | 4  |
|-------------|---------------------------|----|
| MATH 145    | Honors Calculus I         |    |
| MATH 126 or | Calculus II               | 4  |
| MATH 146    | Honors Calculus II        |    |
| ST 260      | Statistical Data Analysis | 3  |
| Total Hours |                           | 92 |

# **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, or 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