

# COASTAL ENVIRONMENTAL SCIENCE AND SOCIETY - BS

## Program Requirements

### First Year

| Fall                         |  | Semester Credit Hours |
|------------------------------|--|-----------------------|
| CHEM 119                     | Fundamentals of Chemistry I  | 4                     |
| ENGL 104                     | Composition and Rhetoric   | 3                     |
| MATH 147<br>or MATH 151      | Calculus I for Biological Sciences<br>or Engineering Mathematics I | 4                     |
| MARS 102                     | Earth and Ocean Science <sup>1</sup>                               | 4                     |
| <b>Semester Credit Hours</b> |  | <b>15</b>             |

### Spring

|                              |  |           |
|------------------------------|--|-----------|
| BIOL 111                     | Introductory Biology I                     | 4         |
| CHEM 120                     | Fundamentals of Chemistry II               | 4         |
| MARB 101                     | Succeeding in Science <sup>1</sup>         | 3         |
| Select one of the following: |  | 4         |
| MATH 148                     | Calculus II for Biological Sciences        |           |
| MATH 150                     | Functions, Trigonometry and Linear Systems |           |
| MATH 152                     | Engineering Mathematics II                 |           |
| <b>Semester Credit Hours</b> |  | <b>15</b> |

### Second Year

| Fall                                 |   | Semester Credit Hours |
|--------------------------------------|---|-----------------------|
| BIOL 112<br>or GEOL 106              | Introductory Biology II<br>or Historical Geology  | 4                     |
| ECON 202                             | Principles of Economics                           | 3                     |
| MARS 210                             | Marine Geography <sup>1</sup>                     | 3                     |
| MARS 280                             | Coastal and Ocean Resources <sup>1,2</sup>        | 3                     |
| MARS 281                             | Sophomore Seminar in Marine Sciences <sup>1</sup> | 1                     |
| Professional elective <sup>1,3</sup> |   | 3                     |
| <b>Semester Credit Hours</b>         |   | <b>17</b>             |

### Spring

|   |  |           |
|---|--|-----------|
| ECON 203  | Principles of Economics  | 3         |
| MARS 303  | Computing and Data Display <sup>1</sup>  | 3         |
| Select one of the following:  |  | 4         |
| PHYS 201  | College Physics  |           |
| PHYS 206<br>& PHYS 226  | Newtonian Mechanics for Engineering and Science<br>and Physics of Motion Laboratory for the Sciences |           |
| Communication ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication</a> ) |  | 3         |
| Professional elective <sup>1,3</sup>  |  | 3         |
| <b>Semester Credit Hours</b>  |  | <b>16</b> |

### Third Year

| Fall     |  | Semester Credit Hours |
|----------|--|-----------------------|
| MARS 325 | Introduction to GIS for Marine Sciences <sup>1</sup> | 3                     |
| MARS 420 | Biological Oceanography <sup>1</sup>                 | 3                     |

|                                      |   |   |
|--------------------------------------|---|---|
| POLS 207                             | State and Local Government              | 3 |
| STAT 303<br>or MARB 303              | Statistical Methods<br>or Biostatistics | 3 |
| Professional elective <sup>1,3</sup> |   | 3 |

**Semester Credit Hours 15**

### Spring

|  |                               |   |
|--|-------------------------------|---|
| MARS 430   | Marine Geology <sup>1,2</sup> | 4 |
| POLS 206   | American National Government  | 3 |
| American History ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> ) |                               | 3 |
| Creative Arts ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts</a> )          |                               | 3 |
| Professional elective <sup>1,3</sup>   |                               | 3 |

**Semester Credit Hours 16**

### Fourth Year

| Fall                                 |  | Semester Credit Hours |
|--------------------------------------|--|-----------------------|
| MARA 363                             | The Management Process                   | 3                     |
| MARS 491                             | Research in Marine Sciences <sup>1</sup> | 1                     |
| Professional elective <sup>1,3</sup> |  | 3                     |
| Professional elective <sup>1,3</sup> |  | 3                     |
| General elective <sup>4</sup>        |  | 3                     |

**Semester Credit Hours 13**

### Spring

|  |                      |   |
|--|----------------------|---|
| MARS 481   | Seminar <sup>1</sup> | 1 |
| American History ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> )                                       |                      | 3 |
| Language, Philosophy and Culture ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture</a> ) |                      | 3 |
| Professional elective <sup>1,3</sup>   |                      | 3 |
| General elective <sup>4</sup>  |                      | 3 |

**Semester Credit Hours 13**

**Total Semester Credit Hours 120**

<sup>1</sup> Indicates required courses in the major. These courses will be used to compute the major GPR.

<sup>2</sup> Designated writing intensive course.

<sup>3</sup> Recommended professional electives include, but are not limited to: ATMO 363; CHEM 227, CHEM 237, CHEM 228, CHEM 238, CHEM 316, CHEM 318; FSCI 360, GEOG 331; MARA 470, MARB 300-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/marb/>); MARS 303, MARS 305, MARS 306, MARS 310, MARS 330, MARS 340, MARS 370/GEOG 370, MARS 408, MARS 410, MARS 412, MARS 415, MARS 425, MARS 426, MARS 432, MARS 435, MARS 440, MARS 470, MARS 484, MARS 489, MARS 491; MATH 251, MATH 308; POLS 347; OCEN 201, OCEN 265, OCEN 300, OCEN 311; STAT 303.

<sup>4</sup> Select any 100-499 course not used elsewhere.

The total hours may be increased if the student is required to take remedial math, remedial English, foreign language, or the 3-hour University Core Curriculum requirement for International and Cultural Diversity and the 3-hour requirement for Cultural Discourse.

All electives must be chosen in consultation with, and approved by, the student's academic advisor. Unless courses are specifically listed, see University Core Curriculum for a listing of course options for Communication, Mathematics, Life and Physical Sciences, Language Philosophy and Culture, Creative Arts, American History, Government and Political Sciences and Social and Behavioral Sciences. The Graduation requirements include a requirement for 3 hours of I (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) International and Cultural Diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) courses and 3 hours of C (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>) Cultural Discourse (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>) courses. A course satisfying a Core category, a college/department requirement, or a free or directed elective can be used to satisfy this requirement. See academic advisor.