COASTAL ENVIRONMENTAL SCIENCE AND SOCIETY - 5-YEAR BACHELOR OF SCIENCE AND MASTER OF MARINE RESOURCES MANAGEMENT

The Coastal Environmental Science and Society (CESS) and Master of Marine Resources Management (MMRM) Program allows CESS majors to enter the MMRM graduate program at the beginning of their senior year, enabling students to receive their CESS undergraduate degree (BS) and a MMRM graduate degree in five years. CESS majors who have at least a 3.25 GPA and have fulfilled all of their prerequisite course requirements and otherwise completed 101 or 102 hours by the fall of their fourth year are eligible to apply for the 5-year combined program during their junior year. Applicants to the 5-year combined program submit the same materials (including GRE scores) and are subject to the same admission process and criteria as other MMRM program applicants. Those students whose credentials are judged to be competitive by the mid-January deadline will be admitted.

Admitted students enroll in MMRM graduate courses with an undergraduate classification (U4) during the fall of their fourth year. They are then reclassified as degree-seeking master's students (G7) upon completing 120 credit hours, which typically occurs at the beginning of the fall semester of the fifth year. Students are required to complete the same 2-year, 36-hour curriculum as other graduate students admitted to the MMRM Professional Track (see MMRM curriculum). Students who are interested in the MMRM Research (Thesis) Track are afforded additional flexibility to replace required courses with up to nine hours of research courses (MARS 691) and electives chosen with the approval of their student advisory committee. To comply with the course and work requirements of the Research Track, this program may extend beyond the 5-year window. For specific requirements to comply with the Research Track curriculum, students are asked to consult the MMRM section of the catalog.

Students who choose not to finish the MMRM degree after being admitted to the 5-year combined program may exit the program at any time. Completed MMRM courses will be applied to their bachelor's degree in CESS, as appropriate. Failure to complete the MMRM program will in no way impede their ability to attain a bachelor's degree in CESS when the requirements for that degree are completed. Those who pursue the 5-year combined program obtain both degrees upon the completion of the 5-year combined program, receiving both their Bachelor of Science in CESS and the MMRM degrees at the end of year five. Advising for the 5-year combined program is coordinated by the Department of Marine and Coastal Environmental Science undergraduate and graduate advisors and by the Office of Graduate Studies. Advising will help ensure that interested students have satisfied the prerequisite course requirements for the bachelor's degree so that they may enter the 5-year combined program. CESS students should consult an undergraduate advisor and a graduate advisor for more information.

### Program Requirements

#### First Year

<table>
<thead>
<tr>
<th>Semester Credit Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 119</td>
<td>Fundamentals of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 104</td>
<td>Composition and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>MARS 102</td>
<td>Earth and Ocean Science</td>
<td>4</td>
</tr>
<tr>
<td>MATH 147</td>
<td>Calculus I for Biological Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 151</td>
<td>Calculus I for Biological Sciences</td>
<td>4</td>
</tr>
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</table>

#### Second Year

<table>
<thead>
<tr>
<th>Semester Credit Hours</th>
<th>Fall</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>BIOL 112 or GEOL 106</td>
<td>Introductory Biology II</td>
<td>4</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>MARS 210</td>
<td>Marine Geography</td>
<td>3</td>
</tr>
<tr>
<td>MARS 280</td>
<td>Coastal and Ocean Resources</td>
<td>3</td>
</tr>
<tr>
<td>POLS 207</td>
<td>State and Local Government</td>
<td>3</td>
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#### Third Year

<table>
<thead>
<tr>
<th>Semester Credit Hours</th>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>MARA 363</td>
<td>The Management Process</td>
<td>3</td>
</tr>
<tr>
<td>MARS 420</td>
<td>Biological Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>MARS 481</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>STAT 303</td>
<td>Statistical Methods</td>
<td>3</td>
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</table>
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)  
Professional elective, Professional elective  
**Semester Credit Hours**  
**16**

**Spring**  
MARS 430 Marine Geology  
MARS 491 Research in Marine Sciences  
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)  
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture)  
Professional elective, Professional elective  
**Semester Credit Hours**  
**17**

**Fourth Year**  
**Fall**  
MARS 325 Introduction to GIS for Marine Sciences  
MARS 625 GIS Use in Coastal Resources  
Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts)  
Professional elective, Professional elective  
**Semester Credit Hours**  
**15**

**Spring**  
MARA 604 Marine Natural Resource Economics  
MARS 603 Quantitative Methods for Resource Management  
MARS 675 Environmental Management Strategies  
MARS 681 Seminar  
Professional elective, Professional elective  
**Semester Credit Hours**  
**16**

**Fifth Year**  
**Fall**  
MARS 635 Environmental Impact Statements and Natural Resource Damage Assessment  
MARS 660 Environmental Conflict Resolution  
PLAN 641 Problems of Environmental Planning Administration  
MARM elective  
**Semester Credit Hours**  
**12**

**Spring**  
MARS 680 Integrative Analysis in Marine Resources  
MARM electives  
**Semester Credit Hours**  
**11**

**Total Semester Credit Hours**  
**150**

1 Indicates required courses in the major. These courses will be used to compute the major GPA.  
2 Designated writing intensive course.