



This course plan is a recommended sequence for this major. Courses designated as critical (!) may have a deadline for completion and/or affect time to graduation. Please see the Program Notes section for details regarding "critical courses" for this particular Program of Study.

| Critical | Course Subject and Title | Credit Hours | Min. Grade ¹ | Major GPA ² | Code | Prerequisites | Notes |
|---|--|--------------|-------------------------|------------------------|------------|--|-------|
| Semester One (15 Credit Hours) | | | | | | | |
| ! | MSCI 101 The Ocean Environment | 4 | C | | CC-SCI | | |
| ! | MATH 141 Calculus 1 ³ | 4 | C | | CC-ARP | C or better in Math 115 or placement through the MAP | |
| ! | CHEM 111 & 111L – General Chemistry I | 4 | C | | PR | C or better in Math 115 or placement through the MAP | |
| | UNIV 101 The Student in the University or Carolina Core Requirement ⁴ | 3 | | | PR/CC | | |
| Semester Two (18-19 Credit Hours) | | | | | | | |
| ! | ENGL 101 Critical Reading and Composition | 3 | C | | CC-CMW | | |
| ! | MSCI 102 The Living Ocean | 4 | C | | CC-SCI | | |
| ! | MATH 142 Calculus II | 4 | | | CC-ARP | C or better in MATH 141 | |
| ! | CHEM 112 & 112L – General Chemistry II | 4 | C | | PR | C or better in CHEM 111 or 141 and MATH 111, 115 or higher math; Prereq or Coreq: MATH 122, 141 or higher math | |
| | Foreign language ⁵ or other Carolina Core Req. ⁴ | 3-4 | | | CC-GFL | | |
| Take during Semester Three or Four (0-2 hours) | | | | | | | |
| | Preapproved Field Experience or MSCI 460 ⁶ | 0-2 | | | MR | C or better in MSCI 101 and 102 or C or better in BIOL 101 and 102 | |
| Semester Three (17 Credit Hours) | | | | | | | |
| ! | ENGL 102 Rhetoric and Composition | 3 | C | | CC-CMW/INF | C or better in ENGL 101 | |
| | MSCI 311 Biology of Marine Organisms (fall only) | 4 | C | | MR/CC-INT | MSCI 102 or BIOL 101 | |
| ! | PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I | 4 | C | | PR | C or better in MATH 111/111i/112/115/116/122/141 or higher (PHYS 201); MATH 141 (PHYS 211) | |
| | Foreign language ⁵ or other Carolina Core Req. ⁴ | 3 | | | CC-GFL | | |
| | History ⁷ | 3 | | | CR | | |
| Semester Four (18 Credit Hours) | | | | | | | |
| | MSCI 313 The Chemistry of the Sea (spring only) | 4 | C | | MR/CC-INT | C or better in MSCI 101, CHEM 111, CHEM 112, & MATH 141 | |
| | BIOL 301 Ecology & Evolution & BIOL 301L | 3 | C | | MR/CC-INT | BIOL 101 and 102 or MSCI 311 | |
| | MSCI 314 Physical Oceanography (fall only) | 4 | C | | MR/CC-INT | MSCI 101, MATH 141, & PHYS 201 or 211 | |
| ! | PHYS 202 & 202L – General Physics II or PHYS 212 & 212L – Essentials of Physics II | 4 | C | | PR | PHYS 201 (PHYS 202); PHYS 211 and MATH 142 (PHYS 212) | |
| | Foreign language ⁵ or Carolina Core Requirement ⁴ | 3 | | | CR/CC | | |
| Semester Five (16-18 Credit Hours) | | | | | | | |
| | MSCI 314 Physical Oceanography (fall only) | 4 | C | | MR/CC-INT | MSCI 101, MATH 141, & PHYS 201 or 211 | |
| | STAT 515 Statistical Methods I | 3 | C | | CR | or higher in MATH 112, MATH 115, MATH 122 or MATH 141; or both C or better in STAT 110 or higher and C or better in MATH 111; or placement through the MAP | |
| | CSCE 102 General Applications Programming or higher-level CSCE course or MSCI 305 Ocean Data Analysis or MSCI 509 MATLAB-Based Data Analysis in Ocean Sciences | 3 | C | | CR | See Bulletin listing | |
| | Carolina Core Requirement ⁴ | 3 | | | CC | | |
| | Carolina Core Requirement ⁴ | 3 | | | CC | | |
| | Elective ⁸ (only if needed to meet hours to graduate) | 0-2 | | | PR | | |
| Semester Six (15 Credit Hours) | | | | | | | |
| | MSCI Bio-Oceanography Elective ⁹ | 3 | C | | MR | See Bulletin listing | |
| | BIOL 302 Cell & Molecular Biology or BIOL 303 Fundamental Genetics | 3 | C | | MR/CC-INT | C or better in BIOL 101 and BIOL 102 or MSCI 311 and CHEM 112 or CHEM 142 (BIOL 302) | |
| | Social Science | 3 | | | CR | | |
| | Humanities or Fine Arts | 3 | | | CR | | |
| | Carolina Core Requirement ⁴ or Elective ⁸ | 3 | | | CC/PR | | |

| Semester Seven (16 Credit Hours) | | | | | | | |
|-------------------------------------|--|-----|---|--|-------|----------------------|--|
| | MSCI Bio-Oceanography Elective ⁹ | 3 | C | | MR | See Bulletin listing | |
| | MSCI 505 Senior Seminar | 1 | C | | MR | | |
| | Carolina Core Requirement ⁴ or Elective ⁸ | 3 | | | CC/PR | | |
| | Elective ⁸ | 9 | | | PR | | |
| Semester Eight (15-16 Credit Hours) | | | | | | | |
| | MSCI Elective (300-level and above) ¹⁰ | 3-4 | C | | MR | See Bulletin listing | |
| | MSCI Elective (300-level and above) ¹⁰ –only if needed to meet MSCI major requirements ⁶ | 3 | C | | MR | See Bulletin listing | |
| | Elective ⁸ | 9 | | | PR | | |

Graduation Requirements Summary

| Minimum Total Hours | Minimum Major Requirements Hours | College & Program Requirements Hours | Carolina Core Hours | Minimum Institutional GPA |
|---------------------|----------------------------------|--------------------------------------|---------------------|---------------------------|
| 128 | 36 | 46-58 | 34-46 | 2.000 |

- Regardless of individual course grades, students must maintain a minimum 2.000 cumulative GPA.
- Some colleges require a minimum GPA for major courses. Courses indicated in this column are included in the major GPA for this program of study.
- Students who place into MATH 115 will be required to successfully complete it with a grade of C or better before taking MATH 141. MATH 115 can be used as an approved elective. Students who start with MATH 115 should use the following sequence for the first three semesters:

| Semester One | Semester Two | Semester Three |
|---|--|--|
| ENGL 101 | ENGL 102 | MSCI 311 |
| MSCI 101 | MSCI 102 | MATH 142 |
| MATH 115 | MATH 141 | CHEM 112 & 112L |
| UNIV 101 or other Carolina Core Requirement | CHEM 111 & 111L | PHYS 201 & 201L or PHYS 211 & 211L |
| | Foreign Language or other Carolina Core Req. | Foreign language or other Carolina Core Req. |

- The [Carolina Core](#) provides the common core of knowledge, skill and academic experience for all Carolina undergraduate students.
- Students in the College of Arts and Sciences are required to demonstrate proficiency in one foreign language equivalent to the 122 course through course credit or the corresponding foreign language placement score.
- All MSCI majors are required to complete a minimum of 60 hours of marine science field effort. Possibilities include taking the MSCI 460 class, semester or summer internship, REU, semester at sea, or faculty-sponsored field research or cruise or field data collection/analysis. Students who opt for an experience other than the MSCI 460 class must submit a petition for an alternative field experience to the Undergraduate Director. If the alternative is approved, the student must submit a short (2-3 page minimum) report at the completion of the experience to the Undergraduate Director for approval. Upon approval, the Undergraduate Director will notify the Dean's office of the substitution, and the student's record will be updated to reflect zero credit hours in MSCI 460 for meeting the field effort requirement. If the student takes the MSCI 460 class (2-credit hours), those credits will be counted towards their 23 major elective credit hours.
- The College of Arts and Sciences requires one U.S. History and one non-U.S. History course, both of which must be chosen from the approved Carolina Core GHS courses. Whichever is not fulfilled through the Carolina Core GHS requirement must be fulfilled through this college requirement.
- No courses of a remedial, developmental, skill-acquiring, or vocational nature may apply as credit toward degrees in the College of Arts and Sciences. The College of Arts and Sciences allows the use of the Pass-Fail option on elective courses. Further clarification on inapplicable courses can be obtained from the College of Arts and Sciences in Flinn Hall.
- Select two courses from the following list of marine biology, ecology or biology courses, or similar courses as approved by advisor: **MSCI/BIOL** 450, 503 (BIOL 502), 510, 525, 535, 536, 537, 538, 552, 574, 575, 576, 577, 627; **MSCI** 496, 497, 498, 499, 599 (if biology oriented); **MSCI** 566, 578; **BIOL** 302 (302L is optional, but may be taken with BIOL 302) or 303; **BIOL** 460, 505, 534, 541, 543, 550, 570, 640, 643, 652, 670, 690.
- In addition to the required 13 hours of major coursework, Marine Science majors must select 23 hours of Marine Science electives (which include the required Biological Oceanography Concentration courses) in consultation with a faculty advisor for a total of 36 major hours. The elective courses listed in the Undergraduate Studies Bulletin for Marine Science are commonly selected, but any course which is eligible for cognate credit in the College of Arts and Sciences can potentially be a major course in Marine Science. The determination of major courses in this interdisciplinary program is the result of consultation between the student and an advisor.

Program Notes:

- ENGL 101 and ENGL 102 must be completed in the student's first 60 semester hours of work in order for these courses to be credited toward graduation. MSCI 101 and MSCI 102 must be completed in the first year in order to stay on track with subsequent Marine Science courses and ensure a timely graduation. Other courses identified as "critical" must be completed before the beginning of the student's 5th major semester.
- Marine Science majors may enroll in the following courses a maximum of two times to earn the required grade of C or higher: MATH through MATH 142, CHEM 111/111L, CHEM 112/112L, PHYS 201/201L or PHYS 211/211L, PHYS 202/202L or PHYS 212/212L. For the purposes of this standard of progression, withdrawal with a W does not constitute enrollment. These courses, in addition to MSCI 101 and MSCI 102, must be completed before the beginning of the student's third academic year (fifth major semester) as a marine science major.
- A maximum of 10 semester hours of a combination of independent study, seminar, and undergraduate research courses may count in the 36 hours of major credit required for the Marine Science major.
- All undergraduate students must take a 3-credit course or its equivalent with a passing grade that covers the founding documents. This course may fulfill any requirement in the program of study. Courses that meet this requirement are listed in the academic bulletin.
- The last 30 credit hours toward your degree must be earned in residence at the University of South Carolina-Columbia.

University Requirements: Bachelor's degree-seeking students must meet Carolina Core (general education) requirements. For more information regarding these requirements, please visit the [Carolina Core](#) page on the University website.

| Codes: | | | |
|---------------|--|---------------|---|
| CC | Carolina Core | CC-INF | Carolina Core – Information Literacy |
| CC-AIU | Carolina Core-Aesthetic and Interpretive Understanding | CC-INT | Carolina Core – Integrative Course |
| CC-ARP | Carolina Core-Analytical Reasoning and Problem-Solving | CC-SCI | Carolina Core – Scientific Literacy |
| CC-CMS | Carolina Core-Effective, Engaged, and Persuasive Communication: Spoken Component | CC-VSR | Carolina Core – Values, Ethics, and Social Responsibility |
| CC-CMW | Effective, Engaged, and Persuasive Communication: Written Component | CR | College Requirement |
| CC-GFL | Carolina Core-Global Citizenship and Multicultural Understanding: Foreign Language | MR | Major Requirement |
| CC-GHS | Carolina Core – Historical Thinking | PR | Program Requirement |
| CC-GSS | Carolina Core – Social Sciences | | |

Disclaimer: Major maps are only a suggested or recommended sequence of courses required in a program of study. Please contact your academic advisor for assistance in the application of specific coursework to a program of study and course selection and planning for upcoming semesters.