



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 <sup>1</sup>	Major GPA <sup>2</sup>	Code	Prerequisites	Notes
<b>Semester One (15 Credit Hours)</b>							
!	MSCI 101 The Ocean Environment	4	C		CC-SCI		
!	MATH 141 Calculus 1 <sup>3</sup>	4	C		CC-ARP	C or better in Math 115 or Math placement test score	
!	CHEM 111 & 111L – General Chemistry I	4	C		PR	C or better in Math 115 or Math placement test score	
	UNIV 101 The Student in the University or Carolina Core Requirement <sup>4</sup>	3			PR/CC		
<b>Semester Two (18 Credit Hours)</b>							
!	ENGL 101 Critical Reading and Composition	3	C		CC-CMW		
!	MSCI 102 The Living Ocean	4	C		CC-SCI		
!	MATH 142 Calculus II	4	C		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 <sup>5</sup> or other Carolina Core Requirement <sup>4</sup>	3			CC-GFL		
<b>Take during Semester Three or Four (0-2 Hours)</b>							
	Preapproved Field Experience or MSCI 460 <sup>6</sup>	0-2			MR	C or better in MSCI 101 and 102 or C or better in BIOL 101 and 102	
<b>Semester Three (17 Credit Hours)</b>							
!	ENGL 102 Rhetoric and Composition	3	C		CC-CMW/CC-INF	C or better in ENGL 101	
	MSCI 311 Biology of Marine Organisms ( <i>fall only</i> )	4	C		MR/CC-INT	MSCI 102 or BIOL 101	
!	PHYS 211 & 211L – Essentials of Physics I	4	C		PR	MATH 141	
	MATH 241 Vector Calculus	3	C		MR	C or better in MATH 142	
	Foreign language <sup>5</sup> or other Carolina Core Requirement <sup>4</sup>	3			CC-GFL		
<b>Semester Four (14 Credit Hours)</b>							
	MSCI 313 The Chemistry of the Sea ( <i>spring only</i> )	4	C		MR/CC-INT	C or better in MSCI 101, CHEM 111, CHEM 112, & MATH 141	
	MATH 242 Elementary Differential Equations	3	C		MR	C or better in MATH 142	
!	PHYS 212 & 212L – Essentials of Physics II	4	C		PR	PHYS 211 and MATH 142	
	Foreign language <sup>5</sup> or Carolina Core Requirement <sup>4</sup>	3			CR/CC		
<b>Semester Five (15-17 Credit Hours)</b>							
	MSCI Elective ( <i>300-level and above</i> ) <sup>7</sup>	3-4	C		MR	See Bulletin listing	
	MSCI Elective ( <i>300-level and above</i> ) <sup>7</sup>	3-4	C		MR	See Bulletin listing	
	CSCE 102 General Applications Programming or higher-level CSCE course or MSCI 305 Ocean Data Analysis or MSCI 509 MATLAB-Based Data Analysis for Ocean Sciences	3	C		CR	See Bulletin listing.	
	STAT 515 Statistical Methods I	3	C		CR	MATH 141; or both MATH 111 or higher and any statistics course	
	Carolina Core Requirement <sup>4</sup>	3			CC		
<b>Semester Six (16 Credit Hours)</b>							
	MSCI 314 Physical Oceanography ( <i>spring only</i> )	4	C		MR/CC-INT	MSCI 101, MATH 141, & PHYS 201 or 211	
	Social Science	3			CR		
	Humanities or Fine Arts	3			CR		
	Carolina Core Requirement <sup>4</sup>	3			CC		
	Carolina Core Requirement <sup>4</sup> or Approved Elective <sup>8</sup>	3			CC/PR		
<b>Semester Seven (15-16 Credit Hours)</b>							
	Physical-Oceanography Elective <sup>9</sup>	3	C		MR	See Bulletin listing	
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	Carolina Core Requirement <sup>4</sup> or Approved Elective <sup>8</sup>	3			CC/PR		
	History <sup>10</sup>	3			CR		
	Approved Elective <sup>8</sup>	3-4			PR		

Semester Eight (16-17 Credit Hours)						
MSCI 505 Senior Seminar	1	C		MR		
MSCI Elective (300-level and above) <sup>7</sup> –only if needed to meet MSCI major requirements	3-4	C		MR	See Bulletin listing	
Approved Elective <sup>8</sup>	3			PR		
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Approved Elective <sup>8</sup>	3			PR		
Approved Elective <sup>8</sup>	3			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 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.
- 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 Physical 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.
- 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.
- Physical Oceanography Electives (6 hours)

Choose two from the following:	
MSCI 557 Coastal Processes (3) –cross-listed GEOL 557	MSCI 582 Marine Hydrodynamics (3) –cross-listed GEOL 582
MSCI 579 Air-Sea Interaction (3) –cross-listed GEOL 579	MSCI 590 Beach-Dune Interactions (3) –cross-listed GEOG 590
MSCI 581 Estuarine Oceanography (3) –cross-listed GEOL 581	

- 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.

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

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.