

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	Math 115 <i>or</i> Math placement test score	
!	CHEM 111 & 111L – General Chemistry I	4	C		PR	Math 115 <i>or</i> Math placement test score	
	UNIV 101 The Student in the University <i>or</i> Carolina Core Requirement <sup>4</sup>	3			PR/CC		
<b>Semester Two (18-19 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	MATH 141	
!	CHEM 112 & 112L – General Chemistry II	4	C		PR	CHEM 111 <i>or</i> 141 <i>and</i> MATH 111, 115 <i>or</i> higher math; Prereq <i>or</i> Coreq: MATH 122, 141 <i>or</i> higher math	
	Foreign language <sup>5</sup> <i>or</i> other Carolina Core Requirement <sup>4</sup>	3-4			CC-GFL		
<b>Semester Three (17 Credit Hours)</b>							
!	ENGL 102 Rhetoric and Composition	3	C		CC-CMW CC-INF	C <i>or</i> better in ENGL 101	
	MSCI 311 Biology of Marine Organisms ( <i>fall only</i> )	4	C		MR/CC-INT	MSCI 102 <i>or</i> BIOL 101	
!	PHYS 201 & 201L – General Physics I <i>or</i> PHYS 211 & 211L – Essentials of Physics I	4	C		PR	C <i>or</i> better in MATH 111/111i/112/115/116/122/141 <i>or</i> higher ( <i>PHYS 201</i> ); MATH 141 ( <i>PHYS 211</i> )	
	Foreign language <sup>5</sup> <i>or</i> other Carolina Core Requirement <sup>4</sup>	3			CC-GFL		
	History <sup>6</sup>	3			CR		
<b>Semester Four (18 Credit Hours)</b>							
	MSCI 313 The Chemistry of the Sea ( <i>spring only</i> )	4	C		MR/CC-INT	MSCI 101, CHEM 111, CHEM 112 (or co-req), & MATH 141	
	MSCI 314 Physical Oceanography ( <i>spring only</i> )	4	C		MR/CC-INT	MSCI 101, MATH 141, & PHYS 201 <i>or</i> 211	
!	PHYS 202 & 202L – General Physics II <i>or</i> PHYS 212 & 212L – Essentials of Physics II <sup>7</sup>	4	C		PR	PHYS 201 ( <i>PHYS 202</i> ); PHYS 211 <i>and</i> MATH 142 ( <i>PHYS 212</i> )	
	Foreign language <sup>5</sup> <i>or</i> Carolina Core Requirement <sup>4</sup>	3			CR/CC		
	Carolina Core Requirement <sup>4</sup>	3			CC		
<b>Semester Five (15-16 Credit Hours)</b>							
	CHEM 333 – Organic Chemistry I	3	C		MR	CHEM 112 <i>or</i> CHEM 142	
	BIOL 301 Ecology & Evolution & BIOL 301L	3-4	C		MR/CC-INT	BIOL 102 <i>or</i> MSCI 311	
	STAT 515 Statistical Methods I <sup>8</sup>	3	C		CR	MATH 141; <i>or</i> both MATH 111 <i>or</i> higher <i>and</i> any statistics course	
	CSCE 102 General Applications Programming <sup>8</sup>	3	C		CR		
	Carolina Core Requirement <sup>4</sup>	3			CC		
<b>Semester Six (15 Credit Hours)</b>							
	MSCI Bio-Oceanography Elective <sup>9</sup>	3	C		MR		
	BIOL 302 Cell & Molecular Biology <i>or</i> BIOL 303 Fundamental Genetics	3	C		MR/CC-INT	BIOL 102 <i>or</i> MSCI 311; & CHEM 333 ( <i>BIOL 302</i> )	
	Social Science	3			CR		
	Humanities <i>or</i> Fine Arts	3			CR		
	Carolina Core Requirement <sup>4</sup> <i>or</i> Approved Elective <sup>10</sup>	3			CC/PR		
<b>Summer (0-4 Credit Hours)</b>							
	MSCI 460 <i>or</i> other preapproved 3-wk field exp. <sup>11</sup>	0-4			MR	MSCI 311, 313, & 314	
<b>Semester Seven (13 Credit Hours)</b>							
	MSCI Bio-Oceanography Elective <sup>9</sup>	3	C		MR		
	MSCI 505 Senior Seminar	1	C		MR		
	Carolina Core Requirement <sup>4</sup> <i>or</i> Approved Elective <sup>10</sup>	3			CC/PR		
	Approved Electives <sup>10</sup>	6			PR		

Semester Eight (12-16 Credit Hours)							
	MSCI Elective (300-level and above) <sup>12</sup>	3-4	C		MR	See Bulletin listing.	
	MSCI Elective (300-level and above) <sup>12</sup> –only if needed to meet MSCI major requirements <sup>11</sup>	3	C		MR	See Bulletin listing.	
	Approved Electives <sup>10</sup>	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 <i>or</i> other Carolina Core Requirement	CHEM 111 & 111L	PHYS 201 & 201L <i>or</i> PHYS 211 & 211L
	Foreign Language <i>or</i> other Carolina Core Req.	Foreign language <i>or</i> 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.
- 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.
- PHYS 212 and 212 Lab may be used as a major elective, in which case one less MSCI Elective would be required.
- Students may choose to take MSCI 305 in place of CSCE 102 or MSCI 599 (Data Analysis section only) in place of STAT 515 by petition. If students use either MSCI 305 or 599 for the Carolina Core ARP requirement, then those hours cannot also be included in the 36 hours of major courses.
- Select two courses from the following list of marine biology, ecology or biology courses, or similar courses as approved by advisor: **MSCI/BIO** 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; **BIO** 302 (302L is optional, but may be taken with BIOL 302) *or* 303; **BIO** 460, 505, 534, 541, 543, 550, 570, 640, 643, 652, 670, 690.
- 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.
- All MSCI majors are required to undertake a minimum of three weeks of marine science field effort. Possibilities include MSCI 460, semester or summer internship, REU, semester at sea, or faculty-sponsored field research or cruise. Students who do not select MSCI 460, 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. Students will not normally receive course credit hours for their alternative field experience, but may combine this requirement with independent study credit as appropriate. If no course credit hours are associated with the field experience, the student will be required to take an additional Marine Science elective (300-level and above). Some students may complete MSCI 460 in the summer following senior year & graduate in August.
- 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 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 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.
- 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-INF</b>	Carolina Core – Information Literacy
<b>CC-AIU</b>	Carolina Core-Aesthetic and Interpretive Understanding	<b>CC-INT</b>	Carolina Core – Integrative Course
<b>CC-ARP</b>	Carolina Core-Analytical Reasoning and Problem-Solving	<b>CC-SCI</b>	Carolina Core – Scientific Literacy
<b>CC-CMS</b>	Carolina Core-Effective, Engaged, and Persuasive Communication: Spoken Component	<b>CC-VSR</b>	Carolina Core – Values, Ethics, and Social Responsibility
<b>CC-CMW</b>	Effective, Engaged, and Persuasive Communication: Written Component	<b>CR</b>	College Requirement
<b>CC-GFL</b>	Carolina Core-Global Citizenship and Multicultural Understanding: Foreign Language	<b>MR</b>	Major Requirement
<b>CC-GHS</b>	Carolina Core – Historical Thinking	<b>PR</b>	Program Requirement
<b>CC-GSS</b>	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.