

**Bold=** must take courses & pass before applying

Green= Undergraduate courses  
Orange= Graduate Courses

**SF State Scholars**  
**\*Tentative\* Biology: Marine Science + Interdisciplinary Marine and Estuarine Sciences Roadmap**

**\*\*Students must meet with their advisor prior to registering for courses. This roadmap is designed for general planning ONLY! Roadmaps for more than 5 years plan may vary please consult with your department.**

**Freshman**

**Sophomore**

**Junior**

**Senior**

**Graduate**

Fall	Spring	Summer
BIO 230	BIO 240	SF Elective
Area A2 (ENG 114)	CHEM 115	SF Elective
MATH 226	Area A	
Area A	Area E	
SF Elective (1 unit)		
<b>14 Units</b>	<b>16 Units</b>	<b>6 Units</b>
<b>(14 total)</b>	<b>(30 total)</b>	<b>(36 total)</b>

Fall	Spring	Summer
CHEM 130	CHEM 215/216 or	SF Elective
PHYS 11/112	Math 227 or PHYS 121/122 (8-9 Units)	SF Elective
Area C	Area C	
Area D	Area D	
Area D		
<b>16 Units</b>	<b>14-15 Units</b>	<b>6 Units</b>
<b>(52 total)</b>	<b>(66-67 total)</b>	<b>(72-73 total)</b>

Fall	Spring	Summer
BIO 355	BIO 337	SF Elective
BIO 458	Major Elective	SF Elective
Area C	Major Elective	
Area UD-C	SF Elective	
SF Elective	Area UD-D	
<b>16 Units</b>	<b>15 Units</b>	<b>6 Units</b>
<b>(88-89 total)</b>	<b>(103-104 total)</b>	<b>(109-110 total)</b>
<b>Apply to SF Scholars</b>		
<b>Completed 60 units and 16 BIO units</b>		<b>3.0 GPA</b>

Fall	Spring
BIO UD-Elective	BIO UD-Elective
BIO UD-Elective	Graduate core MSCI 715
SF Elective	Graduate core MSCI 717
BIO 708	BIO/CHEM/ERTH 897 or GEOG 896
Graduate core MSCI 709	Graduate Seminar BIO 863/GEO 857/ERTH 795
<b>15 Units</b>	<b>13-14 Units</b>
<b>(124-125 total)</b>	<b>(137-139total)</b>

Fall	Spring
Graduate Seminar BIO 863/GEO 857/ERTH 795/Equivalent	Graduate core BIO 883
Graduate core BIO 883	Graduate core MSCI 718
Graduate core MSCI 718	BIO 898/GEOG 857/ERTH 898/CHEM 898
BIO/CHEM/ERTH 897 or GEOG 896	
<b>9-12 Units</b>	<b>7-8 Units</b>
<b>(146 -151total)</b>	<b>(153-159 total)</b>

Minimum Units required for Bachelors =120  
Minimum Units required for Masters = 33