

# BEACH

EDGE

BIOCHEMISTRY

## Recommended Roadmap

Semester	Status	Required Courses (# of units)	Required 500-level Coursework	GE Courses	Total B.S. Units	Total Major Units	Total M.S. Units
<b>Year 1: Fall</b>	Lower- division courses only	<ul style="list-style-type: none"><li>• CHEM 111A (5)</li><li>• MATH 122 (4)</li></ul>		<ul style="list-style-type: none"><li>• GE English Composition (Area 1A)</li><li>• GE Critical Thinking (Area 1B)</li></ul>	15	9	0
<b>Year 1: Spring</b>	Lower- division courses only	<ul style="list-style-type: none"><li>• CHEM 111B (5)</li><li>• MATH 123 (4)</li></ul>		<ul style="list-style-type: none"><li>• GE Oral Communicat ion (Area 1C)</li><li>• GE Arts (Area 3A)</li></ul>	15	9	0
<b>Year 2: Fall</b>	Lower- division courses only	<ul style="list-style-type: none"><li>• CHEM 220A (3)</li><li>• CHEM 251 (4)</li><li>• BIOL 211 (5)</li><li>• CHEM 496* (1)</li></ul>		GE Ethnic Studies (Area 6)	15	9	0
<b>Year 2: Spring</b>		<ul style="list-style-type: none"><li>• CHEM 220B (3)</li><li>• CHEM 241 (1)</li><li>• CHEM 320L (2)</li><li>• BIOL 212 (4)</li><li>• PHYS 151 (4)</li><li>• CHEM 496* (1)</li></ul>			14	14	0
<b>Year 3: Fall</b>	Completed Major Specific requirements with a "C" or better and minimum 3.0 GPA; Upper- division status	<ul style="list-style-type: none"><li>• CHEM 441A (3)</li><li>• BIOL 340 (3)</li><li>• PHYS 152 (4)</li><li>• CHEM 496* (1)</li></ul>		GE US History (Area 4A)	13	10	0

Semester	Status	Required Courses (# of units)	Required 500-level Coursework	GE Courses	Total B.S. Units	Total Major Units	Total M.S. Units
<b>Year 3: Spring</b>	Beach EDGE Program eligible	<ul style="list-style-type: none"> <li>• CHEM 361 (3)</li> <li>• CHEM 441B (3)</li> <li>• CHEM 496* (1)</li> </ul>		<ul style="list-style-type: none"> <li>• GE Constitution and American Ideals (Area 4B)</li> <li>• GE Upper Division (Area 2/5)</li> </ul>	12	6	1
<b>Year 4: Fall</b>	Beach EDGE Program eligible	<ul style="list-style-type: none"> <li>• CHEM 379 (4)</li> <li>• CHEM 541 (3)</li> <li>• CHEM 697 (1)</li> </ul>		GE Upper Division (Area 3)	11	8	4
<b>Year 4: Spring</b>		<ul style="list-style-type: none"> <li>• CHEM 443 (4)</li> <li>• CHEM 461 (1)</li> <li>• CHEM 697 (1)</li> </ul>	Choose one: BIOL 516, 531, 532, 533, 573, 548, 574 (all are 3 units)	<ul style="list-style-type: none"> <li>• GE Upper Division (Area 4)</li> <li>• GE Humanities (Area 3B)</li> </ul>	15	9	4
<b>Year 5: Fall</b>	M.S./Beach EDGE Program; research proposal presentation & advancement to candidacy	<ul style="list-style-type: none"> <li>• CHEM 595A (1)</li> <li>• CHEM 660 (1)</li> <li>• CHEM 695 (1)</li> <li>• CHEM 697 (1)</li> </ul>	Choose one: CHEM 542, 543, 545, 546, 548, 549, 582 (all are 3 units)		0	8	7
<b>Year 5: Spring</b>	M.S./Beach EDGE Program	<ul style="list-style-type: none"> <li>• CHEM 595A (1)</li> <li>• CHEM 660 (1)</li> <li>• CHEM 697C (1)</li> <li>• CHEM 698 (3)</li> </ul>	Choose one CHEM 542, 543, 545, 546, 548, 549, 582 (all are 3 units)		0	9	9
<b>Year 6: Fall</b>	M.S./Beach EDGE Program	<ul style="list-style-type: none"> <li>• CHEM 660 (1)</li> <li>• CHEM 697C (2)</li> <li>• CHEM 698 (3)</li> </ul>			0	6	6
<b>(totals)</b>					110	93	30

\*CHEM 496 enrollment is recommended as soon as possible to identify a research mentor in the Chemistry and Biochemistry Department.

Please see [Biochemistry B.S. + Biochemistry M.S.: Biochemistry EDGE Program](#) for more information.