

# Bachelor of Science

## Chemistry with a Major in Secondary Chemistry Education (6-12) (BS)

### Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
<b>Freshman</b>		
<b>Fall</b>		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 163	Precalculus II	3
CHEM 121N and CHEM 122N		4
Human Creativity		3
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
MATH 211	Calculus I	4
CHEM 123N and CHEM 124N or CHEM 125		4-5
Philosophy and Ethics		3
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
<b>Credit Hours</b>		<b>16-17</b>
<b>Sophomore</b>		
<b>Fall</b>		
CHEM 211 and CHEM 212		5
MATH 212	Calculus II	4
PHYS 231N	University Physics I	4
STEM 201	Knowing and Learning in STEM Education	3
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
CHEM 213 AND CHEM 214 or CHEM 216		5
PHYS 232N	University Physics II	4
STEM 202	Classroom Interactions in STEM Education	3
CHEM 321 and CHEM 322		5
<b>Credit Hours</b>		<b>17</b>
<b>Junior</b>		
<b>Fall</b>		
CHEM 331	Physical Chemistry Lecture I	3

CHEM 332W	Experimental Physical Chemistry I (C or better required)	2
CHEM 441	Biochemistry Lecture	3
CHEM 351	Inorganic Chemistry	3
CHEM 352 or CHEM 442W		2-4
Impact of Technology		3
<b>Credit Hours</b>		<b>16-18</b>
<b>Spring</b>		
CHEM 333	Physical Chemistry Lecture II	3
CHEM 334W	Experimental Physical Chemistry II (C or better required)	2
CHEM 449	Environmental Chemistry	3
COMM 101R	Public Speaking	3
Literature		3
<b>Credit Hours</b>		<b>14</b>
<b>Senior</b>		
<b>Fall</b>		
CHEM 421 and CHEM 422		6
CHEM 468	Research Methods in Mathematics and Science	3
STEM 401	Project Based Instruction in STEM Education	3
Human Behavior		3
Interpreting the Past		3
<b>Credit Hours</b>		<b>18</b>
<b>Spring</b>		
STEM 485	Apprentice Teaching	9
CHEM 415 or CHEM 439 or CHEM 443 or CHEM 451		3
STEM 402	Perspectives on STEM	3
CHEM 485	Chemistry and Biochemistry Seminar	1
<b>Credit Hours</b>		<b>16</b>
<b>Total Credit Hours</b>		<b>129-132</b>

Language and Culture I & II may be met in high school and are not included in this 4-year plan. Please see requirement details.