



**BACHELOR OF SCIENCE IN CHEMISTRY (APPLIED OPTION)  
1+3 TROUGH EARLY ENROLLMENT**

Junior Year	Hours	Milestone(s)	Milestone Note	Term
ENGL 101 - English Composition I	3		Prerequisite for ENGL 102, ENGL 112	
◆ ART 101 – Studio I – Introduction to Art	3			
◆ HIST 208 - American History from 1865	3			
◆ HHP 157 – Healthy Living	2			
COMM 100 - Speech Communication	3			
<b>Semester Total</b>	<b>14</b>			

Senior Year	Hours	Milestone(s)	Milestone Note	Term
MATH 120 – College Algebra	3			
Free Elective	3			
◆ PSYC 151 – General Psychology	3			
◆ SPAN 101 – Beginning Spanish	3			
◆ ENGL 150 – Introduction to Literature	3			
ENGL 102 - English Composition II	3			
<b>Semester Total</b>	<b>18</b>			

First Semester On-Campus	Hours	Milestone(s)	Milestone Note	Term
CHEM 105 - General Chemistry I	3	Milestone Course	Core course. Prerequisite for CHEM 106	
CHEM 107 - General Chemistry Laboratory I	2	Milestone Course	Core course. Prerequisite for CHEM 108	
G ED 101 (NSM)	3			
MATH 102 – Plane Trigonometry OR MATH 121 – Pre-Calculus	3-4			
BIOL 120 - Fundamentals of Biology	4			
<b>Semester Total</b>	<b>15-16</b>			

Second Semester On-Campus	Hours	Milestone(s)	Milestone Note	Term
PHYS 201 - Gen Phys I or PHYS - 231 Phys for Scientists & Engineers I	4	Milestone Course	Prerequisite for CHEM 301	
PHYS 203 - General Physics Laboratory I	1	Milestone Course		
CHEM 106 - General Chemistry II	3	Milestone Course	Core course. Prerequisite for CHEM 206, CHEM 211	
CHEM 108 - General Chemistry Laboratory II	2	Milestone Course	Core course. Prerequisite for CHEM 207, CHEM 211	
MATH 206 - Analytic Geometry and Calculus I	4	Milestone Course	Prerequisite for CHEM 301	
<b>Semester Total</b>	<b>14</b>			

Third Semester On-Campus	Hours	Milestone(s)	Milestone Note	Term
CHEM 205 - Organic Chemistry I	3	Milestone Course	Core course. Prerequisite for CHEM 206	
CHEM 207 - Organic Chemistry Laboratory I	2	Milestone Course	Core course. Prerequisite for CHEM 208	
CHEM 211 - Introductory Analytical Chemistry	4	Milestone Course	Core course. Prerequisite for CHEM 416	
PHYS 202 - Gen Phys II or PHYS 232 - Phys for Scientists & Engineers II	4	Milestone Course		
PHYS 204 - General Physics Laboratory II	1	Milestone Course		
CHEM 460 - Directed Student Research	1	Milestone Course		
<b>Semester Total</b>	<b>15</b>			

Fourth Semester On-Campus	Hours	Milestone(s)	Milestone Note	Term
◆ PHYS 120 - Astronomy	3-4			
CHEM 206 - Organic Chemistry II	3	Milestone Course	Core course. Prerequisite for CHEM 301, CHEM 305, CHEM 331, CHEM 350, CHEM 425, CHEM 429	
CHEM 208 - Organic Chemistry Laboratory II	2	Milestone Course	Core course. Prerequisite for CHEM 301, CHEM 305	
CHEM 202 - Computer Chemistry	2	Milestone Course	Core course. Prerequisite for CHEM 301	
CHEM 461 - Directed Student Research	2	Milestone Course	At least 3 hours of Research credit is required of all majors	
<b>Semester Total</b>	<b>12-13</b>			

Fifth Semester On-Campus	Hours	Milestone(s)	Milestone Note	Term
CHEM Additional Course*	3	Milestone Course	Core course. *Choose from CHEM 312. CHEM 356, CHEM 357, or CHEM 425	
CHEM 411 - Inorganic Chemistry	3	Milestone Course	Core Course	
CHEM 301 - Physical Chemistry I	3	Milestone Course	Core course. Prerequisite for CHEM 416, CHEM 425. Pre- or Co-requisite for CHEM 411	
CHEM 303 - Physical Chemistry Laboratory I	2	Milestone Course		
CHEM 350 - Junior Seminar	1	Milestone Course	Core course. Prerequisite for CHEM 450	
CHEM 331 - Biochemistry	3	Milestone Course		
CHEM 333 - Biochemistry Laboratory	2	Milestone Course		
<b>Semester Total</b>	<b>17</b>			

Sixth Semester On-Campus	Hours	Milestone(s)	Milestone Note	Term
CHEM 416 - Instrumental Analysis	3	Milestone Course	Core course	
CHEM 418 - Instrumental Analysis Laboratory	2	Milestone Course	Core course	
CHEM 429 - Spectroscopic Methods	3	Milestone Course	Core course	
CHEM 450 - Senior Seminar	1	Milestone Course	Core course	
CHEM Additional Course*	3	Milestone Course	Core course. *Choose from CHEM 312. CHEM 356, CHEM 357, or CHEM 425	
CHEM Additional Course*	3	Milestone Course	Core course. *Choose from CHEM 312. CHEM 356, CHEM 357, or CHEM 425	
CHEM 305 - Introduction to Polymer Science	3	Milestone Course		
<b>Semester Total</b>	<b>18</b>			

◆ See reverse of this page for General Education coursework options

