

BACHELOR OF SCIENCE IN CHEMISTRY - GENERAL

Code	Title	Credit Hours
Wellness		
APPH 1040	Scientific Foundations of Health or APPH 10 The Science of Physical Activity and Health or APPH 10 Flourishing: Strategies for Well-being and Resilience	2
Core A - Essential Skills		
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
MATH 1552	Integral Calculus	4
Core B - Institutional Options		
CS 1301	Introduction to Computing ⁹	3
Core C - Humanities		
Any HUM		6
Core D - Science, Math, & Technology		
PHYS 2211	Introductory Physics I	4
PHYS 2212	Introductory Physics II	4
MATH 1551	Differential Calculus	2
MATH 1553	Introduction to Linear Algebra ⁶	2
Core E - Social Sciences		
Select one of the following:		3
HIST 2111	The United States to 1877	
HIST 2112	The United States since 1877	
INTA 1200	American Government in Comparative Perspective	
POL 1101	Government of the United States	
PUBP 3000	American Constitutional Issues	
Any SS		9
Core F - Courses Related to Major		
CHEM 1211K	Chemical Principles I	4
CHEM 1212K	Chemical Principles II	4
CHEM 2380	Synthesis Laboratory I	2
MATH 2551	Multivariable Calculus	4
BIOS 1107 & 1107L	Biological Principles and Biological Principles Laboratory	4
Major Requirements		
CHEM 2216 & 2216L	Quantitative Chemical Analysis and Quantitative Chemical Analysis Laboratory or CHEM 2216L Quantitative Chemical Analysis	4
CHEM 2311	Organic Chemistry I	3
CHEM 2312	Organic Chemistry II or CHEM 2312 Organic and Bioorganic Chemistry	3
CHEM 2601	Professional Skills for Chemists and Biochemists	1
CHEM 3111	Inorganic Chemistry	3
CHEM 3216 & 3216L	Analytical Chemistry Lecture and Analytical Chemistry Laboratory or CHEM 3216 Analytical Chemistry	5
CHEM 3380	Synthesis Laboratory II	3

CHEM 3411	Physical Chemistry I	3
CHEM 3412	Physical Chemistry II	3
CHEM 3481	Physical Chemistry Laboratory I	2

Additional Major Requirements

Research Experience		2
CHEM 4695	Undergraduate Internship (Undergraduate Internship for Academic Credit)	
CHEM 4699	Undergraduate Research ⁷	
CHEM 3511	Survey of Biochemistry or CHEM 4511 Biochemistry I or CHEM 4512 Biochemistry II	3
Upper level Chemistry Electives ¹		6
3000-level Technical Electives ^{2,4}		6
Free Electives		
Free Electives ^{4,5,8}		12
Total Credit Hours		122

Pass-fail only allowed for Free Electives.

¹ CHEM 3700 and all CHEM 4XXX and 6XXX allowed except CHEM 4695 and CHEM 4699

² Courses must be 3000-level or higher, and from the Colleges of Computing, Engineering, or Sciences and MATH 2552, SLS 3110, or SLS 3120. - Limit 3 credit hours of CHEM 4699.

⁴ Courses may be applied toward completion of a minor.

⁵ VIP courses may be used only as free electives or in place of CHEM 4699 with pre-approval of the Associate Chair for Academic Programs or their designate.

⁶ MATH 1554 or MATH 1564 may be used in place of MATH 1553.

⁷ A maximum of twelve credit hours of CHEM 4699 taken on a letter-grade basis are permitted for the degree program

⁸ Up to six hours of CHEM 2699 taken on a letter-grade basis may be used as free electives

⁹ CS 1371 may be used with approval of the Associate Chair for Academic Programs or their designate