

B.S. in Chemistry – Traditional

Typical Program of Study:

Degree requirement: TOTAL = 120 Hours plus 2 Hours Wellness Requirement

	First Semester		Second Semester	
1st Year	CHEM 1211K (4)	Chemical Principles I	CHEM 1212K (4)	Chemical Principles I
	MATH 1551 (2)	Differential Calculus	MATH 1552 (4)	Integral Calculus
	ENGL 1101 (3)	English Comp. I	ENGL 1102 (3)	English Comp. II
	GT 1000 (1)	Freshmen Seminar	BIOL 1510 (4)	Biological Principles
	Core Elective* (3)			
	Core Elective (3)			
	<i>Sub-Total (16)</i>		<i>Sub-Total (15)</i>	
2nd Year	CHEM 2211 (3)	Quantitative Analysis Lab	CHEM 2312 (3) or	Organic Chemistry II
	CHEM 2311 (3)	Organic Chemistry I	CHEM 2313 (3)	Bioorganic Chemistry
	MATH 1553 (2)	Intro. Linear Algebra	CHEM 2380 (2)	Synthesis Lab I
	PHYS 2211 (4)	Intro. to Physics I	PHYS 2212 (4)	Intro. to Physics II
	Core Elective* (3)		MATH 2551 (4)	Multivariable Calc.
			Core Elective* (3)	
	<i>Sub-Total (15)</i>		<i>Sub-Total (16)</i>	
3rd Year	CHEM 3411 (3)	Physical Chemistry I	CHEM 3412 (3)	Physical Chemistry II
	CHEM 3111 (3)	Inorganic Chemistry	CHEM 3481 (2)	Physical Chem. Lab
	CHEM 3380 (3)	Synthesis Lab II	CHEM 3211 (5)	Analytical Chem. Lab
	Core Elective* (3)		Core Elective* (3)	
	Core Elective* (3)		Free Elective (3)	
		<i>Sub-Total (15)</i>		<i>Sub-Total (16)</i>
4th Year	Research Experience**** (3)	Biochemistry elective	CHEM Elective** (3)	
	CHEM 3511 or 4511 (3)		Technical Elective*** (3)	
	CHEM Elective** (3)		Free Electives (9)	
	Technical Elective*** (3)			
	Core Elective* (2)			
			<i>Sub-Total (14)</i>	

Continued

*CORE ELECTIVES

Note that most core electives are 3 hours with the exception of APPH 1040 (2) or APPH 1050 (2).

APPH 1040 or 1050 (2)

CS 1301, 1315, or 1371 (3)

Humanities electives (6 hours required)

Social Sciences electives (9 hours required)

History/constitution requirement: HIST 2111, HIST 2112, PUBP 3000, INTA 1200, or POL 1101

(Credit not allowed for both INTA 1200 and POL 1101)

Only free electives may be Pass/Fail

**CHEMISTRY ELECTIVES

CHEM 3700, 4113, 4311, 4341, 4401, 4452, 4511, 4512, 4521, 4581, 4582, 4601, 4740, 4760, 4765, 4775, 4776, 4803, 4804 (Note CHEM 3511 is not allowed with CHEM 4511 or 4512)

***TECHNICAL ELECTIVES

The technical elective requirement may be fulfilled by coursework in Science, Engineering, and Computing at the 3000 level or higher. A maximum of 3 hours toward the technical elective requirement may be chosen from Undergraduate Research, CHEM 4699. MATH 2403 or 2552 differential equations may also be used for a Technical Elective.

****RESEARCH EXPERIENCE

Research Experience: Either Undergraduate Research CHEM 4699 (3) plus free elective (1) OR Undergraduate Internship CHEM 4695 (3) plus free elective (1) are approved substitutes for CHEM 4684 (4). If either internal or external research (CHEM 4698 or CHEM 4694) is conducted for pay rather than credit, additional free elective(s) may be substituted to achieve the required earned hours to graduate. The research experience must include a comprehensive laboratory report. COOP 4000 or INTN 4000 may be substituted, if conducted for pay rather than credit, additional free elective(s) may be substituted to achieve the required earned hours to graduate. Internships should be with verifiable chemical or biochemical organizations.