

**College of Science**  
 Bachelor of Science (B.S.) in Chemistry  
 For students graduating in calendar year 2008

First Year		Fall	Spring
CHEM 1055, 1056*	General Chemistry for Chem Majors	4	4
CHEM 1065, 1066*	General Chemistry for Chem Majors Lab	1	1
ENGL 1105, 1106*	Freshman English	3	3
MATH 1114*	Elementary Linear Algebra	2	-
MATH 1224*	Vector Geometry	-	2
MATH 1205, 1206*	Calculus	3	3
	Electives <sup>‡</sup>	3	3
	Semester Total	16	16
Second Year			
CHEM 2114*	Analytical Chemistry	3	-
CHEM 2124*	Analytical Chemistry Lab	1	-
CHEM 2565, 2566*	Principles of Organic Chemistry	3	3
CHEM 2555*	Organic Synthesis & Techniques Lab	-	2
CHEM 4014 <sup>†</sup>	Survey of the Chemical Literature	-	1
CHEM 4424	Descriptive Inorganic Chemistry	-	3
MATH 2214	Introduction to Differential Equations	-	3
MATH 2224*	Multivariable Calculus	3	-
PHYS 2305,* 2306	Foundations of Physics	4	4
	Semester Total	14	16
Third Year			
CHEM 2556	Organic Synthesis & Techniques Lab	2	-
CHEM 3615, 3616	Physical Chemistry	3	3
CHEM 3625	Physical Chemistry Lab	-	1
BCHM 3114 or 4115	biochemistry elective	3	-
	Statistics or Computer Science (not CS 1004)	-	3
	Electives <sup>‡</sup>	6	9
	Semester Total	14	16
Fourth Year			
CHEM 3626 <sup>†</sup>	Physical Chemistry Lab	1	-
CHEM 4114	Instrumental Analysis	3	-
CHEM 4124	Instrumental Analysis Lab	1	-
CHEM 4404	Physical Inorganic Chemistry	3	-
CHEM 4414	Inorganic Synthesis & Techniques Lab	-	2
CHEM 4xxx	4000-level chemistry or biochemistry elective	-	3
	Electives <sup>‡</sup>	6	9
	Semester Total	14	14

- \* For "satisfactory progress toward degree" these courses and their prerequisites must be completed by the time the student has attempted 72 hours.
- † These two courses satisfy the University writing-intensive and ViEWS (Visual Expression, Written and Spoken) communication requirement.
- ‡ Electives must include College and University core curriculum requirements (Area 2: two 3-credit courses; Area 3: two 3-credit courses; Area 6: one 3-credit course; and Area 7: one 3-credit course - some area 7 classes will also count towards another core area).

**Credit hours and GPA requirements:** Graduation requires completion of a minimum of 120 credit hours with a GPA of 2.0 or greater for all hours attempted. In addition, students must have an in-major GPA of 2.0 or greater. The in-major GPA is calculated from all chemistry courses except that not more than 6 hours of CHEM 2974, 4974, and 4994 will be included.

**Prerequisites:** The course sequence suggested above places required courses after their prerequisites. A student taking a course out of the recommended sequence should check the course catalog for the course prerequisites before enrolling.

**Language study requirement:** The College of Science language requirement may be met by:

- (1) Completing 3 units of a single foreign or classical language in high school;
- (2) Earning 6 semester hours of college-level foreign or classical language credit or American Sign Language; or
- (3) Receiving credit-by-examination for a foreign or classical language or American Sign Language. (See the Undergraduate Catalog for more information.)

Credits to satisfy the Language Study Requirement are in addition to the 120-credit graduation requirement for the Chemistry degree.

**Substitutions:** Students with existing chemistry credits due to transferring into the major, having transfer credits from elsewhere, or from taking summer classes may substitute the non-majors chemistry courses for the majors chemistry courses. These and other common substitutions are given in the table. Since CHEM 2545,2546 does not satisfy the prerequisite for CHEM 2556 (due to training on specific instrumentation), two or more credits of CHEM 4994 may substitute for CHEM 2556 to meet the requirement of 400 lab hours beyond general chemistry to receive an ACS-certified degree.

Required Courses	Equivalent Substitution
Math 1205, 1206	Math 1015, 1016, 2015
CHEM 1055, 1065	CHEM 1074,1084 or CHEM 1035,1045
CHEM 1056, 1066	CHEM 1036,1046
CHEM 2114, 2124	CHEM 3114, 3124
CHEM 2565	CHEM 2535
CHEM 2566	CHEM 2536
CHEM 2555	CHEM 2545, 2546
CHEM 2556	CHEM 4994