

Chemistry – Bachelors of Science degree checklist

Note – this checklist does not include general education requirements. You will also need to take INQ/HNRS, language, and HHP courses.

Course	Units	Completed?
Suggested first year courses		
CHEM 111/117: General Chemistry 1 (fall)	1.0	
CHEM 112/118: General Chemistry 2 (spring)	1.0	

Suggested second year courses		
CHEM 221: Organic Chemistry 1 (fall)	1.0	
CHEM 222: Organic Chemistry 2 (spring)	1.0	
CHEM 255: Quantitative Analysis (fall)	0.5	

Additional courses for the first and second years*		
MATH 100: Precalculus (fall, if needed)	1.0	
MATH 121: Calculus 1 (fall and spring)	1.0	
MATH 122: Calculus 2 (fall and spring)	1.0	
<i>Two semesters of physics: either 103 and 104 or 201 and 202</i>		
PHYS 103/201: Physics 1 (103: fall; 201: spring)	1.0	
PHYS 104/202: Physics 2 (104: spring; 202: fall)	1.0	

Additional required courses**		
<i>Courses offered every year:</i>		
CHEM 331: Thermodynamics and Kinetics (fall)*	1.0	
CHEM 341: Biochemistry 1 (fall)	1.0	
CHEM 405/406/407 research (by permission)	1.0	
Advanced elective (CHEM 342, 420, 460, 499; titles below)	1.0	
Additional elective or second advanced elective (listed below)	1.0	
<i>Courses offered alternating years in spring:</i>		
CHEM 260: Descriptive Inorganic	1.0	
CHEM 332: Quantum Mechanics*	1.0	
CHEM 350: Instrumental Analysis	1.0	
CHEM 355: Experimental Design	0.5	

*MATH 122 and two semesters of physics are prerequisites for CHEM 331/332

**Earning a grade of C- or higher in CHEM 222 is a prerequisite for most 300- and 400-level CHEM courses

Additional electives (generally offered in spring):	Advanced electives (offered in spring):
CHEM 270: Environmental Chemistry	CHEM 342: Biochemistry 2
CHEM 299: Special Topics	CHEM 420: Advanced Organic Chemistry
CHEM 340: Pharmaceutical Chemistry	CHEM 460: Advanced Inorganic Chemistry
CHEM 405/406/407: Additional unit of research	CHEM 499: Special Topics