

Core Option: Summary

The Core Option provides a basic grounding in chemical principles and skills and requires the fewest courses of all options for the major in Chemistry. It is often selected by students who plan to attend medical school or professional school or to find employment in industry immediately after graduation. This option does not offer certification by the American Chemical Society.

The schedule shown is only for first-year students who have had pre-calculus. Students who have not had pre-calculus and transfer students should discuss their schedules with an advisor in the Chemistry Department.

Core Option and Typical Schedule	
Fall	Spring
FIRST YEAR	
General Chemistry Lecture (4.0 cr) ¹ 01:160:161 OR 01:160:163	General Chemistry Lecture (4.0 cr) 01:160:162 OR 01:160:164
General Chemistry Laboratory (1.0 cr) 01:160:171 Either fall or spring	
Calculus I (4.0 cr) 01:640:151	Calculus II (4.0 cr) 01:640:152
SECOND YEAR	
Organic Chemistry Lecture (4.0 cr) 01:160:307 OR 01:160:315 ² (by invitation)	Organic Chemistry Lecture (4.0 cr) 01:160:308 OR 01:160:316
Analytical Chemistry (3.0 cr) 01:160:251	Organic Chemistry Laboratory ³ (2.5 cr) 01:160:309
General Physics (3.0 cr) 01:750:203	General Physics (3.0 cr) 01:750:204
General Physics Lab (1.0 cr) 01:750:205	General Physics Lab (1.0 cr) 01:750:206
Multivariable Calculus (4.0 cr) 01:640:251	Linear Algebra (3.0 cr) 01:640:250 OR Elementary Differential Equations (3.0 cr) 01:640:252
THIRD YEAR	
Physical Chemistry Lecture (3.0 cr) 01:160:327 ⁴ OR 01:160:341 ⁴	Physical Chemistry Lecture (3.0 cr) 01:160:328 OR 01:160:342
Organic Chemistry Laboratory ² (2.5 cr) 01:160:310	Experimental Physical Chemistry (2.5 cr) 01:160:329
Chemical Bonding (1.5 cr) 01:160:361 ⁶	Inorganic Chemistry (3.0 cr) 01:160:371 ⁶
Instrumental Analysis (3.0 cr) 01:160:348 ⁵	
FOURTH YEAR	
Seminar (1.0 cr) 01:160:491	Seminar (1.0 cr) 01:160:492

Core Option: Course and Scheduling Notes

¹ Pre-calculus prerequisite

² By invitation only.

³ Chem 309 is offered in the *spring* only; Chem 310 is offered only in the *fall* only.

⁴ Chemistry 327 and 341 have Math 251 as a pre-requisite, not as a co-requisite.

Chemistry 327-328 is acceptable for all Chemistry majors and is required for the Chemical Physics Option.

Chemistry 341-342 is recommended for students oriented toward the life sciences, and for students taking the Chemical Biology option.

⁵ Chem 348 has Chem 251 as a pre-requisite. Chem 348 is offered in the *fall* only; Chem 251 is offered both *fall* and *spring*.

⁶ Chem 361 and 371 may be deferred for either one or two semesters, if desired. Both 361 and 371 are offered *fall* and *spring*. Chem 371 has Chem 361 and Chem 308 or 316 as pre-requisites.