



THE UNIVERSITY OF MICHIGAN-ANN ARBOR
SCHOOL OF EDUCATION
TEACHER EDUCATION PROGRAM

Chemistry: MAJOR Requirements for Secondary Teacher Certification

Please note: Major/minor requirements are subject to change. All candidates are expected to consult with a School of Education advisor as they plan and progress through their program.

Chemistry majors must complete a minimum of 36 credits including the following:

Prerequisite Courses:

(Note: These do not count toward the required credits for the major.)

Course Number	Course Title	Credits	Completed?
Math 115	Calculus I	4	
Math 116	Calculus II	4	
Physics 140/141	General Physics I/Lab	5	
Physics 240/241	General Physics II/Lab	5	

Major Requirements: (MUST COMPLETE)

Course Number	Course Title	Credits	Completed?
Education 422	Teaching of Science in the Secondary School	3	
Chemistry 125	General Chemistry Lab I	2	
Chemistry 130*	General Chemistry: Macroscopic Investigations and Reaction Principles	3	
Chemistry 210	Structure and Reactivity II	4	
Chemistry 211	Investigations in Chemistry	1	
Chemistry 215	Structure and Reactivity II	3	
Chemistry 216	Synthesis and Characterization of Organic Compounds	2	
Chemistry 241	Introduction to Chemical Analysis	2	
Chemistry 242	Introduction to Chemical Analysis Lab	2	
Chemistry 260	Chemical Principles	3	

* If possible, students should take the studio section of Chemistry 130. This section is generally only offered in the fall. Please contact the Chemistry Department at (734) 763-7315 to identify which section is the studio section.

Select one of the following courses:

Chemistry 399	Undergraduate Research	1-4	
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Chemistry 485	Projects Lab	1-4	
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Select one of the following courses:

Biology 310	Introductory Biochemistry	4	
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Biochemistry 415	Introductory Biochemistry	4	

Select a total of six credits from the following courses:

Chemistry 302/312	Inorganic Chemistry/Synthesis and Characterization (Lab)	5	
Chemistry 402	Intermediate Inorganic Chemistry	3	
Chemistry 447	Physical Methods of Analysis	3	
Chemistry 461	Physical Chemistry I	3	
Chemistry 462	Computational Chemistry Lab	1	
Chemistry 463	Physical Chemistry II	3	
Chemistry 480	Physical and Instrumental Chemistry	3	