# CHEMISTRY, MINOR

This minor may only be completed by students admitted to the Elementary Education (http://guide.wisc.edu/undergraduate/education/ curriculum-instruction/elementary-education-bse/) or the Elementary Education and Special Education (http://guide.wisc.edu/undergraduate/ education/rehabilitation-psychology-special-education/elementaryeducation-special-education-bse/) programs. A minor is not required to complete either program.

Minors provide a depth of study in a particular area of interest and also inform classroom instruction. The completion of a minor is required to teach middle school in some states and may benefit students particularly interested in teaching at this level.

The Department of Chemistry is housed in the College of Letters & Science. Students may wish to consult with a chemistry undergraduate advisor (http://www.chem.wisc.edu/content/undergraduate-advising/) to discuss course selection and other issues related to this field of study.

Upon completion, the subject area of the minor will be posted on the UW– Madison transcript. Students will not receive an additional certification or license in the subject area. The Wisconsin Department of Public Instruction does not offer content licenses in association with the Elementary Education or Special Education teaching licenses.

## HOW TO GET IN

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This minor may only be declared by students completing the Elementary Education or the Elementary Education and Special Education programs.

To declare the minor, contact your academic advisor in Education Student Services any time after program admission.

#### PREREQUISITES

While there are no specific course requirements for declaring the minor, students can expect to take some of these courses before being eligible for enrolling in the minor coursework:

Code	Title	Credits
CHEM 341	Elementary Organic Chemistry	3
CHEM 343	Organic Chemistry I	3
MATH 222	Calculus and Analytic Geometry 2	4
PHYSICS 201	General Physics	5
or PHYSICS 207	General Physics	
PHYSICS 247	A Modern Introduction to Physics	5

Prerequisite coursework may be used to meet liberal studies requirements.

#### REQUIREMENTS

### **REQUIREMENTS** PREREQUISITE COURSEWORK

Students must complete prerequisite coursework (p. 1) before enrolling in some of the required courses for minor.

#### MINOR REQUIREMENTS

A minimum cumulative grade point average of 2.75 is required, based on all chemistry minor coursework taken on the UW-Madison campus.

Complete at least 22 credits, including the following:

Code	Title	Credits	
Introductory Chemistry			
Select one of the following:		5-9	
CHEM 103 & CHEM 104	General Chemistry I and General Chemistry II		
CHEM 109	Advanced General Chemistry		
CHEM 115	Chemical Principles I		
<b>Analytical Chemist</b>	ry		
Select one of the following:		4-5	
CHEM 327	Fundamentals of Analytical Science		
CHEM 329	Fundamentals of Analytical Science		
CHEM 116 & CHEM 115	Chemical Principles II and Chemical Principles I		
Organic Chemistry			
Select one of the foll	owing options:	7-8	
Option 1:			
CHEM 341	Elementary Organic Chemistry		
CHEM 342	Elementary Organic Chemistry Laboratory		
BIOCHEM 501	Introduction to Biochemistry		
Option 2:			
CHEM 343	Organic Chemistry I		
CHEM 344	Introductory Organic Chemistry Laboratory		
CHEM 345	Organic Chemistry II		
Inorganic Chemistry		4	
CHEM 311	Chemistry Across the Periodic Table		
<b>Physical Chemistry</b>	/	3	
CHEM 561	Physical Chemistry I		
or CHEM 665	Biophysical Chemistry		
Electives			
Complete Chemistry	electives to total 22 credits <sup>1</sup>		

<sup>1</sup> CHEM 346 Intermediate Organic Chemistry Laboratory is recommended. BIOCHEM 501 Introduction to Biochemistry, CIV ENGR 500 Water Chemistry, CBE 440 Chemical Engineering Materials, CBE 540 Polymer Science and Technology, are also recommended elective options.