

# CHEMISTRY, MINOR

This minor may only be completed by students admitted to Elementary Education options leading to certification in K-9 or Middle Childhood through Early Adolescence. A minor is not required to complete the K-9 certification program, but students may elect to complete one.

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 as was possible prior to fall, 2022 program admission.** The Wisconsin Department of Public Instruction does not offer content licenses in association with the K-9 educator license.

## HOW TO GET IN

This minor may only be declared by students completing Elementary Education certification in either K-9 or Middle-Childhood-through-Early-Adolescence. The declaration form is located on the School of Education's Undergraduate Admissions page and can be submitted any time after admission into the program.

## REQUIREMENTS

### CHEMISTRY MINOR PREREQUISITES

Note that students must complete prerequisite coursework before enrolling in some courses required for the minor. For example, MATH 222 Calculus and Analytic Geometry 2 and PHYSICS 201 General Physics or PHYSICS 207 General Physics must be completed before taking CHEM 561 Physical Chemistry. Prerequisite coursework may be used to meet liberal studies requirements.

### CHEMISTRY 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
<b>Introductory Chemistry</b>		
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

#### Analytical Chemistry

Select one of the following: 4-5

CHEM 327 Fundamentals of Analytical Science

CHEM 329 Fundamentals of Analytical Science

CHEM 116 Chemical Principles II

& CHEM 115 and Chemical Principles I

#### Organic Chemistry

Select one of the following 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

#### Physical Chemistry 3

CHEM 561 Physical Chemistry

or CHEM 565 Biophysical Chemistry

#### Electives

Complete Chemistry electives to total 22 credits<sup>1</sup>

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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.