

# CHEMISTRY EDUCATION MINOR

- This minor contains additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the education/teaching concentration of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the education/teaching concentration of a major or education/teaching minor in that content area.
  - Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
  - Licensure Degree Requirements (<https://catalog.umt.edu/colleges-schools-programs/education/teaching-learning/lic-secondary-licensure/>)
- To complete this minor, you need to contact the Teaching and Learning Department. Approvals for this concentration must come from the Teaching and Learning Department.
- Individuals completing this minor must also complete the education/teaching concentration of a major in another teaching content area.

## General Degree Requirements

To earn a baccalaureate degree, all students must complete successfully, in addition to any other requirements, the University of Montana General Education Requirements. Please refer to the General Education Requirements page (<https://catalog.umt.edu/academics/general-education-requirements/>) for more information.

Additional requirements for graduation can be found on the Degree/Certificate Requirements for Graduation page (<https://catalog.umt.edu/academics/graduation-requirements/>).

Unless otherwise noted in individual program requirements, a minimum grade point average of 2.00 in all work attempted at the University of Montana-Missoula is required for graduation. Please see the Academic Policies and Procedures page (<https://catalog.umt.edu/academics/policies-procedures/>) for information on how your GPA is calculated.

Courses taken to satisfy the requirements of a major, minor, or certificate program must be completed with a grade of C- or better unless a higher grade is noted in the program requirements.

## MINOR - CHEMISTRY EDUCATION

### Course Requirements

Code	Title	Hours
<b>Lower-Division Core Courses</b>		
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221	Organic Chemistry I	3
CHMY 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
<b>Upper-Division Core Courses</b>		

Complete all of the following courses:

CHMY 311	Analytical Chemistry-Quantitative Analysis	4
CHMY 373	Physical Chemistry-Kinetics & Thermodynamics	4
CHMY 485	Laboratory Safety	1
BCH 380	Biochemistry	4
or BCH 480	Advanced Biochemistry I	

### Required Courses Outside the Minor

Complete all of the following courses:

CSCI 150	Introduction to Computer Science	3
EDU 497	Teaching and Assessing	3
ENST 472	General Science: Conservation Education	3
M 162	Applied Calculus	4
or M 171	Calculus I	
PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PHSX 207N	College Physics II	4
PHSX 208N	College Physics II Laboratory	1
STAT 216	Introduction to Statistics	4

**Total Hours** 58

## Secondary Teaching Licensure

For endorsement to teach this subject, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (<https://catalog.umt.edu/colleges-schools-programs/education/teaching-learning/lic-secondary-licensure/>). For more information, see the Teaching and Learning Department webpage (<https://www.umt.edu/education/departments/currinst/default.php>).