



College of DuPage

2021/22

Western Michigan University Chemistry Curriculum Guide

The WMU Department of Chemistry offers a choice of five majors:

- **Chemistry major** - this 35-credit hour major in the College of Arts & Sciences is designed for students interested in graduate studies in chemistry. This major also suits students interested in teaching chemistry at the middle/high school level after completion of a Master of Arts in Teaching: Secondary Education.
- **Chemistry major ACS Certified** - this 42-credit hour major is certified by the American Chemical Society and is for students planning to enter the chemical industry, though it may be taken by students planning on graduate school study of chemistry.
- **Biochemistry** - this 36-credit hour major is recommended for students interested in careers in health sciences (medicine, dentistry, nutrition, pharmacology, etc.) or a graduate career in biochemistry or molecular biology.
- **Business-oriented chemistry major** - this 37-credit hour major is available to provide the chemical understanding needed if you are preparing for a career in the chemical industry, outside the laboratory. A minor will be chosen in the Haworth College of Business, and students are prepared to enter areas of management, sales, and some aspects of government service.
- **Geochemistry major** - this 68-credit hour major is designed for students interested in the fields of geochemistry or environmental chemistry and is advised in the department of Geological and Environmental Sciences.

Important Information:

- You must meet one of the following math requirements: **MATH ACT** score of 27 or higher or **MATH SAT** score of 640 or successful completion of **MATH 1110** (MATH 0482 at COD) with a grade of a "C" or higher or score 61% on the ALEKS math placement exam. More information about the ALEKS math placement can be found at <https://wmich.edu/math/placement>.
- All chemistry majors must meet with the College of Arts and Sciences chemistry advisor about major or minor, WES, and degree requirements. You must make an advising appointment to declare your major or minor.
- Chemistry majors must complete a minor (except Geochemistry). Business-oriented chemistry majors will be required to complete a minor in General Business, Management, or Marketing in the Haworth College of Business (HCoB).
- Chemistry majors must complete their last 14 credit hours in the department of Chemistry at WMU.

- Chemistry minors must complete at least 8 credits at WMU.

Courses that can be taken at COD:

WMU courses

CHEM 1100|1110
CHEM 1120|1130
CHEM 3750|3760
CHEM 3770|3780
MATH 1220
MATH 1230
MATH 2720
PHYS 2050|2060
PHYS 2070|2080

COD courses

CHEMI 1551
CHEMI 1552
CHEMI 2551 (elective for Geochem majors)
CHEMI 2552 (elective for Geochem majors)
MATH 2231
MATH 2232
MATH 2233 (elective for Geochem majors)
PHYSI 2111 (elective for Geochem majors)
PHYSI 2112 (elective for Geochem majors)

Business-oriented majors may take these courses:

BUS 1750	BUSIN 1100
MGMT 2500	MANAG 2220
MKTG 2500	MARKE 2210
ACTY 2100	ACCOU 2140

Biochemistry majors may take these courses:

BIOS 2500	BIOLO 1120
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Geochemistry majors may take these courses:

*****Very important note:** Geochemistry majors only need the following Chemistry courses: **CHEMI 1551, 1552, CHEM 2250|2260** (not available at COD), and 8 hours of **upper level Chemistry** course-work. You will also need 11 credits of **Math and General Science** (see below), and 9 credits of Geoscience electives (not available at COD).

Math and General Science or Chemistry electives:

CHEM 3750 3760	CHEMI 2551
CHEM 3770 3780	CHEMI 2552
MATH 2720	MATH 2233
PHYS 2050 2060	PHYSI 2111
PHYS 2070 2080	PHYSI 2112

General education requirements:

- Please see the [WMU Essential Studies \(WES\) transfer guide](#) for requirements for all students.
- All students graduating from the College of Arts & Sciences must meet the world language proficiency by completing two semesters (6-8 hours) of the same foreign language or American Sign Language or passing WMU's proficiency by exam. Please contact the College of Arts & Sciences Undergraduate Advising Office at (269) 387-4366 with any questions.
 - If the student's first language is not English, then the student is exempt from this requirement. Determination of eligibility for this exemption is based on whether the student was required to take the TOEFL test for admission and can be verified through the WMU departments of Spanish or World Language and Literatures.

Contact information:

College of Arts and Sciences Chemistry advisor:

Sean Williams

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wmich.edu/chemistry/advising, for appointments