

Chemistry Major for ACS Certified B.S.

The American Chemical Society certified degree program offers students exposure to each of the major sub-disciplines of chemistry: analytical, organic, inorganic, physical, and biochemical. Because this degree plan is an extended major, no minor is required. **A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. See other degree requirements below!**

Required Major Courses:

-
- CHE 1800- General Chemistry I (4)
 - CHE 1801-General Chemistry Laboratory I (1)
 - CHE 1810- General Chemistry II (4)
 - CHE 1811- General Chemistry Laboratory (1)
 - CHE 3000-Analytical Chemistry (3)
 - CHE 3010 Analytical Chemistry Laboratory (2)
 - CHE 3100- Organic Chemistry I (4)
 - CHE 3120- Organic Chemistry I Laboratory (1)
 - CHE 3110- Organic Chemistry II (3)
 - CHE 3130- Organic Chemistry II Laboratory (2)
 - CHE 3300-Inorganic Chemistry (3)
 - CHE 4100-Instrumental Analysis (3) *Spring only*
 - CHE 4110-Instrumental Analysis Laboratory (2) *Spring only*
 - CHE 4310-Biochemistry I (4)
 - CHE 4450-Physical Chemistry: Quantum Mechanics and Spectroscopy (4) *Fall only*
 - CHE 4480-Physical Chemistry: Quantum Mechanics and Spectroscopy laboratory (2)- *Fall only*
 - CHE 4460-Physical Chemistry: Thermodynamics and Kinetics (4) *Spring only*
 - CHE 4490- Physical Chemistry: Thermodynamics and Kinetics (4) *Spring only*

Electives:

A **minimum of 6 credit hours in upper-division chemistry courses** selected in consultation with and approved by the Department of Chemistry is required. CHE 4950 and CHE 4960 do **not** count as electives; however, CHE 4300 can be completed as both an elective and Senior Experience course. See Chemistry department's Planned Course Offerings handout for the full list of possible electives.

Additional Major Requirements:

Students must complete a Senior Experience course offered by the Department of Chemistry:

CHE 4300 - Advanced Inorganic Chemistry Credits (4)

OR

CHE 4950 - Senior Experience in Chemistry Credits (3)

OR

CHE 4960 - Senior Experience in Biochemistry Credits (3)

Required Non-Chemistry Courses:

-
- MTH 1410- Calculus I (4)
 - MTH 2410- Calculus II (4)
 - MTH 2420- Calculus III (4)

Select one of these two options:

Option I:

- PHY 2010- College Physics I (4)
- PHY 2030- College Physics I Laboratory (1)
- PHY 2020- College Physics II (4)
- PHY 2040- College Physics II Laboratory (1)

Option II:

- PHY 2311- General Physics I (4)
- PHY 2321- General Physics I Laboratory (1)
- PHY 2331- General Physics II (4)
- PHY 2341- General Physics II Laboratory (1)

Required General Studies (min 33cr.):

English (6)	Arts and Humanities (6)	Social & Behavioral Sciences (6)
Math (4) - MTH 1110	Historical (3)	Global Diversity (3- can "double-dip")
Oral Comm (3)	Natural & Physical Sciences (5) - Physics	Multicultural (3 - can "double-dip")

