

Chemistry Major (52 credit hours)

2018-2019

Major Requirements:

(CHEM 1000 and 2700 do not apply toward the major)

40 credit hours from:

- CHEM 2110, General Chemistry I, 4 credit hours
- CHEM 2120, General Chemistry II, 4 credit hours
- CHEM 2210, Organic Chemistry I, 4 credit hours
- CHEM 2220, Organic Chemistry II, 4 credit hours
- CHEM 3100, Analytical Chemistry, 4 credit hours
- CHEM 4510, Senior Physical Science Practicum I, 1 credit hour
- CHEM 4520, Senior Physical Science Practicum II, 1 credit hour
- CHEM 4910, Science Seminar I, 1 credit hour
- CHEM 4920, Science Seminar II, 1 credit hour
- MATH 2010, Calculus I, 4 credit hours
- MATH 2020, Calculus II, 4 credit hours
- PHYS 2240, General Physics I, 4 credit hours
- PHYS 2250, General Physics II, 4 credit hours

4 credit hours from:

- CHEM 4110, Thermodynamics and Kinetics, 4 credit hours
- CHEM 4120, Quantum Theory, 4 credit hours

8 credit hours remaining from additional upper-division (3000- level and above) CHEM courses

Proposed course sequence:

Freshman: CHEM 2110, MATH 2010; CHEM 2120, MATH 2020

Sophomore: CHEM 2210; CHEM 2220, PHYS 2240

Junior: CHEM 3100, CHEM Elective, PHYS 2250; CHEM Elective

Senior: CHEM 4110/4120, 4510, 4910; CHEM 4520, 4920

- CHEM 2110, General Chemistry I, is a Scientific Ways of Knowing course in the Liberal Arts Program.
- CHEM 3100, Analytical Chemistry, is a Writing Intensive course in the Liberal Arts Program.
- CHEM 4910/4920, Science Seminar I/II, is both a Speaking & Writing Intensive course in the Liberal Arts Program.
- MATH 2010, Calculus I, is a Quantitative Reasoning course in the Liberal Arts Program.

Chemistry Major Suggested Course Sequence

2018-2019

SEMESTER 1		SEMESTER 2	
CHEM 2110	4 Hours	CHEM 2120	4 Hours
MATH 2010	4 Hours	MATH 2020	4 Hours
ENGL 1100/ENGL 1110	3-4 Hours	ENGL 1120	3 Hours
LART 1050	1 Hour	LART 1100	2 Hours
COMM 1000	3 Hours	Personal Wellness	2 Hours

SEMESTER 3		SEMESTER 4	
CHEM 2210	4 Hours	CHEM 2220	4 Hours
Civic Ways of Knowing	3 Hours	PHYS 2240	4 Hours
Foreign Language	4 Hours	BIBL 2000	3 Hours
		Aesthetic Ways of Knowing	3 Hours

SEMESTER 5		SEMESTER 6	
CHEM 3100	4 Hours	CHEM Elective (3000 or higher)	4 Hours
CHEM Elective (3000 or higher)	4 Hours	Global/Intercultural	3 Hours
PHYS 2250	4 Hours	Elective	3 Hours
Social & Behavioral Ways of Knowing	3 Hours	Elective	3 Hours

SEMESTER 7		SEMESTER 8	
CHEM 4110 or 4120	4 Hours	CHEM 4520	1 Hour
CHEM 4510	1 Hour	CHEM 4920	1 Hour
CHEM 4910	1 Hour	Elective	3 Hours
Christian Ways of Knowing	3 Hours	Elective	3 Hours
Elective	3 Hours		

The study of chemistry introduces students to the world of atoms and molecules and their composition and interactions. This study is recommended for chemistry majors and minors as preparation for graduate school, medical school, secondary-level teaching, or careers in government or industrial laboratories. It is also recommended for physics or biology students to supplement and complement their major fields of study.

Among the CHEM Electives (3000 or higher), students must take CHEM 4110 or CHEM 4120.