

Chemistry • Bachelor of Arts

Why Choose Chemistry?

Chemistry is the central science and thus provides the framework for our understanding of a wide variety of natural phenomena, societal issues, and advances in technology. Students with good math backgrounds and with interest in scientific thought and reasoning will find the Chemistry BA to be a satisfying and challenging degree. Chemistry students build skills in critical thinking, problem solving, communication, and teamwork, making them marketable in a wide variety of fields. Students complete a curriculum of 34 hours of chemistry courses, including some courses chosen based on their interest. Depending on their interests and career goals, chemistry majors select a wide variety of minors including marketing/sales, English/professional writing, biology, and forensic science. Chemistry students often participate in undergraduate research projects as well.

Professional Opportunities

The Chemistry major provides an excellent background for a wide variety of careers in science or in science-related fields, some involving further education. These include but are not limited to careers in chemistry, medicine, dentistry, education, environmental science, forensic science, pharmaceutical sales, and scientific writing.

Admission Requirements

First year student admission is open to high school graduates (or equivalent) who demonstrate academic preparedness, maturity and seriousness of purpose with educational backgrounds appropriate to their chosen program of study. High school courses and grade point average, ACT composite score, and ACT reading and mathematics subscores will be considered in the admission and placement process. Transfer students must have at least 12 credits at the time of application with a minimum 2.0 overall GPA including an English and mathematics course, or they must provide their high school records and ACT scores for admission review.

Graduation Requirements

In order to graduate with a Bachelor of Arts in Chemistry, a student must complete a minimum of 120 credit hours including the Chemistry major, the BA core, an academic minor in another field of study, and all general education requirements for the Bachelor of Arts degree. No grade lower than 'C' will count toward the major.

Required Courses

Credit Hours

General Education

This degree requires completion of the General Education requirements for a Bachelor of Arts degree. Details of these requirements are delineated on the General Education website. Courses listed below as program/major required courses with the indicators: C, S, Z, R, G, may also be used to satisfy some of these general education requirements.

Major

CHEM 121	General Chemistry 1 *Z	5
CHEM 122	General Chemistry 2 *Z	5
CHEM 231	Quantitative Analysis *Z	4
CHEM 321	Organic Chemistry 1*Z	5
CHEM 322	Organic Chemistry 2*Z	5
CHEM 451	Intro to Physical Chemistry*Z	4
MATH 220	Analytical Geometry & Calculus 1	5
Choose one sequence:		
PHYS 211	Introductory Physics	4
AND		
PHYS 212	Introductory Physics 2*Z	4
OR		
PHYS 241	General Physics 1 *Z	5
AND		
PHYS 242	General Physics 2 *Z	5
Electives: Select a minimum of 6 credits		
CHEM 317	Instrumental Analysis *Z	3
CHEM 332	Biochemistry Lab 1*Z	2
CHEM 333	Biochemistry Lab 2*Z	2
CHEM 364	Biochemistry*Z	4

An academic minor of 18-24 credits is required. Any approved minor is allowed except teacher education minors. Students should consult their major advisor.

B.A. Core 3-15 Credits

The BA core consists of one COMM course and proficiency in a foreign language through the 201 level.



More Information

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FERRIS STATE UNIVERSITY

C O L L E G E O F A R T S & S C I E N C E S