

# Minor in Chemistry

## Why study chemistry?

At KU Chemistry, we have faculty dedicated to mentoring both undergraduate and graduate students and to helping each student achieve scientific maturity. In addition to required classroom and laboratory courses, options exist for doing research in exciting areas of mainstream chemistry, including emerging fields of microfluidics, precision medicine and sustainable catalysis.

## Undergraduate Program

The undergraduate program in the Department of Chemistry has two primary missions. One of these is to help its majors attain a mastery of the discipline in preparation for further study in chemistry or a chemical science, or for immediate employment in chemistry. The other is to provide an opportunity for students majoring in other disciplines to acquire a basic knowledge of the fundamental areas of chemistry.

The curriculum leading to the **Bachelor of Science (B.S.)** degree, a rigorous program certified by the American Chemical Society, consists of a full spectrum of chemistry courses as well as supporting courses in mathematics and physics, and is designed to prepare students for a professional career in chemistry. The **Bachelor of Arts (B.A.)** degree program, with fewer required courses, allows students to obtain a broader knowledge of areas outside of chemistry, or to tailor their chemistry program for specific or unique objectives. We also offer a **minor** in chemistry for those seeking a secondary area of study.

## Requirements for the Minor

The minor allows many non-chemistry majors to obtain a strong, distributed background in the discipline. It is particularly useful for students in STEM fields or pre-professional programs that require at least one year of chemistry coursework but whose career plans would be enhanced by a deeper understanding of the molecular sciences. Due to extensive overlap in required chemistry coursework, the Chemistry minor is not available to students majoring in Biochemistry and Chemical Engineering.

Code	Title	Hours
Chemistry Minor Course Requirements		
Students selecting this minor must complete the following:		
<b>Mathematics and Physics</b>		
Mathematics: (choose one of the following (MATH 115 & MATH 116 recommended))		
MATH 115 & MATH 116	Calculus I and Calculus II	
MATH 125 & MATH 126 & MATH 127	Calculus I and Calculus II and Calculus III	
Physics: (Choose one of the following (PHSX 114 & PHSX 115 recommended))		
PHSX 114 & PHSX 115	College Physics I and College Physics II	
PHSX 211 & PHSX 216 & PHSX 212 & PHSX 236	General Physics I and General Physics I Laboratory and General Physics II and General Physics II Laboratory	

## Chemistry Courses

Chemistry I. Satisfied by one of the following (CHEM 170 recommended):		5
CHEM 170	Chemistry for the Chemical Sciences I	
CHEM 130	General Chemistry I	
CHEM 190 & CHEM 191	Foundations of Chemistry I, Honors and Foundations of Chemistry I Laboratory, Honors	
Chemistry II. Satisfied by one of the following (CHEM 175 recommended):		5
CHEM 175	Chemistry for the Chemical Sciences II	
CHEM 135	General Chemistry II	
CHEM 195 & CHEM 196	Foundations of Chemistry II, Honors and Foundations of Chemistry II Laboratory, Honors	
Organic Chemistry I. Satisfied by one of the following:		3
CHEM 330	Organic Chemistry I	
CHEM 380	Organic Chemistry I, Honors	
Organic Chemistry Lab I. Satisfied by:		2
CHEM 331	Organic Chemistry I Laboratory	
<b>Chemistry Required Elective Group I</b>		<b>5</b>
Students selecting this minor must complete one of the following:		
Analytical Chemistry Lecture and Laboratory. Satisfied by:		
CHEM 400 & CHEM 401	Analytical Chemistry and Analytical Chemistry Laboratory	
Physical Chemistry Lecture and Lab. Satisfied by one of the following (CHEM 510 & 511 recommended):		
CHEM 510 & CHEM 511	Biological Physical Chemistry and Biological Physical Chemistry Laboratory	
CHEM 530 & CHEM 535 & CHEM 537	Physical Chemistry I and Physical Chemistry II and Physical Chemistry Laboratory	
<b>Chemistry Required Elective Group II</b>		<b>3-4</b>
Students selecting this minor must complete one of the following:		
Physical Chemistry Lecture. Satisfied by one of the following (CHEM 510 Recommended):		
CHEM 510	Biological Physical Chemistry or CHEM 53 Physical Chemistry I	
Systematic Inorganic Chemistry. Satisfied by:		
CHEM 660	Inorganic Chemistry	
<b>Total Hours</b>		<b>23-24</b>

\*Students who select this option for Elective Group I cannot take CHEM 510 or CHEM 530 from Elective Group II.

## Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

### Minor Hours

Satisfied by 23-24 hours of minor courses.

### Minor Hours in Residence

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

### Minor Junior/Senior Hours

Satisfied by a minimum of 13 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (<https://sis.ku.edu/gpa-calculator/>).