The Bachelor of Arts Degree in Chemistry (B.A.)

The BA curriculum is intended for students who want a background in Chemistry as a basis for future work in other areas of science, such as the life sciences, or in professional areas such as medicine, pharmacy or veterinary science.

- General Chemistry 1610–1620 and Organic Chemistry 2610–2620 are the recommended sequences for chemistry and biochemistry majors, although qualified students are urged to take Honors sequences instead.
- The major is completed with 9 hours of Advanced Science Electives, which must include at least 3 hours of upper-level chemistry or biochemistry coursework.

Examples of Advanced Science Electives:
- Chem 3510 (Inorganic-3)*
- Chem or Biochem 4998/4999 (Research)
- Chem 5230 (Neurotransmitter-3)*
- Chem 5420 (Organic Spectroscopy-1.5)*
- Chem 5430 (Carbohydrates-3)*
- Chem 5440 (Computational-3)*
- Chem 5520 (Nanochemistry-3)*
- Biochemistry 4511 (4)
- Microbiology 4000 (4)
- Molecular Genetics 4500 (3)
- Most 2000-4000 level courses in Math
- Other non-required graded Chem and Biochem 4000-6000 level courses
- Approved 4000-6000 level courses in Microbiology, Molecular Genetics, Physics, Food Science, and EEOB

- Undergraduate Research (Chem or Biochem 4998/4999) is recommended. A maximum of 6 hours of research may be used to fulfill the requirements of the major.

### Autumn Semester (Year 1) | Spring Semester (Year 1)
---|---
General Chemistry 1 (1910H* 1610, 1210) 5 | General Chemistry 2 (1920H* 1620b, 1220) 5
PLTL in Gen Chem (1612)* 1 | PLTL in Gen Chem (1622)b 1
Calculus 1 (Math 1151) 5 | Calculus 2 (Math 1152) 5
GE (World Language) 4 | GE (World Language) 4
Freshman Survey (ARTSSCI 1100.10)* 1 | Launch Seminar 1 1
16 | 16

### Autumn Semester (Year 2) | Spring Semester (Year 2)
---|---
Analytical Chemistry 1 (2210) 5 | Organic Chemistry 2 (2920H* 2620, 2520) 4
Organic Chemistry 1 (2910H* 2610, 2510) 4 | Organic Chemistry Laboratory 2 (2550) 2
Organic Chemistry Laboratory 1 (2540) 2 | Physics 2 (1201 or 1251) 5
Physics 1 (1200 or 1250) 5 | Biology 1113 4
16 | 15

### Autumn Semester (Year 3) | Spring Semester (Year 3)
---|---
Physical Chemistry 1 (Biochem 5721)* 3 | Physical Chemistry 2 (Biochem 5722)b 3
Advanced Science Elective 4 | Physical Chemistry Laboratory (4410) 3
GE (World Language) 4 | Advanced Science Elective 3
GE (Foundations) 3 | GE (Foundations) 3
Elective 3 | GE (Themes) 4
17 | 16

### Autumn Semester (Year 4) | Spring Semester (Year 4)
---|---
GE (Foundations) 3 | Advanced Science Elective 3
GE (Foundations) 3 | GE (Foundations) 3
GE (Themes) 3-4 | GE (Themes) 3-4
Elective 3 | Elective 3
Reflection Seminar 1 | 1
12-13 | 13-14

*Only offered in autumn semester (bold)
*Only offered in spring semester (bold)