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) ^a | Biochemistry 4511 (4) | | | |
| Chem or Biochem 4998/4999 (Research) | Microbiology 4000 (4) | | | |
| Chem 5230 (Neurotransmitter-3) ^b | Molecular Genetics 4500 (3) | | | |
| Chem 5420 (Organic Spectroscopy-1.5)^b Chem 5430 (Carbohydrates-3)^b Chem 5440 (Computational-3)^a Chem 5520 (Nanochemistry-3)^b | 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 ^a , 1610 ^a , 1210) | 5 | General Chemistry 2 (1920H ^b , 1620 ^b , 1220) | 5 |
| PLTL in Gen Chem (1612) ^a | 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) ^a | 1 | Launch Seminar | 1 |
| | 16 | | 16 |
| Autumn Semester (Year 2) | | Spring Semester (Year 2) | |
| Analytical Chemistry 1 (2210) | 5 | Organic Chemistry 2 (2920H ^b , 2620 ^b , 2520) | 4 |
| Organic Chemistry 1 (2910H ^a , 2610 ^a , 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) ^a | 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 |
| | 12-13 | | 13-14 |

^aOnly offered in autumn semester (bold)

^bOnly offered in spring semester (bold)