Chemistry Major: Curriculum and Requirements

Students majoring in Chemistry can meet their major requirements by completing courses in the core curriculum and selecting additional electives within a single area of concentration (Chemical, Educational, Environmental, Geochemical or Neurochemical).

**Core Curriculum (7 courses)**

- **Chemistry Courses**
  - Introductory or General Chemistry (Chem 1092 or Chem 1102 or Chem 1109 or AP/IB Credit or Placement)
  - Chemical Analysis (Chem 2100)
  - Organic Chemistry I (Chem 2250)
  - Inorganic Chemistry (Chem 2400)

- **Mathematics Courses**
  - Integral Calculus (Math 1700 or 1750 or placement higher than Math 1750)

- **Physics Courses**
  - Introductory Physics I (Physics 1130)
  - Introductory Physics II (Physics 1140)

**Areas of Concentration (5-7 courses)**

### Chemical (5 courses)
- Organic Chemistry II
- Chemical Thermodynamics and Kinetics
- Quantum Chemistry and Spectroscopy
- Chem. Elective #1*
- Chem. Elective #2*

### Educational (7 courses)
- Chemical Thermodynamics and Kinetics OR Quantum Chemistry and Spectroscopy
- Contemporary American Education
- Educating all Students
- Teaching and Learning
- Curriculum Development
- Chem. Elective #1*
- Chem. Elective #2*

### Environmental (5 courses)
- Chemical Thermodynamics and Kinetics
- FOUR electives
  - At least TWO molecular perspective courses in Chemistry*
  - At least ONE environmental perspectives course offered by Biology, EOS, or Physics*

### Geochemical (5 courses)
- Chemical Thermodynamics and Kinetics
- Environmental Chemistry
- Instrumental Analysis
- TWO elective geochemical courses offered by EOS*

### Neurochemical (7 courses)
- Biological Principals II or Scientific Reasoning in Biology
- Organic Chemistry II
- Biochemistry
- Chemical Thermodynamics and Kinetics OR Quantum Chemistry and Spectroscopy
- TWO neurochemical electives*
- ONE 3000-level neuroscience course*

* Lists of electives relevant to each concentration are found in the Academic Catalog or Navigating the Chemistry Major form.