### BACHELOR OF SCIENCE IN CHEMISTRY

**Major**: Chemistry - BS  
**Catalog**: 2017-2018  
**Adviser**:  
**Ant Grad**:  

#### MAJOR COURSES

Minimum 10 courses; Minimum 30 credits required; 19 credits must be from SU

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Grade Credit</th>
<th>Required Supporting Course</th>
</tr>
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<tbody>
<tr>
<td>CHE51-153</td>
<td>Principles of General Chemistry</td>
<td></td>
<td>MAT52-254 Calculus II</td>
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<tr>
<td>CHE51-143</td>
<td>Principles of General Chemistry w/ Tutorial</td>
<td></td>
<td>B.S. Core Courses:</td>
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<tr>
<td>CHE51-151</td>
<td>Chemical Methods and Techniques Lab</td>
<td></td>
<td>BIO50-123 Living Systems</td>
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<tr>
<td>CHE51-163</td>
<td>Chemical Kinetics &amp; Equilibrium</td>
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<td>BIO50-121 Investigation into Living Systems</td>
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<tr>
<td>CHE51-161</td>
<td>Chemical Kinetics &amp; Equilibrium Lab</td>
<td></td>
<td>BIO50-133 Molecular and Population Genetics</td>
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<tr>
<td>CHE51-622</td>
<td>Chemistry Literature Seminar</td>
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<td>BIO50-131 Investigation into Genetics</td>
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<tr>
<td>CHE51-912</td>
<td>Senior Research Capstone</td>
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<td>MAJOR 0</td>
</tr>
<tr>
<td>CHE51-922</td>
<td>Senior Literature Seminar Capstone</td>
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<td>MAJOR 0</td>
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Select one from the following (Courses MUST be taken at SU):

- CHE51-153 or 143 Principles of General Chemistry  
- CHE51-151 or 141 Chemical Methods and Techniques Lab  
- CHE51-163 Chemical Kinetics & Equilibrium

Select one from the following Capstones:

- CHE51-153 or 143 Principles of General Chemistry  
- CHE51-163 Chemical Kinetics & Equilibrium

Select one course from each of the five areas below (Courses MUST be taken at SU):

**Analytical:**
- CHE51-644 Instrumentation in Env. & Biological Analysis
- CHE51-564 General Biochemistry I for Majors
- CHE51-584 General Biochemistry II
- CHE51-634 Inorganic Chemistry & Biological Systems
- CHE51-543/541 Organic Chemistry and Lab
- CHE51-553/561 Organic Chemistry for Majors or Org Chem II
- CHE51-714 Physical Chemistry. Thermodynamics & Kinetics
- CHE51-724 or 424 Physical Chemistry: Quantum Mech & Stat Mechanics OR Quantum Physics

**Biochemistry:**
- CHE51-644 Instrumentation in Env. & Biological Analysis
- CHE51-564 General Biochemistry I for Majors
- CHE51-584 General Biochemistry II
- CHE51-634 Inorganic Chemistry & Biological Systems

**Inorganic:**
- CHE51-644 Instrumentation in Env. & Biological Analysis
- CHE51-564 General Biochemistry I for Majors
- CHE51-584 General Biochemistry II
- CHE51-634 Inorganic Chemistry & Biological Systems

**Organic:**
- CHE51-644 Instrumentation in Env. & Biological Analysis
- CHE51-564 General Biochemistry I for Majors
- CHE51-584 General Biochemistry II
- CHE51-634 Inorganic Chemistry & Biological Systems

**Physical:**
- CHE51-644 Instrumentation in Env. & Biological Analysis
- CHE51-564 General Biochemistry I for Majors
- CHE51-584 General Biochemistry II
- CHE51-634 Inorganic Chemistry & Biological Systems

**University Electives and/or Minor (optional):**

#### GENERAL EDUCATION REQUIREMENTS

At least 30 total credits required, minimum 3 credits required per course

**General Education Part I**

- **Exploration & Breadth - GE Part II**
  - Select one course from each of the four following areas:
    - **Humanities:**
      - Social Justice Course (may double count with any requirement):
        - MAT52-254 Calculus II
    - **Natural Sciences:**
      - *Public Speaking, College Writing and Creative Writing courses may not count in Exploration & Breadth requirements.*
    - **Social Sciences:**
      - *Public Speaking, College Writing and Creative Writing courses may not count in Exploration & Breadth requirements.*
    - **Fine Arts:**

**Total Earned Credits:**

- 0

**Total Southwestern Credits:**

- 0

**Total Major Credits:**

- 0

**Total Gen Ed Credits:**

- 0

**Notes:**

- Minimum of 127 credits:
  - Cumulative GPA > 2.0
  - GPA > 2.0 for Major, Minor and/or Areas of Concentration
  - Less than C- grade in major/minor/core?
  - At least 64 credits completed at Southwestern*
  - No more than 56 credits of any 5 digit prefix**
  - Major credits completed (min 30 required)
  - 60% of Major courses completed at Southwestern (19cr)
  - 50% of Major courses are upper level (16cr)

**Minor (optional):**

- Minimum 18 credits
- Minimum 12 upper level credits
- Minimum of 12 credits taken at Southwestern

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*Public Speaking, College Writing and Creative Writing courses may not count in Exploration & Breadth requirements.*

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**Additional Note:**

A "C" average on all work attempted is required for graduation. No grade below "C-" may be counted toward the major or minor. At least 127 credits are required to earn a degree at Southwestern. These 127 credits include 64 credits that must be completed in residence, including the last 32 credits. No more than 56 credit hours may be counted in one subject area. A major requires at least 30 credits, more than 50% upper-level, and a minor (optional) requires at least 18 credits (at least 12 upper-level). 60% of the major credits and 12 minor credits must be completed in residence at SU. With the exception of FRAs and the FY/AES seminar, all gen.ed. requirements require a minimum of 3 credits, including Fine Arts Performance. For a complete list of graduation requirements, see catalog.
Minimum 2.0 minor courses CGPA

Other:
Degree Audit Completed (Due one year before grad date)
Grad Application Submitted (Due start of final semester)