Chemistry examines the composition, structure, properties, and changes to stuff at the nanometer scale; this is the molecular and atomic scale. Chemists understand the world in terms of how these molecular and atomic units interact: Are the molecules bound to one another? Does one molecule effect how fast a chemical reaction happens? How does molecular component X interact with light in the fingernail polish formulation Y-126 after the brushed film dries on the cuticle? And a zillion other questions around which we can modify outcomes by modifying molecules. Often working to answer these questions can be very lucrative. Chemists have advanced understanding in everything from life to matter in outer space to probable extraterrestrial life in terms of atomic and molecular components. In very basic terms chemistry is the central argument in many other sciences and professions; an education in Chemistry opens many doors.

Freshman Year

**FALL SEMESTER**

- CHE 105 - GENERAL COLLEGE CHEMISTRY I - 4
- CHE 111 - LABORATORY TO ACCOMPANY GENERAL CHEMISTRY I - 1
- UK 101 - ACADEMIC ORIENTATION - 1
- UK Core - Comp. & Comm. I - 3
- Pre-Major Math Selection - 3
- UK Core - Arts and Creativity - 3

**SPRING SEMESTER**

- CHE 107 - GENERAL COLLEGE CHEMISTRY II - 3
- CHE 113 - GENERAL CHEMISTRY II LABORATORY - 2
- Pre-Major Math Selection - 4
- UK Core - Humanities - 3

**TOTAL HOURS: 16**

Total Freshman Hours: 31

Sophomore Year

**FALL SEMESTER**

- CHE 230 - ORGANIC CHEMISTRY I - 3
- CHE 231 - ORGANIC CHEMISTRY LABORATORY I - 1
- PHY 211 - GENERAL PHYSICS - 5
- UK Core - Statistical Inferential Reason - 3
- UK Core - Social Sciences - 3

**SPRING SEMESTER**

- CHE 226 - ANALYTICAL CHEMISTRY - 3
- CHE 232 - ORGANIC CHEMISTRY II - 3
- CHE 233 - ORGANIC CHEMISTRY LABORATORY II - 1
- PHY 213 - GENERAL PHYSICS - 5
- UK Core - Community, Culture and Citizen - 3

**TOTAL HOURS: 15**

Total Sophomore Hours: 30

Junior Year

**FALL SEMESTER**

- CHE 440G - INTRODUCTORY PHYSICAL CHEMISTRY - 3
- WRD 310 - WRITING IN THE NATURAL SCIENCES - 3
- Foreign Language 101 - 4
- Major Field Option Selection - 3
- A&S Humanities (100+ level) - 3

**SPRING SEMESTER**

- CHE 441 - PHYSICAL CHEMISTRY LABORATORY - 2
- Foreign Language 102 - 4
- Major Field Option Selection - 3
- A&S Social Sciences (100+ level) - 3
**Senior Year**

**FALL SEMESTER**
- Foreign Language 201 - 3
- Major Field Option Selection - 3
- Major Field Option Selection - 3
- UK Core - Global Dynamics - 3
- A&S Humanities (100+ level) - 3

**TOTAL HOURS: 15**

**SPRING SEMESTER**
- Major Field Option Selection - 3
- Major Field Option Selection - 3
- A&S Social Sciences (100+ level) - 3
- A&S Approved Elective (300+ level) - 3
- A&S Approved Elective (100+ level) - 3

**TOTAL HOURS: 15**

**Total Senior Hours: 30**

**Total Minimum hours Required for Degree: 122 hours**