A. Professional Track (Program A)

**Required Lower-Division Courses: 30 units**

- CHM 005, 006 General Chemistry I, II (4,4)
- MA 009, 010 Elementary Calculus I, II (4,4)
- MA 019 Multivariable Calculus (4)
- PHY 021, 023 General Physics I, II (4,4)
- PHY 022, 024 Introductory Physics Laboratory I, II (1,1)

**Recommended Lower-Division Courses:**

- BIO 005 General Biology I (4)
- CS 010 Introduction to Computer Science I (4)
- PHY 040 Differential Equations (4)
- GER 001, 002 Elementary German I, II (4,4)

**Required Upper-Division Courses: 39-40 units**

- CHM 101, 102 Organic Chemistry I, II (4,4)
- CHM 104 Advanced Inorganic Chemistry (4)
- CHM 113 Biochemistry (4)
- CHM 121 Introductory Analytical Chemistry (4)
- CHM 122 Advanced Analytical Chemistry (2,3)
- CHM 130, 131 Physical Chemistry I, II (3,3)
- CHM 132, 133 Physical Chemistry Laboratory I, II (1,1)
- CHM 195 Seminar (1)
- CHM 198 Chemical Research (4)

*One of the following (4-5)*

- PHY 142/143 Circuits and Electronics/Electronics Laboratory (4,1)
- CHM 115 Advanced Biochemistry (4)
- CHM 150 Special Topics (4)
- CHM 160 Advanced Organic Chemistry (4)

All graduating majors in the professional track are required to take the Graduate Record Exam in their senior year.
B. General Track (Program B)

**Required Lower-Division Courses: 25-26 units**

- CHM 005, 006 General Chemistry I, II (4,4)
- MA 009, 010 Elementary Calculus I, II (4,4)
- One of the following combinations: (9-10)
  - PHY 011, 013 Physics for Life Sciences I, II (4,4)
  - PHY 014 Physics for Life Sciences Laboratory (1)
    OR
  - PHY 021, 023 General Physics I, II (4,4)
  - PHY 022, 024 General Physics Laboratory I, II (1,1)

**Required Upper-Division Courses: 29-30 units**

- CHM 101, 102 Organic Chemistry I, II (4,4)
- CHM 121 Introductory Analytical Chemistry (4)
- CHM 122 Advanced Analytical Chemistry (2,3)
- CHM 195 Seminar (1)
- CHM 198 Research (2)
- One of the following combinations: (4)
  - CHM 130 Physical Chemistry I (3)
  - CHM 132 Physical Chemistry Laboratory I (1)
    OR
  - CHM 135 Introductory Physical Chemistry (3)
  - CHM 132 or 133 Physical Chemistry Laboratory I or II (1)

*Upper-Division CHM Electives (8)*