Chemical (Biochemical) Engr.

**FIRST YEAR**

**FALL**
- CHE 120
- MATH 126
- ENGR 102
- CHE 105aL
- GEN ED

**SPRING**
- CHE 305
- CHE 350
- CHE 330
- CHE 444aL
- OPTIONAL ELECTIVE

**SECOND YEAR**

**FALL**
- CHE 443
- CHE 442
- CHE 444bL
- CHE 444cL
- CHEM 322aL

**SPRING**
- CHE 460L
- CHE 480
- CHE 485
- BME 410
- GEN ED

**THIRD YEAR**

**FALL**
- CHE 447
- WRIT 340
- BISC 300L
- GEN ED

**SPRING**
- CHE 489
- GEN ED
- GEN ED

**FOURTH YEAR**

**FALL**
- CHE 305
- CHE 330
- CHE 444aL
- CHE 444bL
- CHE 444cL

**SPRING**
- CHE 480
- CHE 485
- BME 410
- BISC 330L

---

**ENGINEERING**

- CHE 120: Introduction to Chemical Engineering
- CHE 305: Numerical & Statistical Analysis for Chemical Engineers
- CHE 330: Chemical Engineering Thermodynamics
- CHE 350: Introduction to Separation Processes
- CHE 442: Chemical Reactor Design
- CHE 444aL: Chemical Engineering Lab
- CHE 444bL: Chemical Engineering Lab
- CHE 447: Heat & Mass Transfer in Chemical Engineering Processes
- CHE 460L: Chemical Process Dynamics & Control
- CHE 480: Chemical Process & Plant Design
- CHE 485: Computer-Aided Chemical Process Design
- CHE 489: Biomedical Engineering
- BME 410L: Introduction to Biomaterials & Tissue Engineering
- ENGR 102: Engineering Freshman Academy

**MATHEMATICS**

- MATH 125: Calculus I
- MATH 126: Calculus II
- MATH 226: Calculus III
- MATH 245: Mathematics of Phys. & Engr.

**SCIENCE**

- BISC 300L: Introduction to Microbiology
- BISC 320L: Molecular Biology
- BISC 330L: Biochemistry
- CHEM 105abL: General Chemistry
- CHEM 322aL: Organic Chemistry
- CHEM 430: Physical Chemistry: Thermodynamics & Kinetics
- PHYS 151L: Mechanics & Thermodynamics
- PHYS 152L: Electricity & Magnetism

**GENERAL EDUCATION**

As a USC Viterbi student, your General Education (Gen Ed) curriculum will include courses in the Arts, Humanistic Inquiry and Social Analysis.

**WRITING**

- WRIT 150: Writing & Critical Reasoning
- WRIT 340: Advanced Writing

**ELECTIVES**

Your optional electives are one way to build engineering+ into your curriculum by choosing classes of interest to you.

Courses with this symbol may be satisfied with certain AP, IB or A-Level exams. With each requirement you replace with prior credit, you increase your optional electives, creating more flexibility for you to pursue additional electives and increase your engineering+ education.

This is a simplified version of a complex curriculum with options and choices made between advisor and student. Course choices can vary by semester and adjust to include relevant topics and materials. Although every attempt has been made to ensure accuracy, the program requirements listed in the USC Catalogue supersede any information which may be contained in this or any other publication of any school or department. The information found in this document is not intended for advising purposes. The University reserves the right to change its policies, rules, regulations, requirements and course offerings at any time.