






Chemical (Sustainable Energy) Engr.

| FIRST YEAR | | SECOND YEAR | | THIRD YEAR | | FOURTH YEAR | |
|--|--|----------------------|------------|------------|-----------------------------------|----------------------|-------------------------|
| FALL | SPRING | FALL | SPRING | FALL | SPRING | FALL | SPRING |
| CHE 120 |  MATH 126 | CHE 305 | CHE 350 | CHE 443 | CHE 442 | CHE 460L | CHE 480 |
| ENGR 102 | CHEM 105bL | CHE 330 | CHE 444aL | CHE 444bL | CHE 444cL | CHE 485 | CHE 476 or MASC 350L |
|  MATH 125 | WRIT 150 | MATH 226 | MATH 245 | CHE 450 | CHE 447 | WRIT 340 | CHEMISTRY ELECTIVE |
|  CHEM 105aL |  GEN ED | PHYS 151L | PHYS 152L | CHEM 430 | SUSTAINABLE ENERGY ELECTIVE | GEN ED | GEN ED |
|  GEN ED | OPTIONAL ELECTIVE | OPTIONAL ELECTIVE | CHEM 322aL | GEN ED | GEN ED | OPTIONAL ELECTIVE | OPTIONAL ELECTIVE |

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 443: Viscous Flow
CHE 444aL: Chemical Engineering Lab
CHE 444bL: Chemical Engineering Lab
CHE 444cL: Chemical Engineering Lab
CHE 447: Heat & Mass Transfer in Chemical Engineering Processes
CHE 450: Sustainable Energy
CHE 460L: Chemical Process Dynamics & Control
CHE 476: Chemical Engineering Materials
CHE 480: Chemical Process & Plant Design
CHE 485: Computer-Aided Chemical Process Design
ENGR 102: Engineering Freshman Academy
MASC 350L: Nanostructured Materials: Design, Synthesis & Processing
SUSTAINABLE ENERGY ELECTIVES: Specialized upper division courses you choose for your major/specialization.

MATHEMATICS

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

SCIENCE

CHEM 105aL: General Chemistry
CHEM 322aL: Organic Chemistry
CHEM 430: Physical Chemistry: Thermodynamics & Kinetics
CHEMISTRY ELECTIVES: Specialized Upper Division courses you choose for your major/specialization
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.