

# Chemical Engineering

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	EMPHASIS ELECTIVE
MATH 125	WRIT 150	MATH 226	MATH 245	CHE ELECTIVE	CHE 447	WRIT 340	CHEMISTRY ELECTIVE
CHEM 105aL	GEN ED	PHYS 151L	PHYS 152L	CHEM 430	ENGR 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 460L:** Chemical Process Dynamics & Control  
**CHE 480:** Chemical Process & Plant Design  
**CHE 485:** Computer-Aided Chemical Process Design  
**ENGR 102:** Engineering Freshman Academy  
**CHE, ENGR, & EMPHASIS 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

**BISC 220L:** Cell Biology & Physiology  
**BISC 320L:** Molecular Biology  
**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.*