COLUMBIA COLLEGE

UNIVERSITY OF SOUTH CAROLINA

Transfer Pathway
Columbia College -to-USC Columbia

B.S. Chemistry
B.S.E. in Chemical Engineering

FIRST YEAR (Take at Columbia College)	
Fall Semester	
Columbia College Course	**USC Chemical Engineering Course**
LA 100 - First Year Experience I: Strategies for Success	UNIV 001T for ECHE 101
ENG 101 - Analytical Thinking, Writing, and Research	ENGL 101 - Critical Reading & Comp
BIO 110 - Foundations of Biology	Tech Elective BIOL 101 and 101L
CHEM 121- General Chemistry I	CHEM 111 and 111L
MATH 161- Calculus I	MATH 141 - Calculus I
Spring Semester	
Columbia College Course	**USC Chemical Engineering Course**
LA 110- First Year Experience II: Strategies for Inquiry	
ENG 102 - Writing about Literature	ENGL 102 - Rhetoric and Composition
CHEM 122- General Chemistry II	CHEM 112 and 112L - General Chemistry II and Lab
CHEM 101- Science Seminar	--
MATH 162 - Calculus II	MATH 142 - Calculus II
COMM 100 - Introduction to Oral Communication	--
SECOND YEAR (Take at Columbia College)	
Fall Semester	
Columbia College Course	**USC Chemical Engineering Course**
CHEM 261- Organic Chemistry I	CHEM 333 and 333L - Organic Chemistry I and Lab
PHYS 221 - General Physics I	PHYS 211 and 211L Essentials of Physics I and Lab
Gen Ed - Social Sciences	GSS
LA 201 - Diversity, Gender and Social Justice	--
Gen Ed- SPAN 122- Elementary Spanish II	GFL SPAN 110 - Beginning Spanish II
Spring Semester	
Columbia College Course	**USC Chemical Engineering Course**
CHEM 262- Organic Chemistry II	CHEM 334 and 332L Organic Chemistry II and Essentials of Org Chem Lab II
PHYS 222- General Physics II	PHYS 212 and 212L - Essentials of Physics II
CHEM 332- Analytical Chemistry	Chem Elec CHEM321 and 321L - Quant Analysis
Gen Ed- Aesthetic Literacy	AIU
Gen Ed - Religion or Philosophy	Career Elective
THIRD YEAR (Take at Columbia College)	
Fall Semester	
Columbia College Course	**USC Chemical Engineering Course**
CHEM 342- Biochemistry	Chem Elec & Lab Elec - CHEM 550 and 550L Biochemistry
CHEM 355- Physical Chemistry I	Tech Elec & Lab Elec CHEM 541 and 541L Physical Chemistry
LA 301 - Women, Leadership, and Social Change	--
MATH 262- Calculus III	MATH 241 Vector Calculus
Gen Ed - Multiculturalism	--

Spring Semester	
Columbia College Course	**USC Chemical Engineering Course**
CHEM 201- Senior Seminar	
CHEM 356 - Physical Chemistry II	Tech Elec CHEM 542 and 542L Physical Chemistry
MATH 360 - Differential Equations	MATH 242 - Elem Differential Equations
Gen Ed - Literature	--
Gen Ed - History	GHS
FOURTH YEAR (Take at USC)	
Fall Semester	
Columbia College Course	**USC Chemical Engineering Course**
Elective	ECHE 300 Chemical Process Principles
CHEM elective	ECHE 310 Intro Chemical Engr Thermodynamics *
Elective	ECHE 320 Chemical Engr Fluid Mechanics
--	ECHE 456 Computational Methods Engr Apps
--	Computer Programming Elective
Spring Semester	
Columbia College Course	**USC Chemical Engineering Course**
Elective	ECHE 311 Chemical Engineering Thermodynamics
Elective	ECHE 321 Heat Flow Analysis
CHEM elective	ECHE 430 Chemical Engr Kinetics **
	ECHE 460 Chem Engr Lab I (Spring only)
	Professional Development Elective
FIFTH YEAR (Take at USC)	
Fall Semester	
Columbia College Course	**USC Chemical Engineering Course**
	ECHE 440 Separation Process Design (Fall only)
	ECHE 461 Chem Engr Lab II (Fall only)
	ECHE 465 Chemical Process Analysis and Design I (Fall only)
	ECHE 550 Chem Proc Dynamics & Controls (Fall only)
	PHIL 325 Engineering Ethics
Spring Semester	
Columbia College Course	**USC Chemical Engineering Course**
	ECHE 322 Mass Transfer (Spring only)
	ECHE 466 Chemical Process Analysis and Design II (Spring only)
	ECHE 567 Process Safety, Health & Loss Prevention (Spring only)
	Engineering Elective
	Engineering Elective

This Addendum displays Columbia College Courses completed with a "C" or higher that USC CEC accepts as transfer credit in this transfer pathway.

** May substitute CHEM 541 for prerequisite of ECHE 300*
***May substitute CHEM 541 for prerequisite of ECHE 311*

Revised August 2024.