

FOUR-YEAR PROGRAM IN CHEMICAL ENGINEERING 2017-2018 Catalog Year

FIRST YEAR	
FALL SEMESTER MATH 1310 or 1311 Eng Calculus I ¹ (4) CHEM 1210 General Chemistry I (4) CHEM 1215 General Chemistry Lab I (1) WRTG 2010 Intermediate Writing (3) CH EN 1703 Intro to Chem Eng (2) General Education/Bachelor Req (3) TOTAL HOURS: 17	SPRING SEMESTER MATH 1320 or 1321 Eng Calculus II ¹ (4) CHEM 1220 General Chemistry II ² (4) CHEM 1225 General Chemistry Lab II (1) PHYS 2210 Phycs For Scien & Eng I (4) CH EN 1705 ChemE Design & Innov ³ (3) CH EN 4755 Undergraduate Seminar (0.5) TOTAL HOURS: 16.5
SECOND YEAR	
FALL SEMESTER MATH 2250 Diff Equ & Lin Algebra (4) PHYS 2220 Phycs For Scien & Eng II (4) CH EN 2300 Thermodynamics I (2) CH EN 2450 Numerical Methods (2) CH EN 4753 Undergraduate Seminar (0.5) General Education (3) TOTAL HOURS: 15.5	SPRING SEMESTER MATH 3140 Vector Calc and PDE's (4) CH EN 2800 Fund. of Process Eng (3) CHEM 2310 Organic Chemistry I ⁴ (4) General Education/Bachelor Req (3) Technical Elective (3) TOTAL HOURS: 17
THIRD YEAR	
FALL SEMESTER CHEM 3060 Quantum Chem (4) CH EN 3353 Fluid Mechanics (3) CH EN 3453 Heat Transfer (3) CH EN 3853 Chemical Eng Thermo (3) CH EN 4753 Undergraduate Seminar (0.5) Technical Elective ⁵ (3) TOTAL HOURS: 16.5	SPRING SEMESTER CH EN 3253 Chemical Process Safety (3) CH EN 3255 Communication & Safety (1) CH EN 3603 Mass Transfer Separations (3) CH EN 3553 Chemical Reaction Eng (3) CH EN 5103 Biochemical Engineering (3) General Education/Bachelor Req (3) TOTAL HOURS: 16
FOURTH YEAR	
FALL SEMESTER CH EN 4903 Projects Laboratory I (4) CH EN 4253 Process Design I (3) CH EN 4203 Process Control (3) CH EN 4753 Undergraduate Seminar (0.5) Technical Elective (3) General Education/Bachelor Req (3) TOTAL HOURS: 16.5	SPRING SEMESTER CH EN 4905 Projects Laboratory II ⁶ (3) CH EN 5253 Process Design II (3) Technical Elective (6) TOTAL HOURS: 12
GRAND TOTAL HOURS: 127	

FIVE-YEAR PROGRAM IN CHEMICAL ENGINEERING 2017-2018 Catalog Year

FIRST YEAR	
FALL SEMESTER MATH 1310 or 1311 Eng Calculus I ¹ (4) CHEM 1210 General Chemistry I (4) CHEM 1215 General Chemistry Lab I (1) WRTG 2010 Intermediate Writing (3) CH EN 1703 Intro to Chem Eng (2) TOTAL HOURS: 14	SPRING SEMESTER MATH 1320 or 1321 Eng Calculus II ¹ (4) CHEM 1220 General Chemistry II ² (4) CHEM 1225 General Chemistry Lab II (1) PHYS 2210 Physcs For Scien & Eng I (4) CH EN 1705 ChemE Design & Innov ³ (3) CH EN 4755 Undergraduate Seminar (0.5) TOTAL HOURS: 16.5
SECOND YEAR	
FALL SEMESTER MATH 2250 Diff Equ & Lin Algebra (4) PHYS 2220 Physcs For Scien & Eng II (4) CH EN 2450 Numerical Methods (2) CH EN 2300 Thermodynamics I (2) TOTAL HOURS: 12	SPRING SEMESTER CH EN 2800 Fund. of Process Engineering (3) CHEM 2310 Organic Chemistry I ⁴ (4) CH EN 4755 Undergraduate Seminar (0.5) General Education/Bachelor Req (3) Technical Elective (3) TOTAL HOURS: 13.5
THIRD YEAR	
FALL SEMESTER MATH 3140 Vector Calc and PDE's (4) CH EN 3353 Fluid Mechanics (3) CH EN 3853 Chemical Eng Thermo (3) General Education/Bachelor Req (3) TOTAL HOURS: 13	SPRING SEMESTER CHEM 3060 Quantum Chem (4) General Education/Bachelor Req (6) TOTAL HOURS: 10⁶
FOURTH YEAR	
FALL SEMESTER CH EN 3453 Heat Transfer (3) Technical Elective ⁵ (6) CH EN 4753 Undergraduate Seminar (0.5) General Education/Bachelor Req (3) TOTAL HOURS: 12.5	SPRING SEMESTER CH EN 3253 Chemical Process Safety (3) CH EN 3255 Communication & Safety (1) CH EN 3553 Chemical Reaction Eng (3) CH EN 3603 Mass Transfer & Separations (3) CH EN 5103 Biochemical Engineering (3) TOTAL HOURS: 13
FIFTH YEAR	
FALL SEMESTER CH EN 4903 Projects Laboratory I (4) CH EN 4203 Process Control (3) CH EN 4253 Process Design I (3) CH EN 4753 Undergraduate Seminar (0.5) Technical Elective ⁵ (3) TOTAL HOURS: 13.5	SPRING SEMESTER CH EN 4905 Projects Laboratory II ⁷ (3) CH EN 5253 Process Design II (3) Technical Elective ⁵ (3) TOTAL HOURS: 9⁶
GRAND TOTAL HOURS:127	