

# Chemical Engineering

2020-2021 Catalog

**129 Total Credits**

## First Year

### Semester 1

4 Math 165 (Calculus I)  
3 Engl 150 (Critical Think & Comm)  
4 Chem 177 (General Chemistry I)  
1 Chem 177L (Gen Chemistry Lab I)  
3 ChE 160 (Engr Problem Solving)  
1 Lib 160 (Library)  
R Engr 101 (Engr Orientation)

*16 Total Credits*

### Semester 2

4 Math 166 (Calculus II)  
3 Chem 178 (General Chemistry II)  
1 Chem 178L (Gen Chemistry Lab II)  
5 Phys 221 (Classical Physics I)  
3 SSH Elective

*16 Total Credits*

## Sophomore Year

### Semester 3

3 ChE 210 (Material & Energy Balnc)  
4 Math 265 (Calculus III)  
4 Phys 232 (Classical Physics II)  
1 Phys 232L (Classical Physics II lab)  
3 Chem 331 (Organic Chemistry I)  
1 ChE 202 (ChE Engr Seminar)  
R ChE 205 (ChE Progress Assessment)

*16 Total Credits*

### Semester 4

3 ChE 356 (Transport Phenomena I)  
4 Math 267 (Differential Equations)  
3 Chem 332 (Organic Chemistry II)  
3 Chem 325 (Chemical Thermodynamics)  
3 Engl 250 (WOVE Comp)

*16 Total Credits*

## Junior Year

### Semester 5

3 ChE 310 (Computation Methods)  
3 ChE 357 (Transport Phenomena II)  
3 ChE 381(ChE Thermodynamics)  
3 BBMB 303 (Biochemistry)  
3 Statistics Elective

*15 Total Credits*

### Semester 6

3 Communication Elective  
3 ChE 358 (Separations)  
2 ChE 325 (ChE Laboratory I)  
3 ChE 382 (Chemical Reaction Engr)  
3 Advanced Chemistry Elective  
3 SSH Elective

*17 Total Credits*

## Senior Year

### Semester 7

3 ChE 421 (Process Control)  
3 Engineering Elective  
3 ChE Elective  
3 SSH Elective  
3 ChE 420 (Chemical Process Safety)

*15 Total Credits*

### Semester 8

4 ChE 430 (Process & Plant Design)  
2 ChE 426 (ChE Laboratory II)  
3 Professional Elective  
3 ChE Elective  
3 SSH Elective  
3 SSH Elective

*18 Total Credits*

*Shading indicates Basic Program courses*