Chemical Engineering (CH E) Degree – B161, Biotechnology Option (128 hours)
School of Chemical, Biological & Materials Engineering

Freshman 1st Semester
- MATH 1823, Calculus & Analytical Geometry I
- MATH 2423, Calculus & Analytical Geometry II
- ENGR 1411, Freshman Engineering Experience
- CHEM 1315, General Chemistry
- CHEM 1415, General Chemistry or CHEM 1425
- ENGL 1113, Principles of English Comp. I
- PHYS 2514, General Physics for Engr. & Sci. Majors
- HIST 1483 or HIST 1493, US History
- ENGR 1423, Programming & Introduction to Computing

Freshman 2nd Semester
- MATH 2433, Intro. to Ordinary & Differential Equations
- PHYS 2524, General Physics for Engr. & Sci. Majors II
- CHEM 1411, Experimental Chemistry I
- CHEM 1412, Organic Chemistry I
- ENGR 1421, Programming II
- ENGR 4215, Advanced Engineering Drawing
- HIST 1113 or 1193, World History

Sophomore 1st Semester
- MATH 3113, Intro. to Ordinary & Differential Equations
- PHYS 2523, General Physics for Engr. & Sci. Majors III
- CHEM 2023, Chemical Engineering Fundamentals
- CHEM 3421, Physical Chemistry Lab
- CHEM 3422, Chemistry II
- CHEM 3473, Chemical Engineering Thermodynamics

Sophomore 2nd Semester
- MATH 2443, Calculus & Analytical Geometry IV
- MATH 3113, Intro. to Ordinary & Differential Equations
- PHYS 2524, General Physics for Engr. & Sci. Majors II
- PHYS 2525, General Physics for Engr. & Sci. Majors III
- CHEM 2022, Chemical Engineering Computing
- CHEM 3421, Physical Chemistry Lab
- CHEM 3422, Chemistry II
- CHEM 3473, Chemical Engineering Thermodynamics

Junior 1st Semester
- MATH 2413, Intro. to Ordinary & Differential Equations
- PHYS 2524, General Physics for Engr. & Sci. Majors II
- PHYS 2525, General Physics for Engr. & Sci. Majors III
- CHEM 2022, Chemical Engineering Computing
- CHEM 3421, Physical Chemistry Lab
- CHEM 3422, Chemistry II
- CHEM 3473, Chemical Engineering Thermodynamics

Junior 2nd Semester
- MATH 2413, Intro. to Ordinary & Differential Equations
- PHYS 2524, General Physics for Engr. & Sci. Majors II
- PHYS 2525, General Physics for Engr. & Sci. Majors III
- CHEM 2022, Chemical Engineering Computing
- CHEM 3421, Physical Chemistry Lab
- CHEM 3422, Chemistry II
- CHEM 3473, Chemical Engineering Thermodynamics

Senior 1st Semester
- MATH 2413, Intro. to Ordinary & Differential Equations
- PHYS 2524, General Physics for Engr. & Sci. Majors II
- PHYS 2525, General Physics for Engr. & Sci. Majors III
- CHEM 2022, Chemical Engineering Computing
- CHEM 3421, Physical Chemistry Lab
- CHEM 3422, Chemistry II
- CHEM 3473, Chemical Engineering Thermodynamics

Senior 2nd Semester
- MATH 2413, Intro. to Ordinary & Differential Equations
- PHYS 2524, General Physics for Engr. & Sci. Majors II
- PHYS 2525, General Physics for Engr. & Sci. Majors III
- CHEM 2022, Chemical Engineering Computing
- CHEM 3421, Physical Chemistry Lab
- CHEM 3422, Chemistry II
- CHEM 3473, Chemical Engineering Thermodynamics

Notes: Arrows indicate prerequisite. A “C” under the arrow indicates it is a corequisite.