[ARCHIVED CATALOG]

Chemical Engineering, BSCHE

Degree Awarded:	Total Credit Hours:
Bachelor of Science in Chemical Engineering	131

Career Opportunities:

Oil and gas industry, refineries, petrochemical, pulp and paper, textile, plastic pharmaceutical cosmetic, or food processing industries

Note(s):

• A grade of "C" or better is required in all courses in the College of Engineering and the College of Sciences that are used toward the degree.
• A minimum of 2.0 cumulative average (major GPA) is required on all hours attempted in the major department (CHEE) and engineering courses that apply toward the degree.
• Students are responsible for completing all course prerequisites before enrolling in a course.

Freshman Year (33 credit hours)

- UNIV 100 - First Year Seminar **Credit Hours: 3**
- BIOL 110 - Fundamentals of Biology I **Credit Hours: 3**
  or BIOL 121 - Biological Principles and Issues I **Credit Hours: 3**
- CHEE 101 - Introduction to Chemical Engineering **Credit Hours: 1**
- CHEM 107 - General Chemistry I **Credit Hours: 3**
- CHEM 108 - General Chemistry II **Credit Hours: 3**
- CHEM 115 - General Chemistry Laboratory **Credit Hours: 2**
- ENGL 101 - Introduction to Academic Writing **Credit Hours: 3**
- ENGL 102 - Writing and Research About Culture **Credit Hours: 3**
- MATH 270 - Calculus I **Credit Hours: 4**
- MATH 301 - Calculus II **Credit Hours: 4**
- PHYS 201 - General Physics I **Credit Hours: 4**

Sophomore Year (34 credit hours)

- CHEE 201 - Chemical Engineering Calculations **Credit Hours: 4**
- CHEE 210 - Engineering Analysis **Credit Hours: 2**
- CHEM 231 - Organic Chemistry I **Credit Hours: 3**
- CHEM 232 - Organic Chemistry II **Credit Hours: 3**
- ENGR 218 - Statics and Strength of Materials **Credit Hours: 3**
- ENGR 301 - Thermodynamics **Credit Hours: 3**
- ENGR 305 - Transport Phenomena **Credit Hours: 3**
- MATH 302 - Calculus III **Credit Hours: 4**
- MATH 350 - Differential Equations **Credit Hours: 3**

English Literature (3 credit hours)

Choose from the General Education Curriculum list of Literature courses in consultation with advisor.

History (3 credit hours)

Choose from the General Education Curriculum list of History courses in consultation with advisor.

Junior Year (33 credit hours)

- CHEE 302 - Transfer Operations **Credit Hours: 3**
- CHEE 307 - Safety, Ethics, and Environmental Policy **Credit Hours: 2**
- CHEE 310 - Chemical Engineering Thermodynamics **Credit Hours: 3**
- CHEE 317 - Materials of Engineering **Credit Hours: 3**
- CHEE 405G - Process Heat Transfer **Credit Hours: 3**
- CHEM 233 - Organic Chemistry Laboratory I **Credit Hours: 1**
- CHEM 302 - Physical Chemistry II **Credit Hours: 3**
- CMCN 310 - Public Speaking **Credit Hours: 3**
- ECON 430G - Industrial Economics and Finance **Credit Hours: 3**
- ENGR 201 - Electrical Circuits **Credit Hours: 3**

Chemical Engineering (3 credit hours)

Requires permission of department. Choose in consultation with advisor.

Social/Behavioral Sciences (3 credit hours)

Choose from the General Education Curriculum list of Social/Behavioral Science courses.

Senior Year (31 credit hours)

- CHEE 400G - Process Simulation **Credit Hours: 3**
- CHEE 401 - Stage Operations Design **Credit Hours: 3**
- CHEE 403 - Chemical Engineering Laboratory I **Credit Hours: 2**
- CHEE 404 - Chemical Engineering Laboratory II **Credit Hours: 2**
- CHEE 407 - Chemical Engineering Plant Design **Credit Hours: 3**
- CHEE 408G - Computer-Aided Process Design **Credit Hours: 3**
- CHEE 413G - Process Control in Chemical Engineering **Credit Hours: 3**
- CHEE 420G - Chemical Reaction Engineering **Credit Hours: 3**

Chemical Engineering (3 credit hours)

Requires permission of department. Choose in consultation with advisor.

Fine Arts (3 credit hours)

Choose from the General Education Curriculum list of Fine Arts courses.

Natural Sciences (3 credit hours)

- BIOL 111 - Fundamentals of Biology II **Credit Hours: 3**
- BIOL 122 - Biological Principles and Issues II **Credit Hours: 3**
- BIOL 216 - Applied Anatomy and Physiology for Kinesiology **Credit Hours: 3**
- BIOL 217 - Applied Anatomy and Physiology Laboratory for Kinesiology **Credit Hours: 1**
- BIOL 220 - Survey of Human Anatomy and Physiology **Credit Hours: 3**
- BIOL 221 - Survey of Human Anatomy and Physiology Laboratory **Credit Hours: 1**
- BIOL 261 - General Microbiology **Credit Hours: 3**
- CHEM 221 - Analytical Chemistry **Credit Hours: 3**
- CHEM 251 - Descriptive Inorganic Chemistry **Credit Hours: 3**
- CHEM 280 - Introduction to Biochemistry **Credit Hours: 3**
- CHEM 301 - Physical Chemistry I **Credit Hours: 3**
- CHEM 317 - Biochemistry I **Credit Hours: 3**
- CHEM 402G - Chemistry of Materials **Credit Hours: 3**
- PHYS 202 - General Physics II **Credit Hours: 4**

General Education Curriculum

English (6 cr)	Mathematics (6 cr)	Natural Sciences (9 cr)	Social/Behavioral Sci (6 cr)
ENGL 101 ENGL 102	MATH 270 MATH 301	CHEM 107 CHEM 108 ***and*** BIOL 110 **or** BIOL 121	ECON 430G ***and*** Choose 3 cr from the Gen Ed Course List
History (3 cr)	**Fine Arts (3 cr)**	**Communication (3 cr)**	**Literature (3 cr)**
Choose from the Gen Ed Course List	Choose from the Gen Ed Course List	CMCN 310	Choose from the Gen Ed Course List