

Bachelor of Science in Chemical Engineering (CH E – B164 Bioengineering)

Summer 2022 through Spring 2023 – Total Credit Hours: 128

This flowchart is not an official check sheet of degree requirements. It is meant to be used as a supplemental visual guide to be used along with the official University of Oklahoma degree check sheet.

FRESHMAN

SOPHOMORE

JUNIOR

SENIOR

Fall
16 Hours

Spring
16 Hours

Fall
18 Hours

Spring
16 Hours

Fall
16 Hours

Spring
14 Hours

Fall
16 Hours

Spring
16 Hours

MATH 1914
Calculus I

MATH 2924
Calculus II

MATH 2934
Calculus III
or **MATH 2443**

CHEM 3423
Physical Chemistry I
Prereq: CHEM 1415
Coreq: MATH 2924 or 2423

CHEM 3421
Physical Chemistry Lab

Bioengineering Core Elective*

Choose either
CHE 5243 (Spring) or
CHE 4203 (Fall)

P SC 1113
Am. Fed. Govt.

Approved Elective ★
Artistic Forms

ENGR 1411 or 3511
Freshman / Transfer
Engineering
Experience

PHYS 2514
General Physics for
Engr & Science
Majors

PHYS 2524
General Physics for
Engr & Science
Majors

CH E 2003
Intro. to CH E
Computing

CH E 3473
Chemical
Engineering
Thermo.

*Additional Prereq:
CH E 2033 &
MATH 2934 or 2443*

CH E 3432
Unit Operations

ENGR 2431
Electrical Circuits I

*Prereq:
MATH 2924 or 2423*
Co-req: PHYS 2524

Approved Elective ★
Non-Western Culture

UCOL 1523 / 1533 / 1543
First-Year
Experience

CH E 2033
Chemical Engineering
Fundamentals

CH E 3113
Momentum, Heat &
Mass Transfer I

CH E 3123
Momentum, Heat &
Mass Transfer II

CH E 3432
Unit Operations

ENGR 3431
Electromechanical
Systems

CH E 3313
Structure &
Properties of
Materials
(was 2313)

*Additional prereq:
CH E 3123*

ENGL 1113
English Composition

**ENGL 1213 or
EXPO 1213**
English Comp or
Expository Writing

BIOL 1124
Introductory Biology

MATH 3113
Differential Equations

*Prereq:
MATH 2924 or 2423*

CH E 3723
Numerical Methods
for Engr. Comp.

CH E 3333
Separation
Processes

CH E 4262
Chem. Engr. Design
Lab I

CH E 4273
Advanced Process
Design

**CHEM 1315 or
CHEM 1335**
General Chemistry

**CHEM 1415 or
CHEM 1435 or
CHEM 1425 (H)**
General Chemistry

CHEM 3053
Organic Chemistry I:
Biol. Emph.

ENGR 2002
Prof. Development

Prereq: ENGL 1213
Coreq: ENGR 1411/3511

CHEM 3152
Organic Chemistry
Lab: Biol. Emph.

**HIST 1483 or
HIST 1493**
American History

Approved Elective ★
Social Science

CH E 4473
Kinetics

*Additional Prereq:
MATH 3113 &*

Approved Elective ★
Western Civilization
& Culture

CH E 4253
Process Design &
Safety

CH E 4153
Process Dynamics &
Control

ENGR 2411
Applied Engr Statics

Prereq: PHYS 2514
*Co-req:
MATH 2934 or 2433*

Technical Elective I

Choose between CHEM3653, CHEM3753, MBI03813, BIOL3103, BIOL3113, BIOL3333, BIOL4843, CHE5243, CHE4203, CHE5293, CHE5373.

Technical Elective II

Key and Important Notes

H = Honors option

← - - - → Co-requisite

↔ Prerequisite

★ At least one of these Gen. Ed. courses must be 3000-4000 level.

Foreign Language: 2 semesters college level or 2 years of high school.

Fall or Spring ONLY

HS History Deficiency

*Bioengineering Core Electives Note:

CHE4203: Pre-reqs PHYS2524 and MATH3113

CHE5243: CHE3123, 5000+ courses require permission of instructor