

Name: _____

Sooner ID: _____

Bachelor of Science in Industrial and Systems Engineering (Pre-Med Option B528)

Summer 2023 through Spring 2024 – Total Credit Hours: 139

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
18 Hours

Spring
19 Hours

Fall
17 Hours

Spring
17 Hours

Fall
18 Hours

Spring
18 Hours

Fall
18 Hours

Spring
15 Hours

MATH 1914
Calculus I

MATH 2924
Calculus II

MATH 2934
Calculus III

ISE 2311
Computer-Aided
Design and
Graphics Lab

ISE 3304
Design and
Manufacturing II

ENGR 2461
Thermodynamics

Prereq: MATH 2934/2433
Co-req: PHYS 2524

ISE 4383
Systems Evaluation

Additional Prereq:
ISE 3304

HIST 1483 or 1493
US 1492-1865 or
US 1865-present

Approved Elective
Artistic Forms

ENGR 1411 / 1421 / 3511
Pathways to
Engineering Thinking

PHYS 2514
General Physics for
Engr & Science
Majors

PHYS 2524
Gen. Physics for
Engr & Science
Majors

ISE 2303
Design and
Manufacturing
Processes

ENGR 2431
Electrical Circuits

Prereq: MATH 2924/2423
Co-req: PHYS 2524

ENGR 3441
Fluid Mechanics

Prereq: MATH 2934/2433
Co-req: PHYS 2524

ISE 4663
Systems Analysis
Using Simulation

Additional Prereq:
ISE 3293, ISE 4633

Approved Elective
Artistic Forms

ENGL 1113
English Composition

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

CEES 2113
Statics

CEES 2153
Mechanics of
Materials

ISE 4623
Deterministic
Systems Models

BIOL 3113 / 3333 / 4853
Additional Prereq:
BIOL 1114, 1124 or 1134

ISE 4633
Probabilistic
Systems Models

Additional Prereq:
ISE 3293

ISE 4333
Productions
Systems & Ops

*Prereq: ISE 2823,
ISE 4623*

ISE 4393
Capstone Design
Project

**CAS
1523/ 1533/ 1543**
First-year
Experience (Core V)

3-hrs CS Programming:
**CS 1313 or
CS 1321/ 1323/ 1324**

ISE 2823
Enterprise
Engineering

Prereq:
Soph standing

ENGR 2002
Prof. Development

*Prereq: Soph standing
& ENGL 1213*

ISE 4113
Spreadsheet-Based
Decision Support
Systems

ISE 4804
Ergonomics in
System Design

Prereq: Jr. standing

ISE 4853
Data-Driven
Decision Making II

Approved Elective
Social Science

CHEM 1315
General Chemistry

CHEM 1415
General Chemistry II

CHEM 3053
Organic Chemistry

ISE 3293
Applied Engr. Statistics

Prereq:
MATH 2924/2433

ISE 4553
Data-Driven
Decision Making I

ISE 4563
Quality and
Reliability Engr

Additional Prereq:
ISE 3293

PSC 1113
American Federal
Government

Approved Elective
Social Science

CHEM 3152
Organic Chem Lab

CHEM 3153
Organic Chemistry II

CHEM 3153
Organic Chemistry II

BIOL 1124
Introductory Biology

*may sub with former
BIOL1114/1121*

ISE 4223
Fundamentals
of Engr Economy

Prereq:
MATH 2924/2423

Approved Elective
World Culture

Approved Elective
Western Culture

★ 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.
 CS placement survey must be taken. Link in classnav.ou.edu course description.

←---→ Co-requisite.
 ↔ Prerequisite
 Shaded courses offered once per year.
 HS History Deficiency