

Name: \_\_\_\_\_

Sooner ID: \_\_\_\_\_

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

Summer 2022 through Spring 2023 – 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

**ENGR 1411 / 3511**  
Freshman / Transfer  
Engineering  
Experience

**PHYS 2514**  
General Physics for  
Engr & Science  
Majors

**PHYS 2524**  
Gen. Physics for  
Engr & Science  
Majors

**ISE 2303**  
Design and  
Manufacturing  
Processes

**ENGR 3441**  
Fluid Mechanics  
*Prereq: MATH 2934/2433*  
*Co-req: PHYS 2524*

**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

**ENGR 2431**  
Electrical Circuits  
*Prereq: MATH 2924/2423*  
*Co-req: PHYS 2524*

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

**ISE 4663**  
Systems Analysis  
Using Simulation  
*Additional Prereq:*  
*ISE 3293, ISE 4633*

**ISE 4393**  
Capstone Design  
Project

**UCOL  
1523/ 1533/ 1543**  
First-year  
Experience

**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 4623**  
Deterministic  
Systems Models

**ISE 4633**  
Probabilistic  
Systems Models  
*Additional Prereq:*  
*ISE 3293*

**ISE 4333**  
Productions  
Systems & Ops  
*Prereq: ISE 2823,  
ISE 4623*

**ISE 4113**  
Spreadsheet-Based  
Decision Support  
Systems

**ISE 4804**  
Ergonomics in  
System Design  
*Prereq: Jr. standing*

**ISE 4853**  
Data-Driven  
Decision Making II

**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

**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