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
Fall 18 Hours
- MATH 1914 Calculus I
- ENGR 1411 / 1421 / 3511 Pathways to Engineering Thinking
- ENGL 1113 English Composition
- CAS 1523/1533/1543 First-year Experience (Core V)
- 3-hrs CS Programming: CS 1313 or CS 1321/1323/1324
- CHEM 1315 General Chemistry

Spring 19 Hours
- MATH 2924 Calculus II
- PHYS 2514 General Physics for Engr & Science Majors
- ENGL 1213 or EXPO 1213 English Comp or Expository Writing
- CHEM 1415 General Chemistry II

SOPHOMORE
Fall 17 Hours
- MATH 2934 Calculus III
- PHYS 2524 Gen. Physics for Engr & Science Majors
- CEES 2113 Statics
- ISE 2823 Enterprise Engineering
- ISE 2311 Computer-Aided Design and Graphics Lab

Spring 17 Hours
- PHYS 2524 Gen. Physics for Engr & Science Majors
- CEES 2153 Mechanics of Materials
- ISE 2303 Design and Manufacturing Processes
- ISE 2002 Prof. Development
- ISE 2393 Applied Engr. Statistics

JUNIOR
Fall 18 Hours
- ISE 3004 Design and Manufacturing II
- ENGR 2461 Thermodynamics
- ENGR 3441 Fluid Mechanics
- ISE 4213 Spreadsheet-Based Decision Support Systems
- ISE 3293 Applied Engr. Statistics
- CHEM 3053 Organic Chemistry II

Spring 18 Hours
- ISE 3304 Design and Manufacturing II
- ENGR 4631 Systems Analysis
- ISE 4633 Quality and Reliability Engr
- ISE 4553 Data-Driven Decision Making II
- CHEM 3152 Organic Chem Lab

SENIOR
Fall 18 Hours
- ISE 4383 Systems Evaluation
- ISE 4623 Deterministic Systems Models
- ISE 4653 Probabilistic Systems Models
- ISE 4223 Fundamentals of Engr Economy
- CHEM 3153 Organic Chemistry II

Spring 15 Hours
- ISE 4393 Capstone Design Project
- ISE 4663 Systems Analysis Using Simulation
- ISE 4333 Productions Systems & Ops
- ISE 4853 Data-Driven Decision Making II
- BIOL 1124 Introductory Biology

Approved Electives
- Social Science
- Artistic Forms
- 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