Bachelor of Science in Industrial and Systems Engineering (Analytics Option B529)
Summer 2018 through Spring 2019 – Total Credit Hours: 132

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 16 Hours**
- **MATH 1914**
  Calculus I
- **CHEM 1315**
  General Chemistry
- **ENGL 1113**
  English Composition
- **PSC 1113**
  American Federal Government
- **ENGR 1411 / 3511**
  Freshman / Transfer Engineering Experience

**Spring 17 Hours**
- **MATH 2924**
  Calculus II
- **PHYS 2514**
  General Physics for Engr & Science Majors
- **ENGL 1213 or EXPO 1213**
  English Comp or Expository Writing
- **HIST 1483 or 1493**
  US 1492-1865 or US 1865-present

**SOPHOMORE**

**Fall 18 Hours**
- **MATH 2934**
  Calculus III
- **PHYS 2524**
  Gen. Physics for Engr & Science Majors
- **CEES 2113**
  Statics
- **ISE 2823**
  Enterprise Engineering
  Prereq: Soph standing
- **CS 2334**
  Programming Structures and Abstractions
  Must earn a B minimum in CS 1321/1323/1324 OR CS 2334 to continue in any remaining CS courses.

**Spring 16 Hours**
- **ISE 2311**
  Computer-Aided Design and Graphics Lab
- **ISE 2303**
  Design and Manufacturing Processes
- **MATH 2513**
  Discrete Math Structures
  Prereq: MATH 2924/2423
- **CS 2413**
  Data Structures
  Additional Prereq: MATH1914/1823

**JUNIOR**

**Fall 16 Hours**
- **ISE 3304**
  Design and Manufacturing II
- **ISE 3203**
  Design and Manufacturing Processes
- **ISE 2513**
  Discrete Math Structures
  Prereq: MATH 2924/2423
- **CS 3203**
  Software Req. & Specs.
- **ISE 3293**
  Applied Engr. Statistics
  Prereq: MATH 2924/2433

**Spring 18 Hours**
- **ISE 3304**
  Design and Manufacturing II
- **ISE 3203**
  Design and Manufacturing Processes
- **ISE 4113**
  Spreadsheet-Based Decision Support Systems
- **ISE 4553**
  Data-Driven Decision Making I
- **ISE 4223**
  Fundamentals of Engr Economy
  Prereq: MATH 2924/2423

**SENIOR**

**Fall 16 Hours**
- **ISE 4113**
  Spreadsheet-Based Decision Support Systems
- **ISE 4553**
  Data-Driven Decision Making I
- **ISE 4223**
  Fundamentals of Engr Economy
  Prereq: MATH 2924/2423

**Spring 15 Hours**
- **ISE 4393**
  Capstone Design Project
- **ISE 4855**
  Data-Driven Decision Making II
- **ISE 4333**
  Productions Systems & Ops
  Prereq: ISE 2823
- **ISE 4663**
  Systems Analysis Using Simulation
  Additional Prereq: ISE 3293
- **ISE 4633**
  Prob. Systems Models
  Additional Prereq: ISE 3293
- **ISE 4223**
  Fundamentals of Engr Economy
  Prereq: MATH 2924/2423

**3-hour ISE Elective**
- Any 4000-5000 level ISE course
- Approved Elective
  Social Science
- Approved Elective
  Non-Western Culture
- Approved Elective
  Western Civilization & Culture

Note: Utilize flowcharts as a supplemental guide to OU Official check sheet http://checksheets.ou.edu and regular visits with your WSSC College Advisor

- ★ 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.