

Name: _____

Sooner ID: _____

Bachelor of Science in Industrial and Systems Engineering (Analytics Option B529)

Summer 2017 through Spring 2018 – 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

SOPHOMORE

JUNIOR

SENIOR

Fall
16 Hours

Spring
17 Hours

Fall
18 Hours

Spring
16 Hours

Fall
16 Hours

Spring
18 Hours

Fall
16 Hours

Spring
15 Hours

MATH 1914
Calculus I

MATH 2924
Calculus II

MATH 2934
Calculus III

ISE 2311
Computer-Aided
Design and
Graphics Lab

ENGR 2461
Thermodynamics

ENGR 2431
Electrical Circuits

ISE 4393
Capstone Design
Project

CHEM 1315
General Chemistry

PHYS 2514
General Physics for
Engr & Science
Majors

PHYS 2524
General Physics for
Engr & Science
Majors

ISE 2303
Design and
Manufacturing
Processes

ISE 3304
Design and
Manufacturing II

ENGR 3441
Fluid Mechanics

ISE 4383
Systems Evaluation

ISE Elective

ENGL 1113
English Composition

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

CEES 2113
Statics

CEES 2153
Mechanics of
Materials

ISE 4623
Deterministic
Systems Models

ISE 4633
Probabilistic
Systems Models

ISE 4333
Productions
Systems and
Operations

Approved Elective
Social Science

PSC 1113
American Federal
Government

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

ISE 2823
Enterprise
Engineering

MATH 2513
Discrete
Mathematical
Structures

ISE 4113
Spreadsheet-Based
Decision Support
Systems

ISE 4804
Ergonomics in
System Design

ISE 4663
Systems Analysis
Using Simulation

Approved Elective
Non-Western Culture

ENGR 1411 / 3511
Freshman / Transfer
Engineering
Experience

CS 1323
Intro to Comp Prog

CS 2334
Programming
Structures and
Abstractions

ISE 3293
Applied Engineering
Statistics

ISE 4553
Data-Driven
Decision Making I

ISE 4563
Quality and
Reliability
Engineering

ISE 4853
Data-Driven
Decision Making II

Approved Elective
Western Civilization
& Culture

CS 2413
Data Structures

CS 3203
Software Reg. and
Spec.
(was 3202)

ISE 4223
Fundamentals
of Engineering
Economy

CS 4513
or other CS Elective

Key and Important Notes

- ←---→ Co-requisite or concurrent
 - MATH 1823 or 1914 is pre-requisite.
 - ✂ MATH 2433* or 2924 is pre-requisite (*ENGR 2431, ISE 4223 & MATH 2513 accept MATH 2423).
 - ◻ MATH 2433 or 2934 is pre-requisite (*CEES 2113 will allow concurrent enrollment).
 - ★ ISE 3293 is pre-requisite.
 - ◆ Must have completed all ISE courses scheduled in prior semesters.
- Sophomore standing:**
ISE 2823
- Junior standing:**
ISE 4804
- ◻ Shaded courses offered once per year.
- ✂ MATH2513 and CS2413 are pre-requisites.

Approved Elective
Artistic Forms

- ◻ ★ 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.