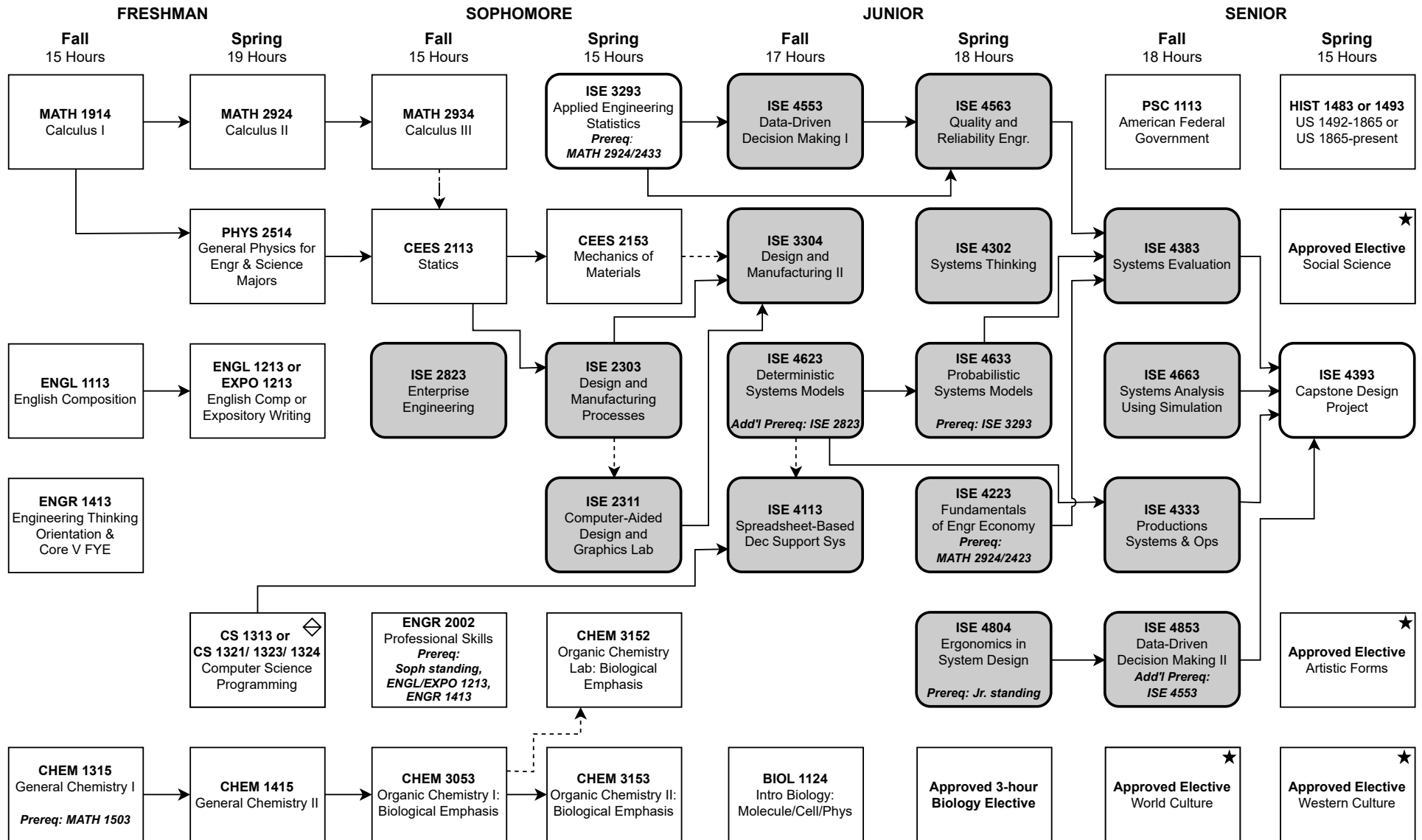Name: _____   Sooner ID: _____

Bachelor of Science in Industrial and Systems Engineering (Pre-Med Option B528) See pre-med advising for additional support.
Summer 2024 through Spring 2025 – 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 15 Hours	**Spring** 19 Hours	**Fall** 15 Hours	**Spring** 15 Hours	**Fall** 17 Hours	**Spring** 18 Hours	**Fall** 18 Hours	**Spring** 15 Hours

MATH 1914 Calculus I

MATH 2924 Calculus II

MATH 2934 Calculus III

ISE 3293 Applied Engineering Statistics *Prereq: MATH 2924/2433*

ISE 4553 Data-Driven Decision Making I

ISE 4563 Quality and Reliability Engr.

PSC 1113 American Federal Government

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

PHYS 2514 General Physics for Engr & Science Majors

CEES 2113 Statics

CEES 2153 Mechanics of Materials

ISE 3304 Design and Manufacturing II

ISE 4302 Systems Thinking

ISE 4383 Systems Evaluation

★ **Approved Elective** Social Science

ENGL 1113 English Composition

ENGL 1213 or EXPO 1213 English Comp or Expository Writing

ISE 2823 Enterprise Engineering

ISE 2303 Design and Manufacturing Processes

ISE 4623 Deterministic Systems Models *Add'l Prereq: ISE 2823*

ISE 4633 Probabilistic Systems Models *Prereq: ISE 3293*

ISE 4663 Systems Analysis Using Simulation

ISE 4393 Capstone Design Project

ENGR 1413 Engineering Thinking Orientation & Core V FYE

ISE 2311 Computer-Aided Design and Graphics Lab

ISE 4113 Spreadsheet-Based Dec Support Sys

ISE 4223 Fundamentals of Engr Economy *Prereq: MATH 2924/2423*

ISE 4333 Productions Systems & Ops

CS 1313 or CS 1321/ 1323/ 1324 ⬦ Computer Science Programming

ENGR 2002 Professional Skills *Prereq: Soph standing, ENGL/EXPO 1213, ENGR 1413*

CHEM 3152 Organic Chemistry Lab: Biological Emphasis

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

ISE 4853 Data-Driven Decision Making II *Add'l Prereq: ISE 4553*

★ **Approved Elective** Artistic Forms

CHEM 1315 General Chemistry I *Prereq: MATH 1503*

CHEM 1415 General Chemistry II

CHEM 3053 Organic Chemistry I: Biological Emphasis

CHEM 3153 Organic Chemistry II: Biological Emphasis

BIOL 1124 Intro Biology: Molecule/Cell/Phys

Approved 3-hour Biology Elective

★ **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. https://www.ou.edu/coe/cs/resources/links-forms

⊷ - - - ➤ Co-requisite.   ⟵➤ Prerequisite   ▨ Shaded courses offered once per year.   □ HS History Deficiency

Flowcharts, degree sheets, and elective sheets: https://www.ou.edu/coe/academics/advising/degree-plans-and-flowcharts