**Industrial & Systems Engineering**

### FIRST YEAR

**FALL**
- ISE 105
- ENGR 102
- MATH 125
- WRIT 150
- GEN ED
- OPTIONAL ELECTIVE

**SPRING**
- ISE 150
- CHEM 105aL or MASC 110L
- MATH 126
- PHYS 151L
- GEN ED
- OPTIONAL ELECTIVE

### SECOND YEAR

**FALL**
- ISE 220
- ISE 225
- ISE 460
- ISE ELECTIVE
- FREE ELECTIVE
- OPTIONAL ELECTIVE

**SPRING**
- ISE 330
- CE 315L
- ISE ELECTIVE
- WRIT 340
- BIOLOGY ELECTIVE
- PHYS 152L

### THIRD YEAR

**FALL**
- ISE 382
- ISE 335
- ISE ELECTIVE
- ISE 495a
- GEN ED
- ENGR ELECTIVE

**SPRING**
- ISE 435
- ISE 370
- ISE 495b
- ENGR ELECTIVE
- GEN ED

### FOURTH YEAR

**FALL**
- ISE 410
- ISE 440
- ISE 435
- ISE 370
- ISE 495a
- GEN ED
- ENGR ELECTIVE

**SPRING**
- ISE 426
- ISE 440
- ISE 426
- ISE 495b
- ENGR ELECTIVE
- GEN ED

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**ENGINEERING**

- ENGR 102: Engineering Freshman Academy
- ISE 105: Intro to Industrial Engineering
- ISE 150: Solving Engr. Problems via Computer Programming
- ISE 225: Engineering Statistics I
- ISE 315L: Engr. Project Management
- ISE 330: Intro. to Operations Research I
- ISE 331: Intro. to Operations Research Stochastic Models
- ISE 335L: Supply Chain Design
- ISE 370: Human Factors in Work Design
- ISE 375L: Facilities Design
- ISE 382: Database Systems: Concept, Design, and Implementation
- ISE 410: Prod. Planning and Scheduling
- ISE 426: Statistical Quality Control
- ISE 435: Discrete Systems Simulation
- ISE 440: Work, Technology and Organization
- ISE 460: Engineering Economy
- ISE 495a: Senior Design Project
- ISE 495b: Senior Design Project

**MATHEMATICS**

- MATH 125: Calculus I
- MATH 126: Calculus II
- MATH 226: Calculus III
- MATH 225: Linear Algebra & Differential Equations

**SCIENCE**

- BISC 103L: Biology for the Environment and Life
- BISC 104L: How The Body Works
- BISC 230L: The Biology of the Brain
- HBIO 205L: The Science of Sport
- CHEM 105aL: General Chemistry
- MASC 110L: Materials Science
- PHYS 151L: Mechanics & Thermodynamics
- PHYS 152L: Electricity & Magnetism

**ELECTIVES**

Your optional electives are one way to build engineering+ into your curriculum by choosing classes of interest to you.

Courses with this symbol may be satisfied with certain AP, IB or A-Level exams. With each requirement you replace with prior credit, you increase your optional electives, creating more flexibility for you to pursue additional electives and increase your engineering+ education.

**GENERAL EDUCATION**

As a USC Viterbi student your General Education (Gen Ed) curriculum will include courses in the Arts, Humanistic Inquiry and Social Analysis.

**WRITING**

- WRIT 150: Writing & Critical Reasoning
- WRIT 340: Advanced Writing

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This is a simplified version of a complex curriculum with options and choices made between advisor and student. Course choices can vary by semester and adjust to include relevant topics and materials. Although every attempt has been made to ensure accuracy, the program requirements listed in the USC Catalogue supersede any information which may be contained in this or any other publication of any school or department. The information found in this document is not intended for advising purposes. The University reserves the right to change its policies, rules, regulations, requirements and course offerings at any time.