

BS Engineering – Industrial and Systems Engineering (ISE) Concentration – 2019

Engineering: 43 core hours + 22 concentration hours

Math/Science : 33 hours

General: 27 hours

FRESHMAN

SOPHOMORE

JUNIOR

SENIOR

Fall

Spring

Fall

Springa

Fall

Spring

Fall

Spring

ENGR 1012 (2)
Engineering Graphics

ENGR 1000 (1)
Intro to Engineering

ENGR 2050 (3)
Computer Applications in Engineering

MATH 2171 (4)
Calculus I

BIOL 1050/1051 (4)
General Biology or **1100/1101**
Prin. of Biology I

ENGL 1100 (3)
Composition

Social Sciences Elective (3)

Dashed border denotes minimum grade of C required

ENGR 1016 (2)
Introduction to Engineering Design

ENGR 2070 (3)
Materials and Processes

MATH 2152 (3)
Calculus II

CHEM 1150/1151 (4)
General Chemistry I

ENGL 2201 (3)
Writing about the Disciplines

Social Sciences Elective (3)

ENGR 2022 (3)
Statics

ENGR 2000 (1)
Engineering Design/PM I

ENGR 2070 (3)
Materials and Processes

MATH 2153 (3)
Calculus III

PHYS 2350 (4)
University Physics I

MATH 3307 (3)
Engineering Statistics

Social Sciences Elective (3)

ENGR 2450 (3)
Dynamics

ENGR 2514 (4)
Circuit Analysis

ENGR 3800 (3)
Quality Control for Engineers

MATH 2154 (4)
Linear Algebra & Diff. Eqns.

PHYS 2360 (4)
University Physics II

HLTH 1000 (2)
Health in Modern Society

Social Sciences Elective (3)

ENGR 3420 (2)
Engineering Economics

ENGR 2514 (4)
Circuit Analysis

ENGR 3024 (3)
Mechanics of Materials

ISE 3060 (3)
Systems Optimization

ENGR 3034 (4)
Thermal and Fluid Systems

KINE 1000 (1)
Lifetime Physical Activity

Social Sciences Elective (3)

ENGR 3000 (2)
Engineering Design/PM II

ENGR 3050 (3)
Sensors Measurements and Controls

ISE 3010 (3)
Principles and Methods of Ind. & Sys. Engr.

ISE 4010 (3)
Work Measurement & Human Factors

ENGR 3034 (4)
Thermal and Fluid Systems

Social Sciences Elective (3)

Social Sciences Elective (3)

ENGR 4010 (2)
Capstone Design I

Tech Elective (3)

ISE 4020 (3)
Production Systems and Facility Design

Concentration-specific courses are only offered in the semester shown on this sheet.

Humanities/ Fine Arts Elective (3)

Social Sciences Elective (3)

Social Sciences Elective (3)

ENGR 4020 (2)
Capstone Design II

ISE 4065 (3)
Discrete Systems Simulation

Tech Elective (3)

Tech Elective (1)

Humanities/ Fine Arts Elective (3)

Humanities/ Fine Arts Elective (3)

Humanities/ Fine Arts Elective (3)

P/C = pre- or co-requisite
* = C or better required

Diversity: At least one elective course must be designated as GD (Global Diversity) and at least one elective course must be designated as DD (Domestic Diversity).

Humanities/Fine Arts: Must complete at least one course in the humanities and one course in fine arts. Social Sciences: Must complete courses in at least two different areas.

Note: This chart is for planning purposes only. It is the student's responsibility to ensure that requirements as detailed in the Undergraduate Catalog are met.

Revision Date: June 3, 2019

17

15/32

17/49

16/65

16/81

15/96

14/110

15/125

Credit hours per Semester

Cumulative Credit hours