

BSE – Industrial & Systems Engineering (ISYS) Concentration

FRESHMAN

SOPHOMORE

JUNIOR

SENIOR

Bold border denotes class with lab

Dashed border denotes minimum grade of C required

Engineering
39 core hours +
26 concentration hours

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.

Math/Science
32 hours

General
31 hours

ENGR 1012 (2)
Engineering Graphics

C: MATH 1083 or higher

ENGR 1000 (1)
Introduction to Engineering

ENGR 1016 (2)
Intro to Eng Design

ENGR 2050 (3)
Computer Applications in Engineering

MATH 1083 or higher

MATH 2151 (3)
Calculus I

MATH 1083 or Placement test

MATH 2152 (3)
Calculus II

BIOL 1050/1051 or 1100/1101 (4)
General Biology

CHEM 1150/1151 (4)
General Chemistry

ENGL 1100 (3)
Composition

Social Sciences Elective (3)

16

ENGL 2201 (3)
Writing About the Disciplines

Credit hours per Semester

15/31

ENGR 2022 (3)
Statics

C: PHYS2350
P: MATH2152

ENGR 2000 (1)
Engineering Design/PM I

ENGR 2070 (3)
Materials and Processes

ENGL 2201
CHEM 1150

MATH 2153 (3)
Calculus III

ENGR 2050

PHYS 2350 (4)
University Physics I

PHYS 2360 (4)
University Physics II

MATH 3307 (3)
Engineering Statistics

MATH2152

Cumulative Credit hours

17/48

ENGR 2450 (3)
Dynamics

C: MATH 2154
C: PHYS 2360

ENGR 3800 (3)
Quality Control for Engineers

MATH 3307

MATH 2154 (4)
DEQ and Linear Algebra

PHYS 2360 (4)
University Physics II

Humanities/
Fine Arts Elective (3)

17/65

ENGR 3024 (3)
Mechanics of Materials

ENGR 2070
ENGR 2022

ENGR 2514 (4)
Circuit Analysis

MATH 2152

ENGR 3420 (2)
Engineering Economics

MATH 2154
MATH 3307
ENGR 2000 or
ENGR 1014

ISYS 3060 (3)
Systems Optimization

ISYS 4010 (3)
Work Meas. & Human Factors

ECON 2113 (3)
Microeconomics

HLTH 1000 (2)
Health in Modern Society

17/82

ENGR 3000 (2)
Engr Design & PM II

ENGR 2000
P/C: ENGR 3420

ENGR 3050 (3)
Sensors, Measurements And Controls

MATH 2154

ENGR 3012 (4)
Thermal and Fluid Systems

MATH 2154
ENGR 2450

ISYS 4010 (3)
Work Meas. & Human Factors

ISYS 3010 (3)
Found. of Ind. & Systems Engineering

ENGR 2000 or ENGR 1014

KINE 1000 (1)
Lifetime Physical Activity

16/98

ENGR 4010 (2)
Senior Capstone Design I

ENGR 3000
ENGR 3420
ISYS 3010

TECH Elective (3)

TECH Elective (3)

ISYS 4020 (3)
Production Systems and Fac. Planning

MATH 3307
ENGR 2000 or
ENGR 1014

Social Sciences Elective (3)

Social Sciences Elective (3)

15/113

ENGR 4020 (2)
Senior Capstone Design II

Tech Elective (1)

ISYS 4065 (3)
Discrete Systems Simulation

ENGR 3800

Tech Elective (3)

PHIL 2274 or 2275 (3)
Ethics

Social Sciences Elective (3)

Social Sciences Elective (3)

15/128

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