

BS in Industrial Engineering

2024-2025 Catalog

Freshman Year

Semester 1

Semester 2

Sophomore Year

Semester 1

Semester 2

Junior Year

Semester 1

Semester 2

Senior Year

Semester 1

Semester 2

Florida Poly
Design
Sequence

EGN 1006
Career Design for
STEM Disciplines
(1)

EGN 1007
Concepts and
Methods for
Eng. & CS
(1)

EGN 2001C
Skills and Design 1
(2)

EGN 2002C
Mechanical
Engineering
Skills and Design 2
(2)

Industrial
Engineering Lab 1
(4)

Industrial
Engineering Lab 2
(3)

Industrial Engineering
Design Capstone 1
(3)

Industrial Engineering
Design Capstone 2
(3)

IDS 1380
Foundational
Lessons in
Applications of
Mathematics
(3)

IDS 1721
Computing &
Problem Solving for
STEM
(3)

EGN 3311
Statics
(3)

EGN 3331
Strength of Materials
(3)

EGN 3365
Structure and
Properties of
Materials
(3)

EIN 3390
Manufacturing
Processes
(3)

Productivity Analysis
Production Planning
and Control
(3)

Industrial Engineering
CORE Elective
(3)

CHM 2045
Chemistry 1
(3)

PHY 2048
Physics 1
(3)

PHY 2049
Physics 2
(3)

EGN 3448
Operations Research
(3)

Introduction to
Stochastic Models in
Manufacturing and
Service Systems
(3)

EGN 3466
Discrete Event
Simulation
(3)

Design of
Experiments
(3)

Industrial Engineering
CORE Elective
(3)

CHM 2045L
Chemistry 1 Lab
(1)

PHY 2048L
Physics 1 Lab
(1)

PHY 2049L
Physics 2 Laboratory
(1)

MAP 2302
Differential Equations
(3)

EGN 4611
Engineering
Economics
(3)

Financial and
Managerial
Accounting
(3)

EGS 3625
Engineering &
Technology Project
Management
(3)

General Engineering
Elective
(3)

IB or MAC
1147 or
higher, AP
for MAC
2311

MAC 2311
Analytic Geometry
and Calculus 1
(4)

MAC 2312
Analytic Geometry
and Calculus 2
(4)

STA 3032
Probability and
Statistics
(3)

MAS 3114
Computational Linear
Algebra
(3)

EEL 3110
Principles of
Electrical Engineering
(3)

Arts and Humanities
Gen. Ed: Required
List
(3)

Arts, Humanities OR
Social Science Gen.
Ed.
(3)

Arts, Humanities OR
Social Science Gen.
Ed.
(3)

ENC 1101
English Composition
1
(3,W)

ENC 2210
Technical Writing
(3,W)

Social Science Gen.
Ed: Required List
(3)

IDS 4941
Professional
Experience Internship
(0)

Legend:

Course Prefix &
Number | Credits |
Course Name

General Education
Elective | Credits

Program or
Concentration
Elective | Credits

C grade or better
pre-req. or passing
grade required

Course Under
Development

Industrial
Engineering CORE
Elective
(3)

→
Critical Course
Pathway

Program Electives

Industrial Engineering Core Elective List

- Additional course details are under development and will be shared via this catalog when completed.

General Engineering Elective List

- Additional course details are under development and will be shared via this catalog when completed.

General Education

Arts and Humanities

A total of 12 credit hours must be completed in the arts, humanities, and social sciences.

At least one course (3 credits) from the following state required list:

- ARH 2000 - Art Appreciation Credits: 3
- LIT 2000 - Introduction to Literature Credits: 3
- MUL 2010 - Music Appreciation Credits: 3
- PHI 2010 - Introduction to Philosophy Credits: 3
- HUM 2020 - Introduction to the Humanities Credits: 3

Optional additional course electives:

- HUM 2022 - Explorations in the Humanities Credits: 3
- IDS 2144 - Legal, Ethical, and Management Issues in Technology Credits: 3

Social Sciences

A total of 12 credit hours must be completed in the arts, humanities, and social sciences.

At least one course (3 credits) from the following state required list:

- AMH 2010 - American History to 1877 Credits: 3
- AMH 2020 - American History Since 1877 Credits: 3
- ECO 2013 - Principles of Macroeconomics Credits: 3
- POS 2041 - American Government Credits: 3
- PSY 2012 - General Psychology Credits: 3

Optional additional course electives:

- ECO 2023 - Principles of Microeconomics Credits: 3