

BS in Engineering Physics

2023-2024 Catalog

Freshman Year

Sophomore Year

Junior Year

Senior Year

Semester 1

Semester 2

Semester 1

Semester 2

Semester 1

Semester 2

Semester 1

Semester 2

EGN 1006
Career Design for
STEM Disciplines
(1)

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

EGN 2001C
Skills and Design I
(2)

PHY 3840L
Experimental
Techniques in Eng.
Physics Lab
(2)

EGN 3150C
Engineering Physics
Design 1
(3)

EGN 3151C
Engineering Physics
Design 2
(3)

EML 4950C
Engineering Design
Senior Capstone 1
(3)

EML 4951C
Engineering Design
Senior Capstone 2
(3)

CHM 2045
Chemistry I
(3)

PHY 2048
Physics 1
(3)

PHY 2049
Physics 2
(3)

PHY 3101
Intro to Modern
Physics
(3)

PHY 4221
Classical Mechanics
(3)

PHY 4513
Thermal & Statistical
Physics
(3)

PHY 3151C
Computational
Physics w/ Lab
(3)

Physics
Elective
(3)

CHM 2045L
Chemistry I Lab
(1)

PHY 2048L
Physics 1 Lab
(1)

PHY 2049L
Physics 2 Lab
(1)

MAS 3105
Linear Algebra
(3)

PHY 4602
Quantum Mechanics
(3)

PHY 4320
Electricity & Magnetism
(3)

EGN 3343
Engineering
Thermodynamics
(3)

Engineering
Elective
(3)

IB or C in
MAC 1147
or higher,
AP for MAC
2311

MAC 2311
Analytic Geometry
and Calculus 1
(4)

MAC 2312
Analytic Geometry
and Calculus 2
(4)

MAC 2313
Analytic Geometry
and Calculus 3
(4)

MAP 2302
Differential Equations
(3)

EGN 3365
Structure and
Properties of
Materials
(3)

EEL 3110
Principles of
Electrical Engineering
(3)

Engineering
Elective
(3)

Engineering
Elective
(3)

COP 2271
Introduction to
Computation and
Programming
(3)

IDS 1380
Foundational
Lessons in
Applications of
MathEmatics
(3)

EGN 3311
Statics
(3)

Social Science
Gen Ed Course
(3)

Arts and Humanities
Gen Ed Course
(3)

Physics
Elective
(3)

Social Science or
Arts and Humanities
Gen Ed Course
(3)

Social Science or
Arts and Humanities
Gen Ed Course
(3)

ENC 1101
English Composition I
(3,W)

ENC 2210
Technical Writing
(3,W)

COP 3337
Object Oriented
Programming
(3)

IDS 4941
Professional Exp.
Internship
(0)



FLORIDAPOLY

Legend:

Grade of C or higher
pre-req or minimum
course grade

General
Education
(38)

Professional
Foundation
(8)

Science and Math
Foundation
(10)

Engineering
Core & Capstone
(29)

Physics
Core
(20)

Physics Elective
(6)
Engineering
Elective
(9)

Last Modified 11/29/2023

Program Electives

Engineering Electives

- EAS 4200 - Introduction to Aero Structures Credits: 3
- EAS 4505 - Orbital Mechanics Credits: 3
- EEL 3287 - Renewable Energy and Sustainability Credits: 3
- EEL 3702 - Digital Logic Design Credits: 3
- EEL 4283 - Renewable Energy Systems Credits: 3
- EEL 4660 - Autonomous Robotic Systems Credits: 3
- EGN 3321 - Dynamics Credits: 3
- EGN 3331 - Strength of Materials Credits: 3
- EGN 4334 - Mechanics of Composite Materials Credits: 3
- EIN 3390 - Manufacturing Processes Credits: 3
- EML 3015 - Fluid Mechanics Credits: 3
- EML 4140 - Heat Transfer Credits: 3
- EML 4541 - Fatigue and Fracture Mechanics Credits: 3
- EML 4833 - Human Robotics Credits: 3

Physics Electives

- AST 4217 Stellar Astrophysics Credits: 3
- AST 4414 Cosmology and Relativity Credits: 3
- PHZ 3442 Semiconductor Physics Credits: 3
- PHZ 4444 - Solid State Physics Credits: 3
- PHZ 3308 Nuclear and Subatomic Physics Credits: 3

Arts, Humanities, and Social Sciences

Arts & Humanities

Select 3 to 9 credits from the following courses:

Required, one from the following:

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

Optional, the following or one more from Arts and Humanities required or Social Sciences:

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

Social Sciences

Select 3 to 9 credits from the following courses. Civic Literacy Requirement must be met.

Required, one from the following:

- AMH 2020 - American History Since 1877 Credits: 3 (fulfills civic literacy)
- POS 2041 - American Government Credits: 3 (fulfills civic literacy)
- PSY 2012 - General Psychology Credits: 3
- ECO 2013 - Principles of Macroeconomics Credits: 3

Optional, one from the following or one more from Social Science required or Arts and Humanities:

- AMH 2010 - American History to 1877 Credits: 3
- HIS 2930 - Special Topics Credits: 3
- ECO 2023 - Principles of Microeconomics Credits: 3

