

# BS in Civil Engineering

2025-2026 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 1008  
Engineering  
Explorations:  
Foundations of  
Design and Problem-  
Solving (3)

EGN 1110C  
Visual Engineering  
Studio: Sketching,  
Diagrams, and 2D  
CAD  
(2)

EGN 2001C  
Skills and Design 1  
(2)

CGN 2163C  
Civil and Env.  
Engineering Skills  
and Design  
(2)

CGN 3022L  
Soil and Water Lab  
(3)

CGN 3023L  
Structures and  
Materials Lab  
(3)

CGN 4951  
Civil Engineering  
Design Capstone 1  
(3)

CGN 4952  
Civil Engineering  
Design Capstone 2  
(3)

ENC 1101  
English Composition  
1  
(3,W)

EGN 1213  
Engineering  
Computing: MATLAB  
Applications for  
Engineers  
(3)

EGN 3311  
Statics  
(3)

EGN 3331  
Strength of Materials  
(3)

CCE 3004  
Construction  
Engineering  
(3)

EML 3015  
Fluid Mechanics  
(3)

CWR 4202  
Applied Hydrology  
and Hydraulics  
(3)

TTE 4004  
Transportation  
Engineering  
(3)

CHM 2045  
Chemistry 1  
(3)

PHY 2048  
Physics 1  
(3)

CGN 2002  
Introduction to Civil  
Engineering  
(3)

PHY 2049  
Physics 2  
(3)

CEG 3011C  
Soil Mechanics  
(3)

CES 3605  
Structural Steel  
Design  
(3)

CES 4702  
Reinforced Concrete  
Design  
(3)

EGN 4611  
Engineering  
Economics  
(3)

CHM 2045L  
Chemistry 1 Lab  
(1)

PHY 2048L  
Physics 1 Lab  
(1)

Social Science Gen.  
Ed: Required List  
(3)

PHY 2049L  
Physics 2 Laboratory  
(1)

CES 3102  
Structural Analysis  
(3)

CEG 3101  
Foundation Analysis  
and Design  
(3)

Civil Engineering  
Elective  
(3)

Civil 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)

MAC 2313  
Analytic Geometry  
and Calculus 3  
(4)

MAP 2302  
Differential Equations  
(3)

STA 3032  
Probability and  
Statistics  
(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 2210  
Technical Writing  
(3,W)

CGN 2324C  
Surveying and  
Geomatics  
(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

Civil Engineering  
Program Core

→  
Critical Course  
Pathway

# BS in Civil Engineering

## Program Electives, General Education, and Other Electives

2025-2026 Catalog

### Program Electives

#### Civil Engineering Core Elective List

CE Elective 1 - ENV 3048 - GIS Applications in Civil and Environmental Engineering

- *Prerequisites: CGN 2163C – Civil and Environmental Engineering Skills and Design*

CE Elective 2 - ENV 3049 - Life Cycle Assessment and Modeling

- *Prerequisites: CGN 2163C Civil and Environmental Engineering Skills and Design*

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

### General Education

#### Arts and Humanities

Select 3 to 6 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
- MUL 2010 - Music Appreciation Credits: 3
- PHI 2010 - Introduction to Philosophy 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

Required, one from the following:

- AMH 2010 - American History to 1877 Credits: 3 (Civic Lit)
- AMH 2020 - American History Since 1877 Credits: 3 (Civic Lit)
- POS 2041 - American Government Credits: 3 (Civic Lit)
- 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:

- ECO 2023 - Principles of Microeconomics Credits: 3