

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

EGN 1008
Engineering
Explorations
(3)

EGN 1110C
Engineering
Computing
(2)

EGN 2001C
Engineering Skills
and Design
(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)

CHM 2045
Chemistry 1
(3)

EGN 1213
Engineering
Computing
(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 2045L
Chemistry 1 Lab
(1)

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)

ENC 1101
English Composition
1
(3,W)

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 2
(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
Core Elective
(3)

→
Critical Course
Pathway

BS in Civil Engineering

Program Electives, General Education, and Other Electives

2025-2026 Catalog

Program Electives

Civil Engineering Core Elective List

- ENV 3048 - GIS Applications in CEE
- ENV 3049 - Life Cycle Assessment and Modeling

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

Social Sciences

Required, one from the following:

- AMH 2010 - American History to 1877 Credits: 3
- AMH 2020 - American History Since 1877 Credits: 3
- POS 2041 - American Government Credits: 3
- 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