Bachelor of Science in Civil Engineering

Semester 1 – Fall (18 hours)

- CAE 100 (2) Engineering Drawing
- CAE 105 (3) Surveying
- MATH 151 (5) Calculus I
- CHEM 124 (4) Chemistry I or CHEM 122+123
- CAE 111 (1) Intro to Prof I
- 200 level HUM (3)

Semester 2 – Spring (17 hours)

- CAE 101 (2) AutoCAD
- MATH 152 (5) Calculus II
- PHYS 123 (4) Physics I
- CS 104 (2) Computer Programming
- CAE 111 (1) Intro to Prof II
- Human Sciences Course (3)

Semester 3 – Fall (17 hours)

- PHYS 221 (4) Physics II
- CAE 286 (3) Structural Mechanics
- MATH 251 (4) Calculus III
- ENVE 201 (3) Earth Environ Science
- Human Sciences Course (3)

Semester 4 – Spring (16 hours)

- MATH 252 (4) Differential Equations
- CAE 302 (3) Fluid Mechanics
- CAE 287 (3) Mechanics of Materials
- CAE 312 (3) Engineering Systems
- Human Sciences Course (3)

Semester 5 – Fall (18 hours)

- MMAE 305 (3) Dynamics
- ENVE 401 (3) Intro to Water Resources
- CAE 304 (3) Structural Analysis I
- CAE 315 (3) Construction Materials
- Human Sciences Course (3)

Semester 6 – Spring (15 hours)

- CAE 323 (3) Geotechnical Engineering
- CAE 303 (3) Steel Structures I
- CAE 307 (3) Concrete Structures I
- Human Sciences Course (3)

Semester 7 – Fall (15 hours)

- CAE 457 (3) Geotechnical Foundation
- CAE 431 (3) Steel Structures II
- CAE 432 (3) Concrete Structures II
- CAE 419 (3) Transportation Engineering
- CAE 470 (3) Construction Estimating

Semester 8 – Spring (15 hours)

- CAE 495 (3) Senior Capstone
- CAE 4xx (3) Technical Elective 1
- CAE 4xx (3) Technical Elective 2
- CAE 4xx (3) Technical Elective 3
- CAE 496 (0) FE Exam Prep Register for FE
- Human Sciences Course (3)

Total credit hours required: 131 (ABET accredited)

Legend:
- General education
- Math and science
- IPRO

Co-requisite/
can be taken at
the same time
Pre-requisite

Offered in the
semester shown
Offered Fall+Spring

- Technical electives must be CAE, ENVE, or EG 400- or 500-level
- Maximum of 1 EG elective
- MMAE 200 and 202 no longer count for CAE 286 and 287 after Fall 2022

Human Sciences requirements:
- 3 hrs of HUM 200 level
- 6 hrs of 300/400 level (H)umanities (AAH, COM, HIST, HUM, LIT or PHIL)
- 9 hrs of (S)ocial Sciences (ECON, PS, PSYC, SOC or SSCI):
  - 6 hrs @ 300/400 level & courses from at least 2 different fields
  - 3 hrs of any level either humanities or social/behavioral sciences

Last updated Nov 2022 for Spring 2023