



Degree Map

CATALOG YEAR: 2023-2024

Degree: BSCE

MAJOR: Civil Engineering

Concentration: Construction Engineering and Management

The major map illustrates one path to completing your major, based on faculty members' advice on course sequence and course schedule. This document provides general direction.

| Course                                      | Cr. Hrs. | Course                                        | Cr. Hrs. |
|---------------------------------------------|----------|-----------------------------------------------|----------|
| <b>FIRST YEAR</b>                           |          |                                               |          |
| Semester: Fall Total Credit Hours: 16 (17)  |          | Semester: Spring Total Credit Hours: 17       |          |
| ENGL 1010 Writing Composition I             | 3        | ENGL 1020 Writing Composition II              | 3        |
| CEE 1020 Connections to CEE <sup>1</sup>    | 1        | Humanities/Fine Arts Elective                 | 3        |
| MATH 1910 Calculus I                        | 4        | MATH 1920 Calculus II                         | 4        |
| CHEM 1110 Chemistry I                       | 4        | CHEM 1120 Chemistry II <sup>2</sup>           | 4        |
| ENGR 1110 Engineering Graphics              | 2        | Social/Behavioral Science Elective            | 3        |
| Humanities/Fine Arts Elective               | 3        |                                               |          |
| Course                                      | Cr. Hrs. | Course                                        | Cr. Hrs. |
| <b>SOPHOMORE YEAR</b>                       |          |                                               |          |
| Semester: Fall Total Credit Hours: 16       |          | Semester: Spring Total Credit Hours: 18       |          |
| ENGL 2130, 2230, or 2330 Literature         | 3        | COMM 2025 or PC 2500 Communication            | 3        |
| MATH 2110 Calculus III                      | 4        | MATH 2120 Differential Equations              | 3        |
| PHYS 2110 Physics I                         | 4        | CEE 3110 Mechanics of Materials               | 3        |
| CEE 2110 Statics                            | 3        | CEE 3500 Construction Engineering             | 3        |
| CEE (ENGR) 3710 Engineering Economics       | 2        | CEE 3600 Surveying                            | 3        |
|                                             |          | ME 2330 Dynamics                              | 3        |
| Course                                      | Cr. Hrs. | Course                                        | Cr. Hrs. |
| <b>JUNIOR YEAR</b>                          |          |                                               |          |
| Semester: Fall Total Credit Hours: 16       |          | Semester: Spring Total Credit Hours: 15       |          |
| CEE 3320 Structural Mechanics               | 3        | CEE 3030 Civil Engineering Materials          | 3        |
| CEE 3413 Environmental Engineering          | 3        | CEE 3420 Hydraulics                           | 3        |
| CEE 3415 or ME 3720 Fluid Mechanics         | 3        | CEE 4310 Steel Design                         | 3        |
| CEE 3610 Transportation Engineering         | 3        | GEOL 3210 Geology for Engineers               | 3        |
| CEE Lab Elective <sup>3</sup>               | 1        | CEM Elective <sup>4</sup>                     | 3        |
| BMGT 3510 Management and Org Behavior       | 3        |                                               |          |
| Course                                      | Cr. Hrs. | Course                                        | Cr. Hrs. |
| <b>SENIOR YEAR</b>                          |          |                                               |          |
| Semester: Fall Total Credit Hours: 15 or 16 |          | Semester: Spring Total Credit Hours: 15 or 16 |          |
| CEE (ENGR) 3720 or MATH 3470 Statistics     | 2 or 3   | CEE 4950 Senior Design                        | 3        |
| CEE 4320 Concrete Design                    | 3        | CEE Lab Elective <sup>3</sup>                 | 1        |
| CEE 4800 Geotechnical Engineering           | 3        | CEM Elective <sup>4</sup>                     | 3        |
| CEE 4920 Professionalism and Ethics         | 1        | CEM Elective <sup>4</sup>                     | 3        |
| CEE 4940 Fundamentals of CEE                | 0        | Social/Behavioral Science Elective            | 3        |
| CEM Elective <sup>4</sup>                   | 3        | Technical Elective <sup>5</sup>               | 2 or 3   |
| CEM Elective <sup>4</sup>                   | 3        |                                               |          |

Note:

- Optional course for first semester freshman only
- Students select either CHEM 1120 or PHYS 2120; CHEM 1120 preferred
- CEE Lab Elective: CEE 3040 (P: CEE 3030), CEE 3120 (P: CEE 3110), or CEE 3430 (C: CEE 3413)
- Construction Engineering and Management Elective: CEE 4500-4599, ENGR (CEE) 4510, ACCT 3720, BMGT 3630, BMGT 4410, BMGT 4520. At least 3 of 5 courses must be CEE (ENGR) courses.
- Technical Elective: ENGR 1120, ECE 2850, ME 3210, or CHE 3010 (fall only)