

# Bachelor of Science in Civil Engineering

## Student Planning Guide: First-Year Students Starting 2025-2026 with MATH 11

|  | Fall                                      | Winter  | Spring  |
|--|---|---|---|
|  | MATH 11 Calculus I                        | MATH 12 Calculus II                                   | MATH 13 Calculus III  |
|  | CHEM 11/11L (5)                           | PHYS 31/31L Physics for Engineers I (5)               | PHYS 32/32L Physics for Engineers II (5)                            |
|  | ENGR 1 &/or 1L Intro to Eng. (1 unit)*    | ENGR 1 &/or 1L Intro to Eng. (1 unit)*                | ENGR 1 &/or 1L Intro to Eng. (1 unit)*                              |
|  | Critical Thinking and Writing I           | Critical Thinking and Writing II                      | CENG 10/10L Surveying (3/1)   |
|  | CENG 7/7L Graphical Comm (3/1)            | Cultures and Ideas I                                  | Cultures and Ideas II   |
|  | Fall                                      | Winter  | Spring  |
|  | MATH 14 Calculus IV                       | AMTH 106 Differential Equations (or MATH 22)          | CENG 44B Strength of Matls II (2)                                   |
|  | PHYS 33/33L Physics for Engineers III (5) | CENG 15/15L Comp. Appl. in CE (3/1)                   | CENG 115/115L Materials (4/1) OR CENG 143/143L Environ Engr (3/1)** |
|  | CENG 20/20L Geology (3/1)                 | CENG 44A/44AL Strength of Matls (3/1)                 | CENG 132 Structural Analysis  |
|  | CENG 41 Statics                           | University Core                                       | University Core   |
|  | Fall                                      | Winter  | Spring  |
|  | CENG 141/141L Fluids/Hydraulics (4/1)     | AMTH 112 Risk in Civil Engr (or AMTH 108 or MATH 122) | CENG 128 Engr. Econ & Business (3)                                  |
|  | CENG 145 Transport Engr Des               | CENG 121/121L Geotech Engr (4/1)                      | CENG 140/140L Water Resources (4/1)                                 |
|  | CENG 148/148L Structural Syst (4/1)       | CENG 125/125L Municipal Engr (3/1)                    | CENG 115/115L Materials (4/1) OR CENG 143/143L Environ Engr (3/1)** |
|  | University Core                           | CENG Tech Elective                                    | CENG 192A Civil Engr Prof Practice (2)                              |
|  |   |   | CENG Tech Elective  |
|  | Fall                                      | Winter  | Spring  |
|  | CENG 192B Civil Engr Prof Practice (2)    | CENG 193 Civil Engr Project Design                    | CENG 194 Civil Design Commun. (1)                                   |
|  | ECEN 49 Fundamentals of Elec CE           | Free Elective   | CENG Tech Elective  |
|  | CENG Tech Elective                        | CENG Tech Elective                                    | University Core   |
|  | ENGL 181 Eng. Comm.                       | University Core                                       | University Core   |



Humanities & Social Science



Math & Science



Major



Technical Electives

\*ENGR 1 and 1L may be taken in any order and in any quarter in the first year. ENGR 1L is recommended Winter quarter to limit lab classes to two per quarter. If taken in later years, ENGR 110 is substituted for ENGR 1/1L.

\*\*CENG 115/115L and 143/143L are both required but may be taken either 2<sup>nd</sup> or 3<sup>rd</sup> year per student's preferred area of emphasis.