

**Civil Engineering Sample Schedule**

|   | Credit Hours | Term 1    | Term 2    | Term 3    | Term 4    | Term 5    | Term 6    | Term 7    | Term 8    |
|---|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Subjects Required by all Programs (55 hours)</b>                             |              |           |           |           |           |           |           |           |           |
| MATH 115, 116, 215, 216   | 16           | 4         | 4         | 4         | 4         | -         | -         | -         | -         |
| ENGR 100, Intro to Engineering  | 4            | 4         | -         | -         | -         | -         | -         | -         | -         |
| ENGR 101, Intro to Computers  | 4            | -         | 4         | -         | -         | -         | -         | -         | -         |
| CHEM 130 & 125/126 or CHEM 210 and 211 <sup>1</sup>                             | 5            | 5         | -         | -         | -         | -         | -         | -         | -         |
| PHYSICS 140 with Lab 141 <sup>2</sup>   | 5            | -         | 5         | -         | -         | -         | -         | -         | -         |
| PHYSICS 240 with Lab 241 <sup>2</sup>   | 5            | -         | -         | 5         | -         | -         | -         | -         | -         |
| Intellectual Breadth (includes ECON 101 or 102)                                 | 16           | 4         | 4         | -         | 4         | -         | -         | -         | 4         |
| <b>Mathematical Methods (7 hours) +</b>   |              |           |           |           |           |           |           |           |           |
| CEE 303, Computational Methods  | 4            | -         | -         | -         | -         | -         | 4         | -         | -         |
| CEE 373, Statistical Methods  | 3            | -         | -         | -         | -         | 3         | -         | -         | -         |
| <b>Required Program Subjects (22 hours)<sup>3</sup> +</b>                       |              |           |           |           |           |           |           |           |           |
| CEE 200, Intro to Civil & Environmental Engineering                             | 1            | -         | -         | -         | 1         | -         | -         | -         | -         |
| CEE 211, Statics and Dynamics   | 4            | -         | -         | 4         | -         | -         | -         | -         | -         |
| CEE 212, Solid and Structural Mechanics   | 3            | -         | -         | -         | 3         | -         | -         | -         | -         |
| CEE 230, Thermodynamics and the Environment or<br>CEE 375, Sensors and Circuits | 3            | -         | -         | 3 or 3    | -         | -         | -         | -         | -         |
| CEE 265, Sustainable Engineering Principles                                     | 3            | -         | -         | 3 or 3    | -         | -         | -         | -         | -         |
| CEE 325, Fluid Mechanics  | 4            | -         | -         | -         | -         | 4         | -         | -         | -         |
| CEE 402, Professional Issues & Design <sup>6</sup>                              | 4            | -         | -         | -         | -         | -         | -         | -         | 4         |
| <b>Science Elective (3 hours) +</b>   |              |           |           |           |           |           |           |           |           |
| Biology 171 or 172  |              |           |           |           |           |           |           |           |           |
| EARTH 119, 201, 222, 284, or 320  | 3            | -         | -         | -         | -         | -         | -         | 3         | -         |
| CEE 482/582, Environmental Microbiology   |              |           |           |           |           |           |           |           |           |
| <b>Program Electives (24 hours)<sup>4</sup> +</b>                               |              |           |           |           |           |           |           |           |           |
| CEE 312, Structural Engineering   |              |           |           |           |           |           |           |           |           |
| CEE 331, Construction Management  |              |           |           |           |           |           |           |           |           |
| CEE 345, Geotechnical Engineering   |              |           |           |           |           |           |           |           |           |
| CEE 351, Civil Engineering Materials  | 24           | -         | -         | -         | -         | 8         | 8         | 8         | -         |
| CEE 365, Environmental Engineering Principles                                   |              |           |           |           |           |           |           |           |           |
| CEE 421, Hydrology and Floodplain Hydraulics                                    |              |           |           |           |           |           |           |           |           |
| CEE 450, Transportation Engineering   |              |           |           |           |           |           |           |           |           |
| <b>Technical Electives (6 hours)<sup>5</sup> +</b>                              |              |           |           |           |           |           |           |           |           |
| CEE 413, 415, 428, 435, 465, 480, 526, 534, 545, 546, 547,<br>551, 552, or 574  | 6            | -         | -         | -         | -         | -         | -         | 3         | 3         |
| <b>General Electives (11 hours)</b>   |              |           |           |           |           |           |           |           |           |
|   | 11           | -         | -         | -         | -         | -         | 4         | 3         | 4         |
| <b>Total</b>  | <b>128</b>   | <b>17</b> | <b>17</b> | <b>16</b> | <b>15</b> | <b>15</b> | <b>16</b> | <b>17</b> | <b>15</b> |

**Notes:** Courses offered only in the **fall** term are purple. Courses offered only in the **winter** term are green.

(+) Civil Engineering students must earn a C- or better in all courses whose categories are marked with a plus.

<sup>1</sup>- If you have a satisfactory score or grade in Chemistry AP, A-Level, IB Exams, or transfer credit from another institution for CHEM 130/125/126, you will have met the Chemistry Core Requirement for the College of Engineering.

<sup>2</sup>- If you have a satisfactory score or grade in Physics AP, A-Level, IB Exams, or transfer credit from another institution for PHYSICS 140/141 and 240/241, you will have met the Physics Core Requirement for the College of Engineering.

<sup>3</sup>- CEE may accept equivalent courses offered by other departments in the College of Engineering, with permission from the program advisor.

<sup>4</sup>- At least six of the seven program electives are required.

<sup>5</sup>- A seventh program elective may count as a technical elective.

<sup>6</sup>- CEE 402 must be taken in the last Winter semester.

| Civil Engineering BSE            |  |   |                              |
|----------------------------------|--|---|------------------------------|
| Subject                          | Prerequisite(s)                              | Must Be Taken Before                            | Term(s) Offered              |
| <b>College Requirements</b>      |  |   |                              |
| MATH 115                         |  | MATH 116, PHYSICS 140                           | Fall, Winter, Spring, Summer |
| MATH 116                         | MATH 115                                     | MATH 215, 216; PHYSICS 240;<br>CEE 230, CEE 265 | Fall, Winter, Spring, Summer |
| MATH 215                         | MATH 116                                     | CEE 373, CEE 450                                | Fall, Winter, Spring, Summer |
| MATH 216                         | MATH 116                                     | CEE 303, CEE 373                                | Fall, Winter, Spring, Summer |
| ENGR 100                         |  |   | Fall, Winter                 |
| ENGR 101                         | Prior or concurrent enrollment in MATH 115   | CEE 303   | Fall, Winter                 |
| CHEM 130                         |  | CEE 230, CEE 265                                | Fall, Winter, Spring         |
| CHEM 125/126                     |  | CEE 230   | Fall, Winter, Spring         |
| PHYSICS 140/141                  | MATH 115                                     | CEE 211, PHYSICS 240                            | Fall, Winter, Spring         |
| PHYSICS 240/241                  | PHYSICS 140, MATH 116                        | CEE 375, CEE 450                                | Fall, Winter, Spring         |
| <b>Mathematical Methods</b>      |  |   |                              |
| CEE 303                          | MATH 215, 216; ENGR 101                      | CEE 421   | Winter                       |
| CEE 373                          | MATH 215, MATH 216 <sup>C or better</sup>    | CEE 552   | Fall                         |
| <b>Required Program Subjects</b> |  |   |                              |
| CEE 200                          |  |   | Fall, Winter                 |
| CEE 211                          | PHYSICS 140                                  | CEE 212, CEE 325                                | Fall, Winter                 |
| CEE 212                          | CEE 211                                      | CEE 312, CEE 345, CEE 351,<br>CEE 574           | Fall, Winter                 |
| CEE 230                          | MATH 116, CHEM 130 & 125/126                 |   | Fall                         |
| CEE 265                          | MATH 116, CHEM 130                           | CEE 365   | Fall, Winter                 |
| CEE 325                          | CEE 211                                      | CEE 421, CEE 428, CEE 465,<br>CEE 526           | Fall, Winter                 |
| CEE 375                          | PHYSICS 240                                  |   | Winter                       |
| CEE 402                          | Senior Standing                              |   | Winter                       |
| <b>Program Electives</b>         |  |   |                              |
| CEE 312                          | CEE 212                                      | CEE 413, CEE 415                                | Fall                         |
| CEE 331                          | Junior Standing                              | CEE 435, CEE 534                                | Winter                       |
| CEE 345                          | PHYSICS 140, CEE 212                         | CEE 545, CEE 546, CEE 547                       | Fall, Winter                 |
| CEE 351                          | CEE 212                                      |   | Fall, Winter                 |
| CEE 365                          | CHEM 130, MATH 116, CEE 265                  | CEE 465   | Fall                         |
| CEE 421                          | CEE 303, CEE 325                             |   | Fall                         |
| CEE 450                          | MATH 215, PHYSICS 240 <sup>C or better</sup> | CEE 551, CEE 552                                | Winter                       |
| <b>Technical Electives</b>       |  |   |                              |
| CEE 435                          | CEE 331 <sup>C or better</sup>               |   | Fall                         |
| CEE 534                          | CEE 331, Junior Standing                     |   | Winter                       |
| CEE 413                          | CEE 312                                      |   | Fall                         |
| CEE 415                          | CEE 312                                      |   | Winter                       |
| CEE 547                          | CEE 345                                      |   | Fall                         |
| CEE 574                          | CEE 212                                      |   |                              |
| CEE 545                          | CEE 345                                      |   | Fall                         |
| CEE 546                          | CEE 345                                      |   | Winter                       |
| CEE 428                          | CEE 325, (CEE 345 or CEE 366)                |   | Fall                         |
| CEE 526                          | CEE 325                                      |   | Winter                       |
| CEE 465                          | CEE 325, CEE 365                             | CEE 480   | Fall                         |
| CEE 480                          | CEE 465                                      |   | Fall                         |
| CEE 551                          | CEE 450 <sup>C or better</sup>               |   | Fall                         |
| CEE 552                          | CEE 373, CEE 450 <sup>C or better</sup>      |   | Fall                         |

Unless otherwise noted, a grade of C- is required for prerequisites.