

**Civil Engineering**

|                   | UI Course #                          | University of Iowa Course Title   | SH        |                              | ILCC Course                  | Iowa Lakes Course Title                        | SH |
|-------------------|--------------------------------------|---|-----------|------------------------------|------------------------------|--|----|
| <b>Semester 1</b> |                                      |   |           |                              |                              |  |    |
| Fall              | MATH:1550                            | Engineering Math I – Single Variable Calculus   | 4         | <b>BOTH</b>                  | MAT 211                      | Calculus I                                     | 5  |
|                   |                                      |   |           |                              | MAT 217                      | Calculus II                                    | 5  |
|                   | ENGR:1100                            | Engineering Problem Solving I   | 3         |                              | No equivalent course offered |  |    |
|                   | CHEM:1110                            | Principles of Chemistry I & Lab   | 4         |                              | CHM 166                      | General Chemistry I                            | 5  |
|                   | RHET:1030                            | Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required) | 4         |                              | ENG 105                      | Composition I                                  | 3  |
|                   |                                      |   |           |                              | ENG 106                      | Composition II                                 | 3  |
|                   |                                      |   |           | <b>CHOOSE 1</b>              | SPC 112                      | Public Speaking                                | 3  |
|                   |                                      |   |           | SPC 101                      | Fund. Of Oral Communication  | 3  |    |
| ENGR:1000         | Engr Success for First-Year Students | 1*  |           | No equivalent course offered |                              |  |    |
|                   | Total                                |   | <b>16</b> |                              |                              |  |    |
| <b>Semester 2</b> |                                      |   |           |                              |                              |  |    |
| Spring            | MATH:1560                            | Engineering Math II – Multivariable Calculus  | 4         |                              | Mat 218**                    | Calculus III                                   | 3  |
|                   | MATH:2550                            | Engineering Math III – Matrix Algebra   | 2         |                              | No equivalent course offered |  |    |
|                   | ENGR:1300                            | Engineering Problem Solving II  | 3         | <b>CHOOSE 1</b>              | CIS 171                      | Java   | 3  |
|                   |                                      |   |           |                              | CIS 162                      | C++  | 4  |
|                   |                                      |   |           |                              | CIS 161                      | C++  | 3  |
|                   | PHYS:1611                            | Introductory Physics I with Lab   | 4         |                              | PHY 212                      | Classical Physics I                            | 5  |
|                   | General Education Component #1       | 3   |           |                              |                              |  |    |
|                   | Total                                |   | <b>16</b> |                              |                              |  |    |
| <b>Semester 3</b> |                                      |   |           |                              |                              |  |    |
| Fall              | MATH:2560                            | Engineering Math IV – Differential Equations  | 3         |                              | MAT 227                      | Differential Equations with Laplace Transforms | 4  |
|                   | PHYS:1612                            | Introductory Physics II   | 4         |                              | PHY 222                      | Classical Physics II                           | 5  |
|                   | ENGR:2110                            | Engineering Fundamentals I: Statics   | 2         |                              | EGT 139                      | Statics Engineering                            | 3  |
|                   | ENGR:2120                            | Engineering Fundamentals II: Electrical Circuits  | 3         | No equivalent course offered |                              |  |    |
|                   | ENGR:2130                            | Engineering Fundamentals III: Thermodynamics  | 3         | No equivalent course offered |                              |  |    |
|                   | CEE:1030                             | Intro to Earth Science (No Lab Required)  | 18        | No equivalent course offered |                              |  |    |
|                   | Total                                |   | <b>17</b> |                              |                              |  |    |
| <b>Semester 4</b> |                                      |   |           |                              |                              |  |    |
| Spring            | STAT:2020                            | Probability and Stat for Engineering & Phys Sci   | 3         | No equivalent course offered |                              |  |    |
|                   | ENGR:2710                            | Dynamics  | 3         | No equivalent course offered |                              |  |    |
|                   | ENGR:2750                            | Mechanics of Deformable Bodies  | 3         | No equivalent course offered |                              |  |    |
|                   | CEE:2010                             | CEE Professional Practice and Ethics  | 1         | No equivalent course offered |                              |  |    |
|                   | CEE:3763                             | Principles of Transportation  | 3         | No equivalent course offered |                              |  |    |
|                   |                                      | General Education Component #2  | 3         |                              |                              |  |    |
|                   | Total                                |   | <b>16</b> |                              |                              |  |    |

# Civil Engineering

|                   | UI Course #   | University of Iowa Course Title              | SH | ILCC Course | Iowa Lakes Course Title      | SH |
|-------------------|---------------|--|----|-------------|------------------------------|----|
| <b>Semester 5</b> |               |  |    |             |                              |    |
| Fall              | CEE:2015      | Civil Engineering Tools                      | 2  |             | No equivalent course offered |    |
|                   | CEE:3530      | Geomechanics                                 | 4  |             |                              |    |
|                   | CEE:3533      | Principles of Structural Engineering         | 4  |             | No equivalent course offered |    |
|                   | ENGR:2510     | Fluid Mechanics                              | 4  |             | No equivalent course offered |    |
|                   |               | Elective Focus Area #1                       | 3  |             |                              |    |
|                   | CEE:3001      | Leadership Seminar                           | 1  |             | No equivalent course offered |    |
|                   |               | <b>Total</b>                                 |    | <b>18</b>   |                              |    |
| <b>Semester 6</b> |               |  |    |             |                              |    |
| Spring            | CEE:3155      | Principles of Environmental Engineering      | 4  |             | No equivalent course offered |    |
|                   | CEE:3371      | Principles of Hydraulics and Hydrology Engin | 3  |             | No equivalent course offered |    |
|                   | CEE:3586      | Civil Engineering Materials                  | 3  |             | No equivalent course offered |    |
|                   |               | Elective Focus Area #2                       | 3  |             |                              |    |
|                   |               | General Education Component #3               | 3  |             |                              |    |
|                   | CEE:3002      | Technical Communication in CEE               | 1  |             | No equivalent course offered |    |
|                   |               | <b>Total</b>                                 |    | <b>17</b>   |                              |    |
| <b>Semester 7</b> |               |  |    |             |                              |    |
| Fall              |               | CEE Design Course                            | 3  |             | No equivalent course offered |    |
|                   |               | CEE Design Course                            | 3  |             | No equivalent course offered |    |
|                   |               | Elective Focus Area #3                       | 3  |             |                              |    |
|                   |               | Elective Focus Area #4                       | 3  |             |                              |    |
|                   |               | General Education Component #4               | 3  |             |                              |    |
|                   | CEE:3003      | Project Management Skills                    | 1  |             | No equivalent course offered |    |
|                   |               | <b>Total</b>                                 |    | <b>16</b>   |                              |    |
| <b>Semester 8</b> |               |  |    |             |                              |    |
| Spring            | CEE:3084/4850 | Project Design & Management in Civil Engr    | 3  |             | No equivalent course offered |    |
|                   |               | Elective Focus Area #5                       | 3  |             |                              |    |
|                   |               | Elective Focus Area #6                       | 3  |             |                              |    |
|                   |               | Elective Focus Area #7                       | 3  |             |                              |    |
|                   |               | General Education Component #5               | 3  |             |                              |    |
|                   |               | <b>Total</b>                                 |    | <b>15</b>   |                              |    |

2017-18 Curriculum

updated June 2018

\* 1sh; does not count toward 128 sh total required for graduation

\*\*Students must have completed Calculus I, II, and III to receive credit for Engineering Math II