

## Sample Program in Civil Engineering for Freshmen entering in Fall 2020

### Freshman Year

| <i>Fall</i>                          |             | <i>Spring</i>                               |             |
|--------------------------------------|-------------|---|-------------|
| 110.108 Calculus I                   | 4           | 110.109 Calculus II                         | 4           |
| 171.101 General Physics I            | 4           | 030.101 Introductory Chemistry              | 3           |
| 173.111 General Physics Laboratory I | 1           | 030.105 Introductory Chemistry Laboratory I | 1           |
| 560.100 Civilization Engineered      | 3           | 500.113 Gateway Computing: Python           | 3           |
| 560.191 CaSE Collaborative           | 0.5         | 560.112 Electromagnetism & Sensors Lab      | 1           |
| ____.____ H/S Elective               | 3           | 560.192 CaSE Design                         | 0.5         |
|                                      |             | 661.110 CLE Professional Communication      | 3           |
|                                      | <b>15.5</b> |   | <b>15.5</b> |

### Sophomore Year

| <i>Fall</i>   |             | <i>Spring</i>                                 |             |
|---|-------------|---|-------------|
| 550.201 Linear Algebra & Differential Equations       | 4           | 110.202 Calculus III                          | 4           |
| 560.201 Statics and Mechanics of Materials            | 3           | 560.250 Intro to Mathematical Decision Making | 3           |
| 560.211 Statics and Mechanics of Materials Lab        | 1           | 560.301 Structural Systems I                  | 3           |
| 560.240 Uncertainty, Reliability, and Decision-Making | 3           | 560.255 Dynamical Systems                     | 3           |
| 270.103 Intro to Global Environmental Change          | 3           | 560.292 CaSE Research                         | 0.5         |
| 560.291 CaSE Coding                                   | 0.5         | ____.____ H/S Elective                        | 3           |
| ____.____ H/S Elective                                | 3           |   |             |
|   | <b>17.5</b> |   | <b>16.5</b> |

### Junior Year

| <i>Fall</i>                               |             | <i>Spring</i>                |             |
|---|-------------|------------------------------|-------------|
| 560.302 Structural Systems II             | 3           | 560.362 Engg Mech & Matls    | 3           |
| 660.361 Engineering Business & Management | 3           | 560.305 Soil Mechanics       | 4           |
| ____.____ Natural Science Elective        | 3           | ____.____ Technical Elective | 3           |
| 560.391 CaSE Seminar I                    | 0.5         | 560.392 CaSE Seminar II      | 0.5         |
| ____.____ H/S Elective                    | 3           | ____.____ H/S Elective       | 3           |
| ____.____ Free Elective                   | 3           | ____.____ Free Elective      | 3           |
|   | <b>15.5</b> |                              | <b>16.5</b> |

### Senior Year

| <i>Fall</i>                             |           | <i>Spring</i>                          |           |
|---|-----------|--|-----------|
| 560.401 Design Theory & Pract.          | 3         | 560.402 Integrated Design Project      | 3         |
| 560.330 Foundation Engineering          | 3         | 560.458 Natural Disaster Risk Modeling | 3         |
| 560.462 Failure Mechanisms in Str Matls | 3         | ____.____ Technical Elective           | 3         |
| ____.____ Technical Elective            | 3         | ____.____ H/S Elective                 | 3         |
| ____.____ Free Elective                 | 3         | ____.____ Free Elective                | 3         |
|   | <b>15</b> |  | <b>15</b> |

TOTAL NUMBER OF CREDITS = 127