

## 4-Year Course Plan for Computer Science & Engineering

| Fall  | Winter   | Spring                    |
|---|--|---------------------------|
| University Core<br>(Critical Thinking & Writing 1)    | University Core<br>(Critical Thinking & Writing 2) | COEN 19 - Discrete Math   |
| MATH 11 - Calculus I                                  | MATH 12 - Calculus II                              | MATH 13 - Calculus III    |
| CHEM 11 - Chemistry I                                 | PHYS 31 - Physics I                                | PHYS 32 - Physics II      |
| COEN 10 - Introduction to<br>Programming <sup>1</sup> | COEN 11 - Advanced Programming                     | COEN 12 - Data Structures |
| ENGR 1 - Introduction to Engineering<br>(2 units)     |  |                           |

| Fall                                    | Winter   | Spring  |
|---|--|---|
| University Core<br>(Cultures & Ideas 1) | University Core<br>(Cultures & Ideas 2)                  | University Core<br>(Religion, Theology & Culture 1) |
| MATH 14 - Calculus IV                   | AMTH 106 - Differential Equations                        | MATH 53 - Linear Algebra                            |
| PHYS 33 - Physics III                   | AMTH 108 - Probability and Statistics                    | ELEN 50 - Electric Circuits                         |
| COEN 21 - Logic Design                  | COEN 79 - OO Programming and<br>Advanced Data Structures | COEN 20 - Embedded Systems                          |

| Fall                          | Winter                           | Spring                                   |
|-------------------------------|----------------------------------|--|
| University Core               | University Core                  | University Core                          |
| ELEN 153 - Digital IC Design  | COEN 171 - Programming Languages | ENGL 181 - Engineering<br>Communications |
| COEN 177 - Operating Systems  | COEN 146 - Computer Networks     | COEN 179 - Algorithms                    |
| Computer Engineering Elective | Computer Engineering Elective    | Computer Engineering Elective            |

| Fall                                    | Winter                                   | Spring                                    |
|---|--|---|
| University Core                         | University Core                          | Educational Enrichment Elective           |
| Educational Enrichment Elective         | Educational Enrichment Elective          | Educational Enrichment Elective           |
| COEN 174 - Software Engineering         | COEN 175 - Compilers                     | COEN 122 - Computer Architecture          |
| COEN 194 - Senior Design I<br>(2 units) | COEN 195 - Senior Design II<br>(2 units) | COEN 196 - Senior Design III<br>(2 units) |

Humanities & Social Science
  Math & Science
  Engineering
  Other

<sup>1</sup>Students with previous programming experience, as determined by advanced placement credit or the department's programming diagnostic exam, may replace COEN 10 with a free elective.