

# B.S. IN SOFTWARE ENGINEERING

| Code  | Title                                     | Credits        |
|---|---|----------------|
| <b>Major in Software Engineering (B.S.)</b>               |   |                |
| ENR 160   | Introduction to Engineering               | 3              |
| ENR 465   | Engineering Design Seminar                | 1              |
| ENR 490   | Engineering Design Project                | 3              |
| Choose one of the following sequences:                    |   | 6-7            |
| COS 100   | Introduction to Programming               |                |
| COS 105   | Object-oriented Design and Programming    |                |
| or  |   |                |
| COS 205   | Scientific Computing                      |                |
| one additional Computer Science course not required below |   |                |
| BUS 334   | Principles of Project Management          | 3              |
| COS 212   | Data Structures                           | 4              |
| COS 216   | Algorithms and Advanced Data Structures   | 3              |
| COS 235   | Computer Systems                          | 4              |
| COS 313   | Database Systems                          | 3              |
| COS 318   | Web Programming                           | 3              |
| COS 335   | Computer Security                         | 3              |
| COS 371   | Organization of Programming Languages     | 3              |
| COS 386   | Data Communications and Computer Networks | 3              |
| COS 420   | Software Process                          | 3              |
| COS 450   | Humans and Computers                      | 3              |
| COS 477   | Software Engineering                      | 3              |
| MAT 124M  | Calculus <sup>1</sup>                     | 4              |
| MAT 207M  | Statistical Analysis                      | 3              |
| MAT 211   | Linear Algebra                            | 3              |
| MAT 241   | Discrete Mathematics                      | 3              |
| <b>Code</b>   | <b>Title</b>                              | <b>Credits</b> |
| <b>Major</b>  |   | <b>64-65</b>   |
| <b>General Education</b>                                  |   | <b>44-45</b>   |
| <b>Electives</b>  |   | <b>13</b>      |
| <b>Total Credits</b>                                      |   | <b>122</b>     |

<sup>1</sup> Students may test into this course via successful completion of the Math and Computer Science department placement exam or by completing MAT 123M and the Math and Computer Science department placement exam requirements.

Courses whose number is followed by a letter fulfill a General Education requirement. Students may not declare a B.S. in Software Engineering and a Minor in Computer Science. Students may not declare a B.S. in Software Engineering and a Minor in Engineering.