### Bachelor of Science in Software Engineering (Effective Fall 2020)

#### UNIVERSITY CORE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hrs</th>
<th>ABET Student Outcomes</th>
<th>ABET Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 1103</td>
<td>English Comp I</td>
<td>3</td>
<td>C3</td>
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<td>EN 1113</td>
<td>English Comp II</td>
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<td>Humanities Elective</td>
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<tr>
<td>Humanities Elective</td>
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<td>Fine Art Elective</td>
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<td>Social Science Elective</td>
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<td>C3</td>
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<tr>
<td>GE 3513</td>
<td>(Writing)</td>
<td>3</td>
<td>C3, O3, O4, O5, O7</td>
<td>C3</td>
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**TOTAL UNIVERSITY CORE REQUIREMENTS:** 24

#### DEPARTMENTAL CORE NON-CSE REQMTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hrs</th>
<th>ABET Student Outcomes</th>
<th>ABET Curriculum</th>
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<tbody>
<tr>
<td>MA 1713</td>
<td>Calculus I</td>
<td>3</td>
<td>C1</td>
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<tr>
<td>MA 1723</td>
<td>Calculus II</td>
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<td>C1</td>
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<tr>
<td>MA 3113</td>
<td>Linear Algebra</td>
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<td>Math elective:</td>
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<tr>
<td>MA 2733</td>
<td>Cal III,</td>
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<td>C1</td>
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<tr>
<td>MA 3053</td>
<td>Foundations of Math.,</td>
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<td>C1</td>
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<tr>
<td>MA 4143</td>
<td>Graph Theory,</td>
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<tr>
<td>MA 4173</td>
<td>Number Theory</td>
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<tr>
<td>IE 4613</td>
<td>Engineering Statistics I</td>
<td>3</td>
<td>C1, C5</td>
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<tr>
<td>CH 1213</td>
<td>Chemistry I</td>
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<td>CH 1211</td>
<td>Chemistry Lab</td>
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**TOTAL DEPARTMENTAL NON-CSE REQUIREMENTS:** 27

#### DEPARTMENTAL REQUIREMENTS (71 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hrs</th>
<th>ABET Student Outcomes</th>
<th>ABET Curriculum</th>
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<tbody>
<tr>
<td>CSE 1011</td>
<td>Intro to CSE</td>
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<tr>
<td>CSE 1284</td>
<td>Intro Comp Programming</td>
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<td>CSE 1384</td>
<td>Inter Comp Programming</td>
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<td>C5</td>
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<td>CSE 2383</td>
<td>Data Struc &amp; Alg</td>
<td>3</td>
<td>C2, C5</td>
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<td>CSE 2813</td>
<td>Discrete Structures</td>
<td>3</td>
<td>C1, C2, C5</td>
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<td>CSE 2213</td>
<td>Methods and Tools for Software Development</td>
<td>3</td>
<td>O1, C2, C5</td>
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<td>CSE 3183</td>
<td>Systems Prog</td>
<td>3</td>
<td>O7, C2, C5</td>
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<td>CSE 3723</td>
<td>Computer Organization</td>
<td>3</td>
<td>C6, C7</td>
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<td>CSE 3763</td>
<td>Legal &amp; Ethical Issues</td>
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<tr>
<td>CSE 4214</td>
<td>Intro Software Eng</td>
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<td>C2, C5</td>
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<td>CSE 3213</td>
<td>SE Senior Project I</td>
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<td>O2, O3</td>
<td>C4</td>
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<tr>
<td>CSE 3223</td>
<td>SE Senior Project II</td>
<td>3</td>
<td>O3, O5</td>
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<tr>
<td>CSE 4233</td>
<td>Soft. Arch. and Design</td>
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<tr>
<td>CSE 4283</td>
<td>Soft. Test and QA</td>
<td>3</td>
<td>O6, C2, C5</td>
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<td>CSE 4733</td>
<td>Operating Systems I</td>
<td>3</td>
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<td>CSE 4833</td>
<td>Intro. to Anal. of Alg.</td>
<td>3</td>
<td>O1, O6, C2, C5</td>
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<tr>
<td>CSE 4223 or IE 4533 (Proj. Mgt)</td>
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<td>O4, C2, C5</td>
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<td>free electives</td>
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**TOTAL DEPARTMENTAL REQUIREMENTS:** 77

### Technical Electives:

- **ECE 3714 Dig Dev**
- **ECE 3724 Micro 1, Eq. MA 4513 Numerical Analysis, MA 4523 Probability**
- **Simulation, IE 4533 Proj Mgmt, IE 4513 Eng Admin, IE 4624 Stats II, IE 4713 Ops Res**
- **Support Systems, BIS 4523 Business prog with COBOL**

**TOTAL HOURS IN PROGRAM:** 128