# COMPUTER SCIENCE MAJOR 2004-05

## College of Engineering

<table>
<thead>
<tr>
<th>PREPARATION FOR THE MAJOR (Lower Division)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 10</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 20</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 30</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 40</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 50</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 60</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3A-B-C, 5A-B</td>
<td>20</td>
</tr>
<tr>
<td>PSTAT 120A</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MAJOR COURSES (Upper Division)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 110A or 110B</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 130A-B</td>
<td>8</td>
</tr>
<tr>
<td>CMPSC 138</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 154/ECE 154</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 160</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 162</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 170</td>
<td>4</td>
</tr>
<tr>
<td>ECE 152A</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>3</td>
</tr>
<tr>
<td>PSTAT 120B</td>
<td>4</td>
</tr>
<tr>
<td>Major Field Electives</td>
<td>20</td>
</tr>
</tbody>
</table>

Prior approval of the student’s major field electives must be obtained from the student’s faculty adviser.

#### FREE ELECTIVES

<table>
<thead>
<tr>
<th>SCIENCE COURSES (Lower Division)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1, 2, 3, 3L</td>
<td>12</td>
</tr>
<tr>
<td>Science Electives (see CS Dept. for approved list)</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCIENCE COURSES</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 1, 2, 3, 3L</td>
<td>12</td>
</tr>
<tr>
<td>Science Electives</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNIVERSITY REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>American History and Institutions</td>
</tr>
<tr>
<td>(1 course – may be counted as G.E. if selected from approved list)</td>
</tr>
<tr>
<td>See General Catalog for American Institutions requirement.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GENERAL EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRIT 2, 50 (Area A)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL SCIENCES, CIVILIZATION &amp; THOUGHT; THE ARTS AND LITERATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A total of 23 units is required in Social Sciences, Civilization and Thought, and the Arts and Literature.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FREE ELECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Electives taken:</td>
</tr>
<tr>
<td>Science Electives taken:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL UNITS REQUIRED FOR GRADUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
</tr>
</tbody>
</table>

Courses required or accepted for the pre-major or major, inside or outside of the Department of Computer Science, cannot be taken for the passed/not passed grading option. They must be taken for letter grades.
# COMPUTER SCIENCE MAJOR
## 2004-2005

### FRESHMAN YEAR  (44 units)

<table>
<thead>
<tr>
<th>FALL units</th>
<th>WINTER units</th>
<th>SPRING units</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.E. Elective 4</td>
<td>CMPSC 10 4</td>
<td>CMPSC 20 4</td>
</tr>
<tr>
<td>MATH 3A 4</td>
<td>MATH 3B 4</td>
<td>MATH 3C 4</td>
</tr>
<tr>
<td>WRIT 1, 2, or G.E. Elective 4</td>
<td>PHYS 1 4</td>
<td>PHYS 2 4</td>
</tr>
<tr>
<td>WRIT 1, 2, or G.E. Elective 4</td>
<td></td>
<td>G.E. Elective 4</td>
</tr>
<tr>
<td><strong>TOTAL</strong> 12</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

### SOPHOMORE YEAR  (48 units)

<table>
<thead>
<tr>
<th>FALL units</th>
<th>WINTER units</th>
<th>SPRING units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 30* 4</td>
<td>CMPSC 50 4</td>
<td>CMPSC 60 4</td>
</tr>
<tr>
<td>CMPSC 40* 4</td>
<td>MATH 5B 4</td>
<td>PSTAT 120A 4</td>
</tr>
<tr>
<td>MATH 5A 4</td>
<td>WRIT 50 4</td>
<td>G.E. Elective 4</td>
</tr>
<tr>
<td>PHYS 3 3</td>
<td>Science or Free Elective 4</td>
<td>Science or Free Elective 4</td>
</tr>
<tr>
<td>PHYS 3L 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong> 16</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

### JUNIOR YEAR  (48 units)

<table>
<thead>
<tr>
<th>FALL units</th>
<th>WINTER units</th>
<th>SPRING units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 130A 4</td>
<td>CMPSC 130B 4</td>
<td>CMPSC / ECE 154 4</td>
</tr>
<tr>
<td>CMPSC 138 4</td>
<td>ECE 152A 5</td>
<td>PSTAT 120B 4</td>
</tr>
<tr>
<td>G.E. Elective 4</td>
<td>Free Elective 3</td>
<td>Field or Free Elective 4</td>
</tr>
<tr>
<td>Science or Free Elective 4</td>
<td>G.E. Elective 4</td>
<td>G.E. Elective 4</td>
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<tr>
<td><strong>TOTAL</strong> 16</td>
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### SENIOR YEAR  (40 units)

<table>
<thead>
<tr>
<th>FALL units</th>
<th>WINTER units</th>
<th>SPRING units</th>
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</thead>
<tbody>
<tr>
<td>CMPSC 110A 4</td>
<td>CMPSC 160 4</td>
<td>Field or Free Elective 4</td>
</tr>
<tr>
<td>CMPSC 170 4</td>
<td>CMPSC 162 4</td>
<td>Field or Free Elective 4</td>
</tr>
<tr>
<td>Field or Free Elective 4</td>
<td>ENGR 101 3</td>
<td>G.E. or Free Elective 5</td>
</tr>
<tr>
<td>Field or Free Elective 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong> 12</td>
<td>15</td>
<td>13</td>
</tr>
</tbody>
</table>

*CMPSC 30 OR 40 may be switched with Science or Free Elective listed for Winter Quarter of sophomore year.*