## Computer Science

### Graduation Requirements Checklist* – Fall 2007

### Computer Science Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Gr.</th>
<th>Sem.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 114</td>
<td></td>
<td></td>
<td>Computer Science I [prerequisite: CSE 110]</td>
</tr>
<tr>
<td>CSE 214</td>
<td></td>
<td></td>
<td>Computer Science II</td>
</tr>
<tr>
<td>CSE 215</td>
<td></td>
<td></td>
<td>Foundations of Computer Science</td>
</tr>
<tr>
<td>CSE 219</td>
<td></td>
<td></td>
<td>Computer Science III</td>
</tr>
<tr>
<td>CSE 220</td>
<td></td>
<td></td>
<td>Computer Organization</td>
</tr>
<tr>
<td>CSE 300</td>
<td></td>
<td></td>
<td>Writing in Computer Science</td>
</tr>
<tr>
<td>CSE 302</td>
<td></td>
<td></td>
<td>Professional Ethics for Computer Science</td>
</tr>
<tr>
<td>CSE 303</td>
<td></td>
<td></td>
<td>Introduction to the Theory of Computation</td>
</tr>
<tr>
<td>CSE 373</td>
<td></td>
<td></td>
<td>Analysis of Algorithms</td>
</tr>
<tr>
<td>CSE 308</td>
<td></td>
<td></td>
<td>Software Engineering</td>
</tr>
<tr>
<td>CSE ___</td>
<td></td>
<td></td>
<td>Three courses chosen from:</td>
</tr>
<tr>
<td>CSE ___</td>
<td></td>
<td></td>
<td>CSE 305; 306; 304 or 307; 328 or 333</td>
</tr>
<tr>
<td>CSE ___</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE ___</td>
<td></td>
<td></td>
<td>One of CSE 310, 320, 346, ESE 345</td>
</tr>
<tr>
<td>CSE ___</td>
<td></td>
<td></td>
<td>Three upper-division CSE or ISE courses,</td>
</tr>
<tr>
<td>CSE ___</td>
<td></td>
<td></td>
<td>excluding CSE 301, 475, 488, 495, and 496</td>
</tr>
<tr>
<td>CSE ___</td>
<td></td>
<td></td>
<td>and ISE 475 and 488</td>
</tr>
</tbody>
</table>

### Mathematics Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Gr.</th>
<th>Sem.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 151</td>
<td></td>
<td></td>
<td>Alternate calculus sequences:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MAT 125/126/127;</td>
</tr>
<tr>
<td>AMS 161</td>
<td></td>
<td></td>
<td>MAT 131/132; MAT 141/142</td>
</tr>
<tr>
<td>AMS 210</td>
<td></td>
<td></td>
<td>or MAT 211 or AMS 326</td>
</tr>
<tr>
<td>AMS 301</td>
<td></td>
<td></td>
<td>Finite Mathematical Structures</td>
</tr>
<tr>
<td>AMS 310</td>
<td></td>
<td></td>
<td>or AMS 311 or 312</td>
</tr>
</tbody>
</table>

### Natural Science Sequence (BIO, CHE, or PHY)

<table>
<thead>
<tr>
<th>Course</th>
<th>Gr.</th>
<th>Sem.</th>
<th>One of the following sequences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>BIO 201, 202, 204 or 201, 203, 204 or 202, 203, 204; or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CHE 131, 132, 133 or 141, 142, 143; or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PHY 131/133, 132/134 or 141, 142 or 125, 126, 127</td>
</tr>
</tbody>
</table>

### Additional Natural Science Course(s)

<table>
<thead>
<tr>
<th>Course</th>
<th>Gr.</th>
<th>Sem.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Four additional credits from the above natural</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>science courses (biology, chemistry, or physics)†</td>
</tr>
</tbody>
</table>

* All courses on this list must be completed with a grade of C or higher. A detailed description of graduation requirements can be found in the Stony Brook Undergraduate Bulletin. For information about general university requirements you may also consult the CEAS Undergraduate Office.

† Advanced courses may be substituted with the prior approval of the department.