**COMPUTER SCIENCE 2018-19**

### PREPARATION FOR THE MAJOR

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 16</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 24</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 32</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 40</td>
<td>5</td>
</tr>
<tr>
<td>CMPSC 48</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 56</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 64</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3A-B, 4A-B, 6A</td>
<td>20</td>
</tr>
<tr>
<td>PSTAT 120A</td>
<td>4</td>
</tr>
</tbody>
</table>

### UPPER DIVISION MAJOR

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 111 or 140</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</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 160 or 162</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 170</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>3</td>
</tr>
<tr>
<td>PSTAT 120B</td>
<td>4</td>
</tr>
</tbody>
</table>

Major Field Electives: 28 units

Prior approval of the student's major field electives must be obtained from the faculty advisor.

1. CMPSC 111 or CMPSC 140 can be used as an elective if not taken as a major course.
2. CMPSC 160 or CMPSC 162 can be used as an elective if not taken as a major course.
3. Four units maximum from CMPSC 192 and CMPSC 196 combined; only for students with GPA of 3.0 or higher.

### SCIENCE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1, 2, 3, 3L</td>
<td>12</td>
</tr>
</tbody>
</table>

### UNIVERSITY REQUIREMENTS

- **American History and Institutions** – (one 4-unit course, may be counted as G.E. if selected from approved list)
- UC Entry Level Requirement: English Composition
  - Must be fulfilled within three quarters of matriculation

Satisfied by: ____________________________

### GENERAL EDUCATION

**General Subject Areas**

- **Area A:** English Reading & Comprehension – (2 courses required)
  - A-1: ____________________________
  - A-2: ____________________________

- **Area D:** Social Science
  - (2 courses minimum)

- **Area E:** Culture and Thought
  - (2 courses minimum)

- **Area F:** The Arts
  - (1 course minimum)

- **Area G:** Literature
  - (1 course minimum)

### Special Subject Areas

- **Ethnicity (1 course):**
- **European Traditions**
  - or **World Cultures (1 course):**

### NON-MAJOR ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education and Free Electives taken:</td>
<td>48</td>
</tr>
</tbody>
</table>

- **TOTAL UNITS REQUIRED FOR GRADUATION:** 184 units

Courses that can apply toward the 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 2018-19

## FRESHMAN YEAR

<table>
<thead>
<tr>
<th>FALL</th>
<th>units</th>
<th>WINTER</th>
<th>units</th>
<th>SPRING</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.E. Elective or CMPSC 8*</td>
<td>4</td>
<td>CMPSC 16</td>
<td>4</td>
<td>CMPSC 24</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3A</td>
<td>4</td>
<td>MATH 3B</td>
<td>4</td>
<td>MATH 4A</td>
<td>4</td>
</tr>
<tr>
<td>WRIT 1, 2, or G.E. Elective</td>
<td>4</td>
<td>PHYS 1</td>
<td>4</td>
<td>PHYS 2</td>
<td>4</td>
</tr>
<tr>
<td>G.E. Elective</td>
<td>4</td>
<td>WRIT 1, 2, or G.E. Elective</td>
<td>4</td>
<td>Science or Free Elective</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td></td>
<td>16</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

## SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>FALL</th>
<th>units</th>
<th>WINTER</th>
<th>units</th>
<th>SPRING</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 32</td>
<td>4</td>
<td>CMPSC 56</td>
<td>4</td>
<td>CMPSC 48</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 40</td>
<td>5</td>
<td>CMPSC 64</td>
<td>4</td>
<td>Math 6A</td>
<td>4</td>
</tr>
<tr>
<td>MATH 4B</td>
<td>4</td>
<td>PSTAT 120A</td>
<td>4</td>
<td>G.E. Elective</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3</td>
<td>3</td>
<td>WRIT 50</td>
<td>4</td>
<td>Science or Free Elective</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3L</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>17</td>
<td></td>
<td>16</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

## JUNIOR YEAR

<table>
<thead>
<tr>
<th>FALL</th>
<th>units</th>
<th>WINTER</th>
<th>units</th>
<th>SPRING</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 130A</td>
<td>4</td>
<td>CMPSC 130B</td>
<td>4</td>
<td>CMPSC 154</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 138</td>
<td>4</td>
<td>Field Elective</td>
<td>4</td>
<td>PSTAT 120B</td>
<td>4</td>
</tr>
<tr>
<td>G.E. Elective</td>
<td>4</td>
<td>Free Elective</td>
<td>4</td>
<td>Field or Free Elective</td>
<td>4</td>
</tr>
<tr>
<td>Science or Free Elective</td>
<td>4</td>
<td>G.E. Elective</td>
<td>4</td>
<td>G.E. Elective</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td></td>
<td>16</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

## SENIOR YEAR

<table>
<thead>
<tr>
<th>FALL</th>
<th>units</th>
<th>WINTER</th>
<th>units</th>
<th>SPRING</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 111 **</td>
<td>4</td>
<td>CMPSC 170</td>
<td>4</td>
<td>Field or Free Elective</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 160 ****</td>
<td>4</td>
<td>Field or Free Elective</td>
<td>4</td>
<td>Field or Free Elective</td>
<td>4</td>
</tr>
<tr>
<td>Field or Free Elective</td>
<td>4</td>
<td>ENGR 101***</td>
<td>3</td>
<td>G.E. or Free Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Field or Free Elective</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
<td></td>
<td>15</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

* CMPSC 8 is recommended only for students who do not have prior programming experience; programming experience is a prerequisite for CMPSC 16.

** Or you may take CMPSC 140 in Winter Quarter to satisfy this requirement.

*** ENGR 101 may be taken any quarter of senior year.

**** Or you may take CMPSC 162 to satisfy this requirement.