Computer Science Major Requirements

Students majoring in computer science must a total of 124 course units. These units must satisfy the following requirements.

**General Education (30 units)**
The university’s general education program is designed to enrich student’s self-understanding and expand their interests in preparation for a fulfilling life. The GE program includes the three course Pacific Seminar sequence, as well as a breadth requirement from which students elect a variety of courses from the following nine categories.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual and Interpersonal Behavior</td>
<td>U.S. Studies</td>
<td>Global Studies</td>
</tr>
<tr>
<td>Literature, Letters and Language</td>
<td>Fundamental Human Concerns</td>
<td>Practice and Perspectives in the Arts</td>
</tr>
<tr>
<td>Lab Sciences</td>
<td>Formal Systems of Thought</td>
<td>Science, Technology and Society</td>
</tr>
</tbody>
</table>

Computer science students must complete five courses from categories I and II. Three category III courses are covered by the math, science and CS core courses. CS students must complete ENGR 30 (Engineering and Computer Science Ethics), which counts as a IIB course.

**Math and Science (30 units)**
Computer science students must complete a total of 30 units of math and science courses. These courses must include:
- COMP 47 – Discrete Math (3 units)
- MATH 37 or 39 – Statistics (4 units)
- MATH 45 or 51 – Calculus (4 units)
- Two laboratory science courses (8 units)

**Computer Science Core (21 units)**
The computer science core courses give students a solid understanding of fundamental computing knowledge and skills. The following courses are required of all computer science courses.
- ENGR 10 – Dean’s Seminar (1 units)
- COMP 51 – Computer Science I (4 units)
- COMP 53 – Computer Science II (4 units)
- COMPUTER ORG (4 units)
- COMP 101 – Application Programming (4 units)
- COMP 188&189 – Senior Project (4 units)

**CS Electives and Areas of Concentration (20 units)**
Students complete their degree with 20 units of computer science electives. These elective must include all courses from at least one area of concentration. Areas of concentration are selected by students to allow them to specialize in an area appropriate for their post-graduation plans. Required courses for each of the areas of concentration are listed on the computer science web site.