

## Computer Science

### LOWER DIVISION TRANSFER PATTERN

### California State University (CSU) Statewide Pattern

The Lower Division Transfer Pattern (LDTP) consists of the CSU statewide pattern of coursework outlined below, plus campus-specific coursework, bringing the total pattern to at least 60 but no more than 70 transferable semester units for students to complete at a California Community College (CCC).

The CSU statewide pattern of coursework for CCC students who plan to major in Computer Science at any CSU campus offering the major includes:

- Completion of lower division general education requirements except for Area E, following the CSU General Education Breadth (GE-Breadth) pattern;
- Completion of the CSU graduation requirements in United States History, Constitution and American Ideals; and
- Completion of additional semester units as specified below in (3), (4), and (5).

<b>CSU Statewide Pattern Course Requirement</b>	<b>Semester Unit Requirement</b>
<p><b>(1) Complete lower division general education requirements in the following areas:</b></p> <ul style="list-style-type: none"> <li>• <b>Three courses to satisfy GE-Breadth Area A</b> (9 units)</li> <li>• <b>A course to satisfy GE-Breadth Area B4</b> (see (3) below) (3 units)</li> <li>• <b>Science courses to satisfy GE-Breadth Areas B1, B2, and B3</b> (see (3) below) (6 units)</li> <li>• <b>Three courses in Arts, Literature, and Foreign Language to satisfy 9 units of GE-Breadth Area C.</b> (9units)</li> <li>• <b>One course in Area D: Social, Political, and Economic Institutions and Behavior; Historical Background in addition to those required in (2).</b> (3units)</li> </ul>	<p><b>30 units</b>  <b>Minimum grade of C</b>  <b>required in courses used to</b>  <b>meet Areas A and B4</b></p>
<p><b>(2) Complete the graduation requirements in United States History, Constitution and American Ideals.</b></p> <p>These are typically completed with one course each in American government and American history, or a sequence of courses that integrate the history and government topics.</p> <p>Students completing GE-Breadth should ordinarily use these courses to satisfy 6 units of Area D.</p>	<p><b>6 units</b></p>
<p><b>(3) Complete the following:</b></p> <ul style="list-style-type: none"> <li>• <b>First-year Calculus courses</b> [CAN Math Sequence B*] (8 units). One course will be used to satisfy GE-Breadth Area B4.</li> <li>• <b>One year of Physics - Calculus Based-Mechanics</b> [CAN PHYS 8*] and <b>Calculus Based Electricity and Magnetism</b> [CAN PHYS 12*] (8 units). One course will be used to satisfy GE-Breadth Area B1.</li> <li>• <b>A Life Science course for Science Majors with lab</b> (4 units). This course will be used to satisfy GE-Breadth Area B2 and B3.</li> </ul>	<p><b>5 units ( first 3 units</b>  <b>counted in GE)</b></p> <p><b>5 units( first 3 units counted</b>  <b>in GE)</b></p> <p><b>1 unit</b></p>
<p><b>(4) Complete the following:</b></p> <ul style="list-style-type: none"> <li>• <b>A sequence of courses that is compliant with the standards of the Association for Computing Machinery (ACM).</b> The sequence will include approximately 6 units of study in programming and 6 units of coursework distributed equally between discrete mathematics and machine organization.</li> </ul>	<p><b>12 units</b></p>
<p><b>Total Semester Units Required for Statewide LDTP Pattern</b></p>	<p><b>59 Units</b></p>

\*Course descriptor to be expanded.

CCC courses that fulfill general education and graduation requirements in United States History, Constitution and American Ideals are listed at [www.assist.org](http://www.assist.org).