



**California State Polytechnic University, Pomona  
Degree Curriculum Sheet**

Plan (Major) COMPUTER SCIENCE

Catalog Year 2009-2010

Name \_\_\_\_\_

Evaluator \_\_\_\_\_

Subplan/Option \_\_\_\_\_

Minimum Units Required 180

Student ID \_\_\_\_\_

GWT Satisfied Yes No

Required Core Courses		
Course		Units
Discrete Structures	CS 130	4
Introduction to Computer Science	CS 140	4
Intro to Prog and Prob Solv	CS 141	4
Computer Logic	CS 210	4
Data Struc and Algorithms I	CS 240	4
Data Struc and Algorithms II	CS 241	4
C++ Programming	CS 256	4
Computer Organization and Assembly Prog	CS 264	4
Language Translation and Automata	CS 311	4
Design and Analysis of Algorithms	CS 331	4
Computer Architecture	CS 365	4
Programming Languages	CS 408	4
Operating Systems	CS 431	4
Undergraduate Seminar	CS 463	2
Software Engineering	CS 480	4
<b>Total Units</b>		<b>58</b>

Elective Core Courses		
Course		Units
<i>At least 24 units from:</i>		24
Programming Graphical User Interfaces	CS 245 (4)	
Numerical Methods	CS 301 (4)	
Symbolic Programming	CS 352 (4)	
Object-Oriented Design & Programming	CS 356 (4)	
Parallel Processing	CS 370 (4)	
Computer Networks	CS 380 (4)	
Compilers and Interpreters	CS 411 (4)	
Artificial Intelligence	CS 420 (4)	
Database Systems	CS 435 (4)	
Computer Graphics	CS 445 (4)	
Computability	CS 450 (4)	
Secure Communication	CS 460 (4)	
Software Engineering Practice	CS 481 (4)	
Honors	CS 490 (4)	
Special Topics for Upper Division Studnets	CS 499 (1-4)	
No more than 4 units from: CS 400, CS 461, CS 462, MAT 216, MAT 370, MAT 380, MAT 381, MAT 402, MAT 470, MAT 480, MAT 485, MAT 486.		
Subject to department approval, no more than 4 units from: CS 299, SCI 470, SCI 471, SCI 472, SCI 473, EGR 461, EGR 462, EGR 463.		
<b>Total Units</b>		<b>27</b>

Required Support Courses			
Course			Units
General Physics/Lab (B1, B3)	PHY 131/131L		3/1
General Physics/Lab	PHY 132/132L		3/1
General Physics/Lab	PHY 133/133L		3/1
Anal Geom & Calculus I (B4)	MAT 114		4
Anal Geom & Calculus II	MAT 115		4
Anal Geom & Calculus III	MAT 116		4
Linear Algebra	MAT 208		4
Calculus Sev Variables	MAT 214		3
Stat Meth for Comp Scientists	STA 326		4
Life Science/Lab (B2, B3)	BIO 110/111L		3/1
Computers and Society (B5)	CS 375		4
<b>Total Units</b>			<b>43</b>

General Education Requirements		
Area		Units
<b>Area A Communication &amp; Critical Thinking</b>		<b>12</b>
1 Oral Communication		
2 Written Communication		
3 Critical Thinking		
<b>Area B Mathematics &amp; Natural Sciences</b>		<b>16</b>
<i>Select at least one lab course from sub-area 1 or 2.</i>		
1 Physical Science		
2 Biological Science		
3 Laboratory Activity		
4 Math/Quantitative Reasoning		
5 Science & Technology Synthesis		
<b>Area C Humanities</b>		<b>16</b>
1 Visual and Performing Arts		
2 Philosophy and Civilization		
3 Literature and Foreign Language		
4 Humanities Synthesis		
<b>Area D Social Sciences</b>		<b>20</b>
1 U.S. History, Constitution, American Ideals		
2 History, Economics and Political Science		
3 Sociology, Anthropology, Ethnic & Gender Studies		
4 Social Science Synthesis		
<b>Area E Lifelong Understanding &amp; Self Development</b>		<b>4</b>
<b>Total Units</b>		<b>68</b>

American Institutions	Units
Courses that satisfy this requirement may also satisfy G.E. Area D1	8

American Cultural Perspectives Requirement	Units
Refer to catalog for list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.		
Course		GE Area
General Physics/Lab	PHY 131/131L	B1, B3
Life Science/Lab	BIO 110/111L	B2, B3
Anal Geom & Calculus I	MAT 114	B4
Computers and Society	CS 375	B5
The remaining GE requirements may be satisfied by any course approved for that area.		

No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.  
A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.