



California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) **COMPUTER SCIENCE**

Catalog Year **2012-2013**

Name _____

TGA _____

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
Total Units		58

Elective Core Courses		
Course		Units
<i>At least 20 units from:</i>		
Programming Graphical User Interfaces	CS 245	(4)
Unix and Scripting	CS 260	(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)
Game Development	CS 470	(4)
Software Engineering Practice	CS 481	(4)
Honors	CS 490	(4)
Special Topics for Upper Division Studnets	CS 499	(1-4)
<i>No more than 8 units from:</i>		
CS 299, CS 400, CS 461, CS 462, EGR 461, EGR 462, EGR 463,		
MAT 216, MAT 370, MAT 380, MAT 381, MAT 402, MAT 470,		
MAT 480, MAT 485, MAT 486, SCI 470, SCI 471, SCI 472, SCI 473.		
Total Units		27

Required Support Courses			
Course			Units
Life Science (B2, B3)	BIO 110/111L		3/1
Computers and Society (B5)	CS 375		4
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
General Physics (B1, B3)	PHY 131/131L		3/1
General Physics	PHY 132/132L		3/1
General Physics	PHY 133/133L		3/1
Stat Meth for Comp Scientists	STA 326		4
Total Units			43

General Education Requirements		
Area		Units
Area A Communication & Critical Thinking		12
1 Oral Communication		
2 Written Communication		
3 Critical Thinking		
Area B Mathematics & Natural Sciences		16
<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		
Area C Humanities		16
1 Visual and Performing Arts		
2 Philosophy and Civilization		
3 Literature and Foreign Language		
4 Humanities Synthesis		
Area D Social Sciences		20
1 U.S. History, Constitution, American Ideals		
2 History, Economics and Political Science		
3 Sociology, Anthropology, Ethnic & Gender Studies		
4 Social Science Synthesis		
Area E Lifelong Understanding & Self Development		4
Total Units		68

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

American Cultural Perspectives Requirement	
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	PHY 131/131L	B1, B3
Life Science	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.