



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

Plan (Major) COMPUTER ENGINEERING
Subplan/Option _____

Catalog Year 2013-2014
Minimum Units Required 198

Name _____
Student ID _____

TGA _____
GWT Satisfied _____ Yes _____ No

Required Core Courses		
Course		Units
Introduction to Electrical Engineering	ECE 109/109L	3/1
C for Engineers	ECE 114/114L	3/1
Discrete Structures	ECE 130	4
Introduction to Combinational Logic	ECE 204/204L	3/1
Introduction to Sequential Logic	ECE 205/205L	3/1
Network Analysis I	ECE 207/207L	3/1
Network Analysis II	ECE 209/209L	3/1
Electronic Devices and Circuits	ECE 220/220L	4/1
Object-Oriented Programming	ECE 256	4
Electromagnetic Fields	ECE 302	4
Data Structures for Engineers	ECE 304	4
Discrete Time Signals & System	ECE 306/306L	4/1
Control Systems Engineering	ECE 309/309L	4/1
Prob, Stats, & Random Processes for ECE	ECE 315	4
Electronic Design for Digital Circuits	ECE 325/325L	3/1
Introduction to Microcontrollers	ECE 341/341L	3/1
Computer Architecture	ECE 425/425L	3/1
Operating Systems	ECE 426/426L	3/1
Computer Networks	ECE 431/431L	3/1
or TCP/IP Internetworking	ECE 433/433L	(3/1)
Professional Topics for Engineers	ECE 464	1
Team Project	ECE 467	1
Software Engineering	ECE 480	4
Total Units		85

Elective Core Courses	
Course	Units
ECE Upper Division Electives	16
At least 12 of the electives must be satisfied by selecting courses from the following list. The rest of the elective units can be satisfied by selecting courses from the upper division ECE courses. If a course with an associated lab is selected both must be taken. ECE 342/342L, ECE 343/343L, ECE 404/404L, ECE 408/408L, ECE 414/414L, ECE 415/415L, ECE 423, ECE 423L, ECE 424/424L, ECE 428, ECE 429, ECE 432/432L, ECE 439, ECE 499 (with advisor approval).	
Total Units	16

Required Support Courses		
Course		Units
General Chemistry for Engineers	CHM 115	4
or General Chemistry (B1)	CHM 121	(3)
and General Chemistry Lab (B3)	CHM 121L	(1)
Project Design & Application (B5)	EGR 481, 482	4
Analytic Geometry/Calculus I (B4)	MAT 114	4
Analytic Geometry/Calculus II	MAT 115	4
Analytic Geometry/Calculus III	MAT 116	4
Calculus of Several Variables I	MAT 214	3
Calculus of Several Variables II	MAT 215	3
Linear Algebra & Differential Equations	MAT 224	4
General Physics (B1, B3)	PHY 131/131L	3/1
General Physics	PHY 132/132L	3/1
General Physics	PHY 133/133L	3/1
Total Units		42

General Education Requirements		IGE (G.E. Alternative)
Area	Units	
Area A Communication & Critical Thinking	12	IGE 120 4
1 Oral Communication		IGE 121 4
2 Written Communication		IGE 122 4
3 Critical Thinking		IGE 220 4
Area B Mathematics & Natural Sciences	16	IGE 221 4
<i>Select at least one lab course from sub-area 1 or 2.</i>		
1 Physical Science		IGE 222 4
2 Biological Science		IGE 223 4
3 Laboratory Activity		IGE 224 4
4 Math/Quantitative Reasoning		Area A1 4
5 Science & Technology Synthesis		Area A3 4
Area C Humanities	16	Area B 16
1 Visual and Performing Arts		Area C1, C2, or C3 4
2 Philosophy and Civilization		Area C4 4
3 Literature and Foreign Language		Area D4 4
4 Humanities Synthesis		
Area D Social Sciences	20	See University Catalog for information on how IGE meets G.E. requirements.
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
and General Chemistry Lab	CHM 121L B3
Analytic Geometry/Calculus I	MAT 114 B4
Project Design and Application	EGR 481/482 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.

