California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) **COMPUTER ENGINEERING** Catalog Year **2012-2013** Name _____ TGA _____
Subplan/Option _____ Minimum Units Required **198** Student ID _____ 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
Elecromagnetic Fields	ECE 302	4
Data Structures for Engineers	ECE 304	4
Introduction to Disctrete Time Signals & System	ECE 306	4
Comp Simulation of Dynamic Systems Lab	ECE 306L	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 and Senior Design Team Project	ECE 464, 467	1,1
Software Engineering	ECE 480	4
	Total Units	**85**

Elective Core Courses

Course	Units
ECE Upper Division Electives 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 selecdted 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).	16
Total Units	**16**

Required Support Courses

Course		Units
General Chemistry	CHM 121	3
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

Area	Units	IGE (G.E. Alternative)	
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
Select at least one lab course from sub-area 1 or 2.		IGE 222	4
1 Physical Science		IGE 223	4
2 Biological Science		IGE 224	4
3 Laboratory Activity		Area A1	4
4 Math/Quantitative Reasoning		Area A3	4
5 Science & Technology Synthesis		Area B	16
Area C Humanities	**16**	Area C1, C2, or C3	4
1 Visual and Performing Arts		Area C4	4
2 Philosophy and Civilization		Area D4	4
3 Literature and Foreign Language			
4 Humanities Synthesis			
Area D Social Sciences	**20**	See University Catalog for information on how IGE meets G.E. require-ments.	
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

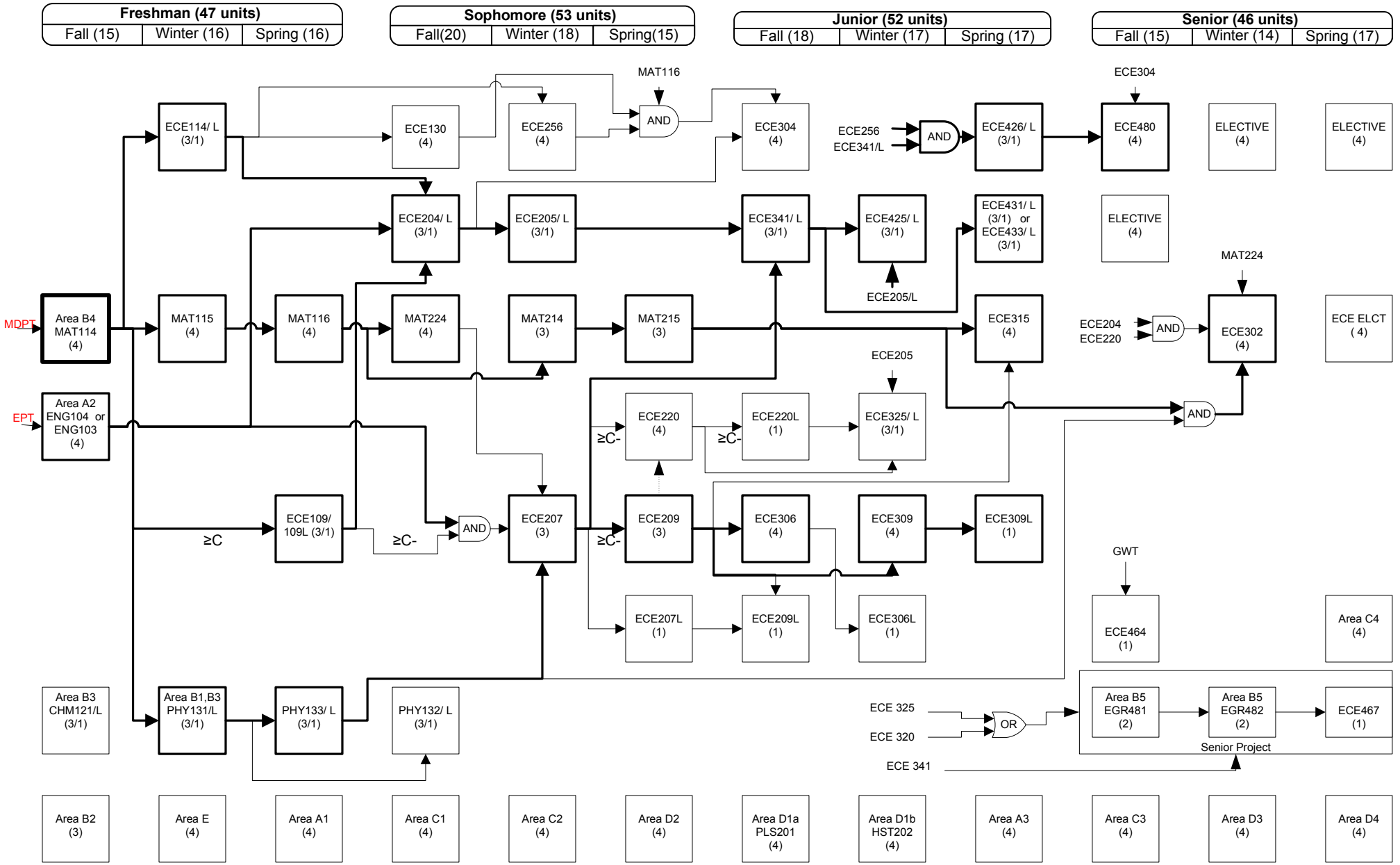
The remaining GE requirements may be satisfied by any course approved for that area.

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.

Computer Engineering Curriculum Flow Chart

Year 2012/2013

Name:_____



At least 12 units 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 (The lab is listed as corequisite to the Lecture) is selected both must be taken.

ECE 342/L ECE 343/L ECE 404/L ECE 414/L ECE 415/L ECE 423 ECE 423L ECE 424/L
ECE 408/L ECE428 ECE 429 ECE 432/L ECE 439 ECE 499 (with advisor approval)

Electrical and Computer Engineering Department
Computer Engineering Major
Curriculum Year: 2012-2013

Your department has developed this road plan, taking into account prerequisites and schedule restrictions.
You should pay attention to these concerns when deviating from this plan.

	Fall	Units	Winter	Units	Spring	Units	Comment
Year 1	**CHM 121/L** Major Support	4	**ECE 114/114L** Major Core	4	**ECE 109/109L** Major Core	4	*Students in this major are expected to maintain a GPA of at least 2.00 in all core courses.* *MAT 114, PHY 131/131L, CHM 121L, EGR 481, and EGR 482 satisfy both major and general education requirements*
	MAT 114 GE Area B4	4	**MAT 115** Major Support	4	**MAT 116** Major Support	4	
	ENG 104 or ENG 103 GE Area A2	4	**PHY 131/131L** GE Area B1, B3	4	**PHY 133/133L** Major Support	4	
	GE Area B2	3	**GE Area E** Any approved course in area E	4	**GE Area A1** Any approved course in area A1	4	
	Total Units	**15**	**Total Units**	**16**	**Total Units**	**16**	
					Total Units for Year	**47**	

	Fall	Units	Winter	Units	Spring	Units	Comment
Year 2	**ECE 204/204L** Major Core	4	**ECE 205/205L** Major Core	4	**ECE 209** Major Core	3	
	ECE 130 Major Core	4	**ECE 207** Major Core	3	**ECE 220** Major Core	4	
	MAT 224 Major Support	4	**ECE 256** Major Core	4	**MAT 215** Major Support	3	
	PHY 132/132L Major Support	4	**MAT 214** Major Support	3	**ECE 207L** Major Core	1	
	GE Area C1 Any approved course in area - C1	4	GE Area C2 Any approved course in area C2	4	GE Area D2 Any approved course in D2	4	
	Total Units	**20**	**Total Units**	**18**	**Total Units**	**15**	
					Total Units for Year	**53**	

	Fall	Units	Winter	Units	Spring	Units	Comment
Year 3	**ECE 304** Major Core	4	**ECE 425/L** Major Core	4	**ECE 426/L** Major	4	*Upper division ECE elective units may vary depending on selection of ECE 431/433.*
	ECE 341/341L Major Core	4	**ECE 325/325L** Major Core	4	**ECE 315** Major Core	4	
	ECE 220L Major Core	1	**ECE 309** Major Core	4	**ECE 431/431L or ECE 433/433L** Major	4	
	ECE 306 Major Core	4	**ECE 306L** Major Core	1	**ECE 309L** Major Core	1	
	ECE 209L Major Core	1	**HST 202** GE D1b	4	Any approved course in area A3	4	
	PLS 201 GE Area D1a	4					
	Take the Graduation Writing Test						
	Total Units	**18**	**Total Units**	**17**	**Total Units**	**17**	
					Total Units for Year	**52**	

	Fall	Units	Winter	Units	Spring	Units	Comment
Year 4	**ECE 480** Major Core	4	**ECE UD Elective** Major Core	4	**ECE UD Elective** Major Core	4	*All GE Area A courses and all lower division GE courses in a GE area must be completed before taking the GE Synthesis course in that area.* *ECE Upper Division Electives:* *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 UD ECE courses. If a course with an associated lab is selected both must be taken. ECE 342/342L, 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).*
	ECE UD Elective Major Core	4	**ECE 302** Major Core	4	**ECE 467** Major Core	1	
	ECE 464 Major Core	1	GE Area D3 Any approved course in D3	4	**ECE UD Elective** Major Core	4	
	EGR 481 GE Area B5	2	**EGR 482** GE Area B5	2	**GE Area C4** Any approved course in area C4	4	
	GE Area C3 Any approved course in area C3	4			**GE Area D4** Any approved course in area D4	4	
			Request a graduation check		*File an application for graduation*		
	Total Units	**15**	**Total Units**	**14**	**Total Units**	**17**	
					Total Units for Year	**46**	

Total Units on Plan	**198**	
Major Core Units	**101**	
Major Support Units	**29**	
General Education Units	**68**	
Unrestricted Elective Units	**0**	