



California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) **COMPUTER ENGINEERING**
Subplan/Option _____

Catalog Year **2007-2008**
Minimum Units Required **198**

Name _____
Student ID _____

Evaluator _____
GWT Satisfied _____ Yes _____ No

Required Core Courses		
Course		Units
<i>Students in this major are expected to maintain a GPA of at least 2.00 in all core courses.</i>		
Introduction to Electrical Engineering/Lab	ECE 109/L	4
C for Engineers/Lab	ECE 114/L	4
Discrete Structures	ECE 130	4
Introduction to Combinational Logic/Lab	ECE 204/L	4
Introduction to Sequential Logic/Lab	ECE 205/L	4
Network Analysis I/Lab	ECE 207/L	4
Network Analysis II/Lab	ECE 209/L	4
Electronic Devices and Circuits/Lab	ECE 220/L	5
Object-Oriented Programming	ECE 256	4
Electromagnetic Fields	ECE 302	4
Data Structures for Engineers	ECE 304	4
Introduction to Discrete Time Signals & System	ECE 306	4
Comp Simulation of Dynamic Systems/Lab	ECE 306L	1
Control Systems Engineering/Lab	ECE 309/L	5
Prob, Stats, & Random Processes for ECE	ECE 315	4
Electronic Design for Digital Circuits/Lab	ECE 325/L	4
Introduction to Microcontrollers/Lab	ECE 341/L	4
Computer Organization/Lab	ECE 342/L	5
or Microprocessor I/Lab	ECE 343/L	(5)
Digital Design using Verilog HDL/Lab	ECE 415/L	4
or State Machine Design using VHDL/Lab	ECE 424/L	(4)
Computer Architecture/Lab	ECE 425/L	4
Operating Systems/Lab	ECE 426/L	4
Applications Development using Java	ECE 429	4
Computer Networks/Lab	ECE 431/L	5
or TCP/IP Internetworking/Lab	ECE 433/L	(4)
Professional Topics for Engineers and Senior Design Team Project	ECE 464, 467	1,1
Software Engineering	ECE 480	4
Total Units		99

Elective Core Courses	
Course	Units
ECE Upper Division Electives*	2-3
*Varies depending on choice of ECE 431 or 433.	
Total Units	2-3

Required Support Courses			IGE (G.E.)	
Course		Units	Alternative)	
General Chemistry	CHM 121	3	IGE 120	4
General Chemistry Lab (B2)	CHM 121L	1	IGE 121	4
Analytic Geometry/Calculus I (B1)	MAT 114	4	IGE 122	4
Analytic Geometry/Calculus II	MAT 115	4	IGE 220	4
Analytic Geometry/Calculus III	MAT 116	4	IGE 221	4
Calculus of Several Variables I	MAT 214	3	IGE 222	4
Calculus of Several Variables II	MAT 215	3	IGE 223	4
Linear Algebra & Differential Equations	MAT 224	4	IGE 224	4
General Physics/Lab (B2)	PHY 131/L	4	Area A2	4
General Physics/Lab	PHY 132/L	4	Area A3	4
General Physics/Lab	PHY 133/L	4	Area B	16
Project Design & Application (B4)	EGR 481, 482	4	Area C1, C2,	
Ethical Cons. in Tech. & Appl. Sci. (C4)	EGR 402	4	or C3	4
			Area C4	4
			Area D4	4
			See University Catalog for information on how IGE meets G.E. requirements.	
Total Units		46		

General Education Requirements	
Area	Units
Area A Communication & Critical Thinking	12
1 Written Communication	
2 Oral Communication	
3 Critical Thinking	
Area B Mathematics & Natural Sciences	16
<i>Select at least one lab course from sub-area 2 or 3.</i>	
1 Math/Quantitative Reasoning	
2 Physical Science	
3 Biological Science	
4 Science & Technology Synthesis	
Area C Humanities	16
1 Fine 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. Areas D1.a and D1.b

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

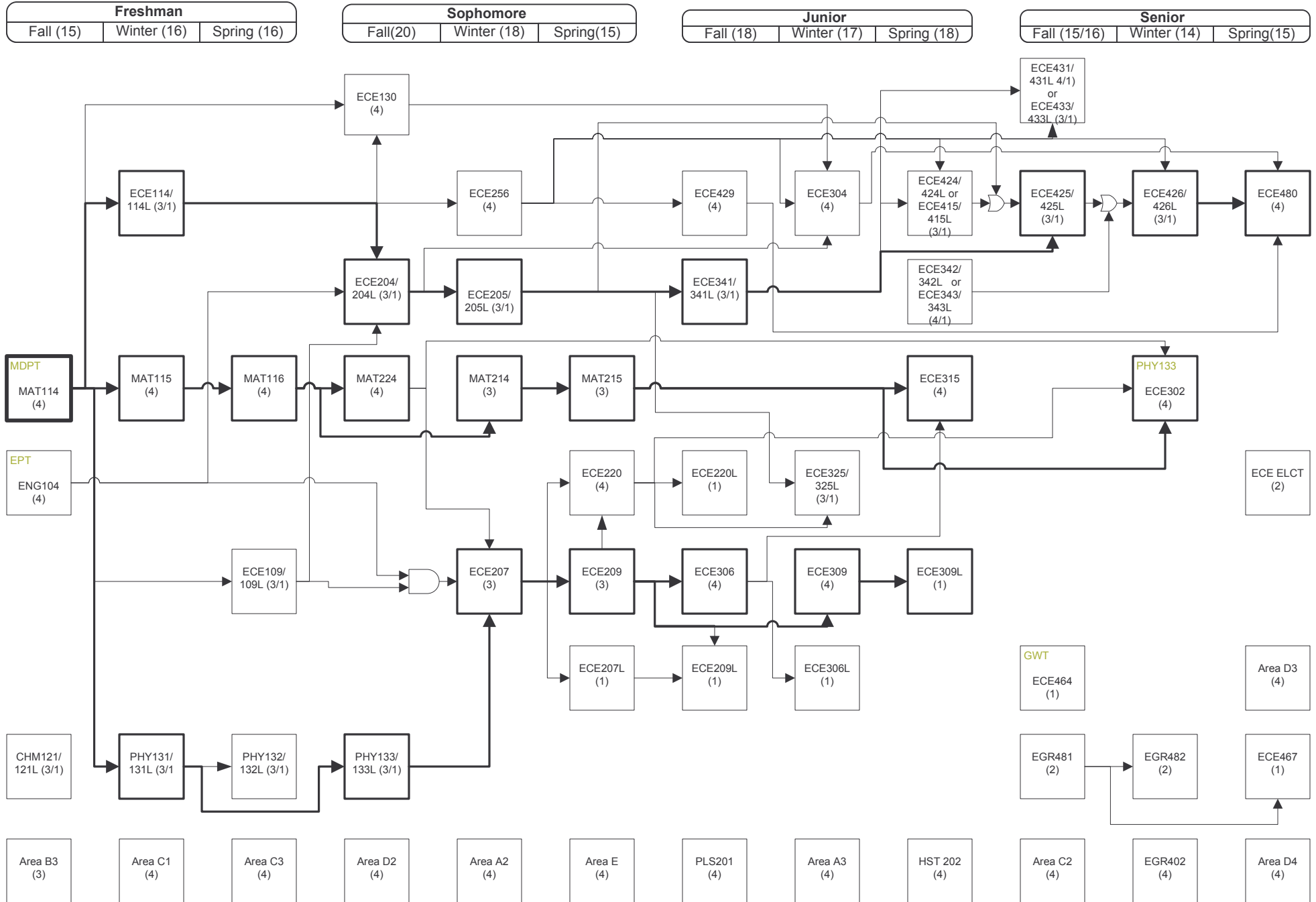
The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.		
Course		GE Area
Analytic Geometry/Calculus I	MAT 114	B1
General Physics/Lab	PHY 131/L	B2
General Chemistry Lab	CHM 121L	B2
Project Design and Application	EGR 481/482	B4
Ethical Cons. in Tech. & Appl. Science	EGR 402	C4
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 2007/2008

Name: _____



Electrical and Computer Engineering Department
Computer Engineering Major
Curriculum Year: 2007-2008

*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.*

Year 1	Fall	Units	Winter	Units	Spring	Units	Comment
	CHM 121 Major Support	3	ECE 114/114L Major Core	4	ECE 109/109L Major Core	4	<i>Students in this major are expected to maintain a GPA of at least 2.00 in all core courses.</i> <i>MAT 114, PHY 131/131L, CHM 121L, EGR 402, EGR 481, and EGR 482 satisfy both major and general education requirements</i> <i>One course must be completed in each of the GE areas A2-3, B1-3, C1-3, D3, and E.</i>
	MAT 114 GE Area B1	4	MAT 115 Major Support	4	MAT 116 Major Support	4	
	ENG 104 GE Area A1	4	PHY 131/131L GE Area B2	4	PHY 132/132L Major Support	4	
	GE Area Any approved course in area B3, C1-3, D3-4, or E	3	GE Area Any approved course in area B3, C1-3, D3-4, or E	4	GE Area Any approved course in area B3, C1-3, D3-4, or E	4	
	CHM 121L GE	1					
	Total Units	15	Total Units	16	Total Units	16	
Total Units for Year						47	

Year 2	Fall	Units	Winter	Units	Spring	Units	Comment
	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 133/133L Major Support	4	MAT 214 Major Support	3	ECE 207L Major Core	1	
	GE Area D2	4	GE Area A2	4	GE Area Any approved course in area B3, C1-3, D3-4, or E	4	
Total Units	20	Total Units	18	Total Units	15		
Total Units for Year						53	

Year 3	Fall	Units	Winter	Units	Spring	Units	Comment
	ECE 429 Major Core	4	ECE 304 Major Core	4	ECE 415/415L or ECE 424/424L Major	4	
	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 342/342L or ECE343/343L Major	5	
	ECE 306 Major Core	4	ECE 306L Major Core	1	ECE 209L Major Core	1	
	ECE 209L Major Core	1	GE Area A3	4	HST 202 GE D1b	4	
	PLS 201 GE Area D1a	4					
	<i>Take the Graduation Writing Test</i>						
Total Units	18	Total Units	17	Total Units	18	Total Units for Year	

Year 4	Fall	Units	Winter	Units	Spring	Units	Comment	
	ECE 431/431L or ECE 433/433L Major Core	5 (or 4 if taking ECE433)	ECE 426/426L Major Core	4	ECE 480 Major Core	4	<i>Upper division ECE elective units may vary depending on selection of ECE 431/433.</i> <i>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.</i>	
	ECE 425/425L Major Core	4	ECE 302 Major Core	4	ECE 467 Major Core	1		
	ECE 464 Major Core	1	EGR 402 GE Area C4	4	ECE Elective Major Core	2 (or 3 if took ECE433)		
	EGR 481 GE Area B4	2	EGR 482 GE Area B4	2	GE Area Any approved course in area B3, C1-3, D3-4, or E	4		
	GE Area Any approved course in area B3, C1-3, D3-4, or E	4			GE Area Any approved course in area B3, C1-3, D3-4, or E	4		
			<i>Request a graduation check</i>		<i>File an application for graduation</i>			
	Total Units	16	Total Units	14	Total Units	15		Total Units for Year

Total Units on Plan	198
Major Core Units	101
Major Support Units	29

General Education Units	68	
Unrestricted Elective Units	0	