



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

Plan (Major) COMPUTER ENGINEERING
Subplan/Option _____

Catalog Year 2009-2010
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 109/109L	3/1
C for Engineers/Lab	ECE 114/114L	3/1
Discrete Structures	ECE 130	4
Introduction to Combinational Logic/Lab	ECE 204/204L	3/1
Introduction to Sequential Logic/Lab	ECE 205/205L	3/1
Network Analysis I/Lab	ECE 207/207L	3/1
Network Analysis II/Lab	ECE 209/209L	3/1
Electronic Devices and Circuits/Lab	ECE 220/220L	4/1
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 309/309L	4/1
Prob, Stats, & Random Processes for ECE	ECE 315	4
Electronic Design for Digital Circuits/Lab	ECE 325/325L	3/1
Introduction to Microcontrollers/Lab	ECE 341/341L	3/1
Computer Organization/Lab	ECE 342/342L	4/1
or Microprocessor I/Lab	ECE 343/343L	(4/1)
Digital Design using Verilog HDL/Lab	ECE 415/415L	3/1
or Digital System Design Using VHDL/Lab	ECE 424/424L	(3/1)
Computer Architecture/Lab	ECE 425/425L	3/1
Operating Systems/Lab	ECE 426/426L	3/1
Applications Development using Java	ECE 429	4
Computer Networks/Lab	ECE 431/431L	4/1
or TCP/IP Internetworking/Lab	ECE 433/433L	(3/1)
Professional Topics for Engineers	ECE 464, 467	1,1
and Senior Design Team Project		
Software Engineering	ECE 480	4
Total Units		98- 99

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

Required Support Courses		
Course		Units
General Chemistry/Lab (B1, B3)	CHM 121/121L	3/1
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/Lab (B1, B3)	PHY 131/131L	3/1
General Physics/Lab	PHY 132/132L	3/1
General Physics/Lab	PHY 133/133L	3/1
Project Design & Application (B5)	EGR 481, 482	4
Total Units		42

General Education Requirements		IGE (G.E. Alternative)
Area	Units	
Area A Communication & Critical Thinking	12	
1 Oral Communication		IGE 120 4
2 Written Communication		IGE 121 4
3 Critical Thinking		IGE 122 4
Area B Mathematics & Natural Sciences	16	
<i>Select at least one lab course from sub-area 1 or 2.</i>		
1 Physical Science		IGE 220 4
2 Biological Science		IGE 221 4
3 Laboratory Activity		IGE 222 4
4 Math/Quantitative Reasoning		IGE 223 4
5 Science & Technology Synthesis		IGE 224 4
Area C Humanities	16	
1 Visual and Performing Arts		Area A2 4
2 Philosophy and Civilization		Area A3 4
3 Literature and Foreign Language		Area B 16
4 Humanities Synthesis		Area C1, C2, or C3 4
Area D Social Sciences	20	
1 U.S. History, Constitution, American Ideals		Area C4 4
2 History, Economics and Political Science		Area D4 4
3 Sociology, Anthropology, Ethnic & Gender Studies		
4 Social Science Synthesis		
Area E Lifelong Understanding & Self Development	4	
Total Units	68	See University Catalog for information on how IGE meets G.E. requirements.

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/Lab	PHY 131/131L	B1, B3
and General Chemistry/Lab	CHM 121/121L	B1, 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.

Electrical and Computer Engineering Department
Computer Engineering Major
Curriculum Year: 2009-2010

*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/L Major Support (GE Area B3)	4	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. MAT 114, PHY 131/131L, CHM 121L, EGR 481, and EGR 482 satisfy both major and general education requirements</i>
	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 132/132L Major Support	4	
	GE Area Any approved course in area B2	3	GE Area Any approved course in area A1, A3, C1-4, D2-4, E	4	GE Area Any approved course in area A1, A2, C1-4, D2-4, E	4	
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 Any approved course in area A1, A2, C1-4, D2-4, E	4	GE Area Any approved course in area A1, A2, C1-4, D2-4, E	4	GE Area Any approved course in area A1, A2, C1-4, D2-4, 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 309L Major Core	1	
	ECE 209L Major Core	1	GE Area Any approved course in area A1, A3, C1-4, D2-4, E	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	53	

Year 4	Fall	Units	Winter	Units	Spring	Units	Comment
	ECE 431/431L or ECE 433/433L Major Core	4-5	ECE 426/426L Major Core	4	ECE 480 Major Core	4	Upper division ECE elective units may vary depending on selection of ECE 431/433. 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 425/425L Major Core	4	ECE 302 Major Core	4	ECE 467 Major Core	1	
	ECE 464 Major Core	1	GE Area C4	4	ECE Elective Major Core	2-3	
	EGR 481 GE Area B4	2	EGR 482 GE Area B4	2	GE Area Any approved course in area A1, A3, C1-4, D2-4, E	4	
	GE Area Any approved course in area A1, A3, C1-4, D2-4, E	4			GE Area Any approved course in area A1, A3, C1-4, D2-4, E	4	
			<i>Request a graduation check</i>		<i>File an application for graduation</i>		
	Total Units	15-16	Total Units	14	Total Units	15-16	
					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	

Computer Engineering Curriculum Flow Chart

Year 2009/2010

Name: _____

Freshman		
Fall (15)	Winter (16)	Spring (16)

Sophomore		
Fall(20)	Winter (18)	Spring(15)

Junior		
Fall (18)	Winter (17)	Spring (18)

Senior		
Fall (15/16)	Winter (14)	Spring(15)

