California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) __COMPUTER ENGINEERING__   Catalog Year __2011–2012__   Name_____   Evaluator_____

Subplan/Option_____   Minimum Units Required __198__   Student ID_____   GWT Satisfied ____Yes ____No

Required Core Courses

Course		Units
*Students in this major are expected to **maintain** a GPA of at least 2.00 in all core courses.*		
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	ECE 464, 467	1,1
and Senior Design Team Project		
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 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).	
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
Area A Communication & Critical Thinking	12
1 Oral Communication	
2 Written Communication	
3 Critical Thinking	
Area B Mathematics & Natural Sciences	16
Select at least one lab course from sub-area 1 or 2.	
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**

IGE (G.E. Alternative)

IGE 120	4
IGE 121	4
IGE 122	4
IGE 220	4
IGE 221	4
IGE 222	4
IGE 223	4
IGE 224	4
Area A1	4
Area A3	4
Area B	16
Area C1, C2, or C3	4
Area C4	4
Area D4	4

See University Catalog for information on how IGE meets G.E. require-ments.

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

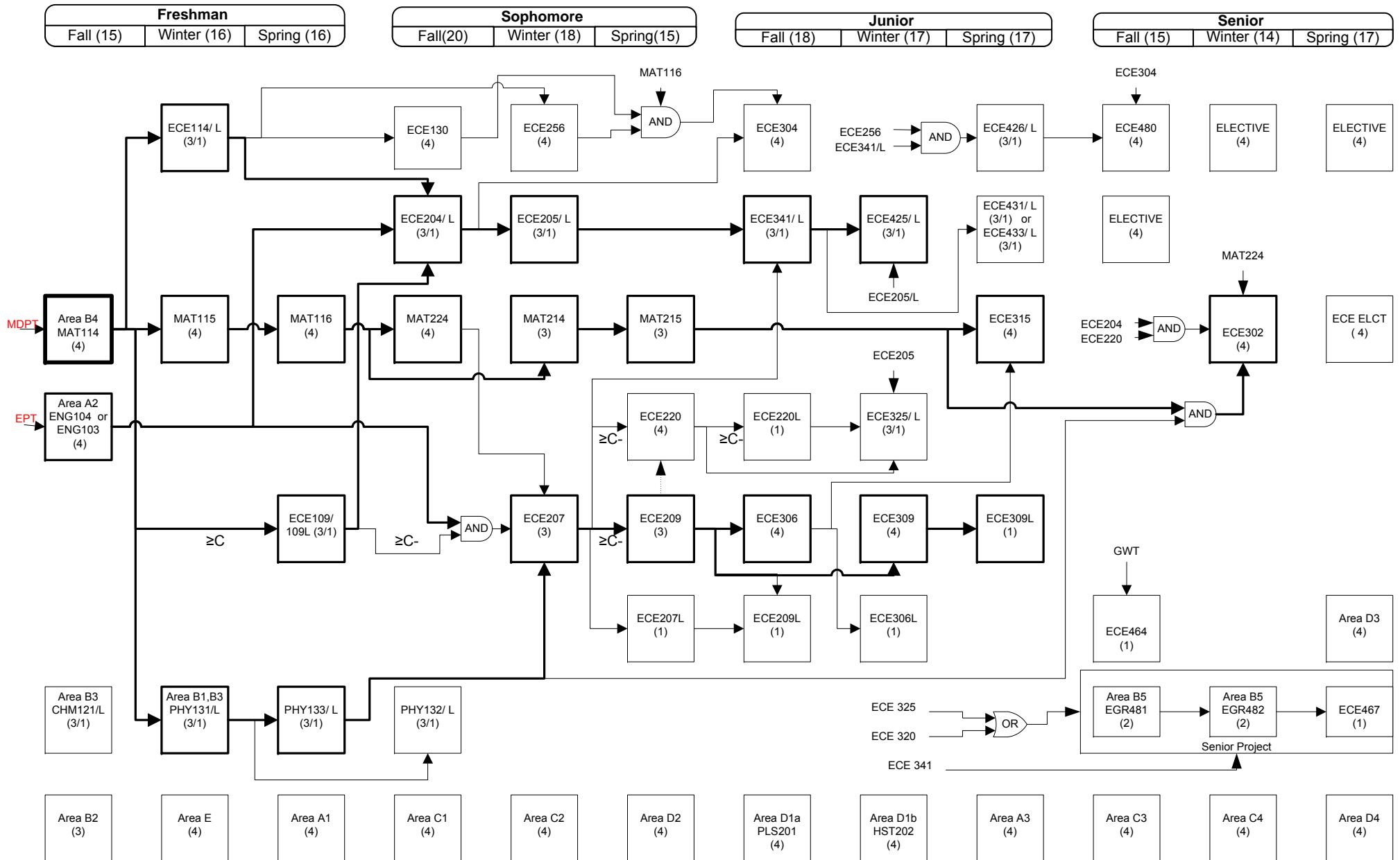| American Cultural Perspectives Requirement	
Refer to catalog for list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

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 2011/2012

Name: _____

Freshman			Sophomore			Junior			Senior		
Fall (15)	Winter (16)	Spring (16)	Fall(20)	Winter (18)	Spring(15)	Fall (18)	Winter (17)	Spring (17)	Fall (15)	Winter (14)	Spring (17)

MAT116

ECE114/ L (3/1)

ECE130 (4)

ECE256 (4)

AND

ECE304 (4)

ECE304

ECE480 (4)

ELECTIVE (4)

ELECTIVE (4)

ECE256 → AND
ECE341/L →

ECE426/ L (3/1)

ECE204/ L (3/1)

ECE205/ L (3/1)

ECE341/ L (3/1)

ECE425/ L (3/1)

ECE431/ L (3/1) or ECE433/ L (3/1)

ELECTIVE (4)

ECE205/L

MDPT

Area B4 MAT114 (4)

MAT115 (4)

MAT116 (4)

MAT224 (4)

MAT214 (3)

MAT215 (3)

ECE315 (4)

MAT224

ECE204 → AND
ECE220 →

ECE302 (4)

ECE ELCT (4)

EPT

Area A2 ENG104 or ENG103 (4)

ECE205

≥C−

ECE220 (4)

≥C−

ECE220L (1)

ECE325/ L (3/1)

AND

≥C

ECE109/ 109L (3/1)

≥C−

AND

ECE207 (3)

≥C−

ECE209 (3)

ECE306 (4)

ECE309 (4)

ECE309L (1)

GWT

ECE207L (1)

ECE209L (1)

ECE306L (1)

ECE464 (1)

Area D3 (4)

Area B3 CHM121/L (3/1)

Area B1,B3 PHY131/L (3/1)

PHY133/ L (3/1)

PHY132/ L (3/1)

ECE 325
ECE 320

OR

Area B5 EGR481 (2)

Area B5 EGR482 (2)

ECE467 (1)

Senior Project

ECE 341

| Area B2 (3) | Area E (4) | Area A1 (4) | Area C1 (4) | Area C2 (4) | Area D2 (4) | Area D1a PLS201 (4) | Area D1b HST202 (4) | Area A3 (4) | Area C3 (4) | Area C4 (4) | Area D4 (4) |

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 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)