Plan (Major) **ELECTRICAL ENGINEERING**   Catalog Year   **2015 - 2016**   Name

Subplan/Option   Minimum Units Required   **194**   Student ID

Required Core Courses

Course		Units
Required of all students. A 2.0 cumulative GPA is required in core courses in order to receive a degree in the major.		
Intro to Electrical Engineering & Lab	ECE 109/109L	3/1
C for Engineers & Lab	ECE 114/114L	3/1
Intro to Combinational Logic & Lab	ECE 204/204L	3/1
Intro 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
or Programming for Engineering Applications	ECE 257	(4)
Electromagnetic Fields	ECE 302	4
Discrete Time Signals and Systems & Lab	ECE 306/306L	4/1
Network Analysis III	ECE 307	3
Control Systems Engineering & Lab	ECE 309/309L	4/1
Intro to Power Engineering & Lab	ECE 310/310L	4/1
Prob, Stats, & Random Processes for ECE	ECE 315	4
Linear Active Circuit Design & Basic Active Circuit Lab	ECE 320/320L	3/1
Intro to Semiconductor Devices	ECE 330	3
Intro to Microcontrollers & Lab	ECE 341/341L	3/1
Communications Systems & Lab	ECE 405/405L	4/1
Professional Topics for Engineers	ECE 464	1
Team Project III	ECE 467	1
Total Units		**77**

Elective Core Courses

Course	Units
ECE Upper Division Electives	20
12 of the 20 units must be 400 level courses. If a course has an associated lab, both must be taken.	
Total Units	**20**

Required Support Courses

Course		Units
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.		
General Chemistry for Engineers	CHM 115	4
or General Chemistry & Lab (B3)	CHM 121/121L	(3/1)
Project Design Principles and Applications (B5)	EGR 481	2
and Project Design Principles and Applications (B5)	EGR 482	2
	MAT 114	4
Analytic Geometry and Calculus I (B4)	MAT 115	4
Analytic Geometry and Calculus II (B4)	MAT 116	4
Analytic Geometry and Calculus III (B4)	MAT 214	3
Calculus of Several Variables I	MAT 215	3
Calculus of Several Variables II	MAT 224	4
Elem Linear Algebra and Diff Equations	PHY 131/131L	3/1
General Physics & Lab (B1, B3)	PHY 132/132L	3/1
General Physics & Lab	PHY 133/133L	3/1
General Physics & Lab		
Total		**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 subarea 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	
a. United States History	
b. Introduction to American Government	
2. History, Economics and Political Science	
3. Sociology, Anthropology, Ethnic & Gender Studies	
4. Social Science Synthesis	
Area E Lifelong Understanding & Self Development	4
Total	**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 GE requirements.

American Institutions	
Courses that satisfy this requirement may also satisfy GE 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

All persons who receive undergraduate degrees from Cal Poly Pomona must pass the Graduation Writing Test (GWT). The test must be taken by the quarter following completion of 120 units for undergraduates.