



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

Plan (Major) **ELECTROMECHANICAL SYSTEMS ENGINEERING, B.S. TECHNOLOGY**

Catalog Year **2017-2018**

Name \_\_\_\_\_

Subplan/Option \_\_\_\_\_

Minimum Units Required **191**

Student ID \_\_\_\_\_

Required Core Courses
ETT 201/201L - Electrical Technology/Laboratory (3/1)
ETT 210 - Applied Statics (3)
ETT 211 - Applied Dynamics (3)
ETT 215/215L - C Programming for Technology/Laboratory (3/1)
ETT 217 - Materials Science for Engineering Technology (3)
ETT 220/220L - Strength of Materials for Engineering Technology/Laboratory (3/1)
ETT 234/234L - Materials Joining/Laboratory (1/1)
ETT 305 - Engineering Economics Analysis for Engineering Technology (4)
ETT 310/310L - Applied Fluid Mechanics I/Laboratory (3/1)
ETT 321/321L - Electronic Devices and Systems/Laboratory (3/1)
ETT 460 - Project/Selection and Management (2)
ETM 306 - Applied Thermodynamics (4)
ETM 308 - Applied Heat Transfer (4)
ETM 312 - Applied Fluid Mechanics II (4)
ETM 315/315L - Machine Elements/Laboratory (3/1)
ETM 330/330L - Instrumentation and Control Applications/Laboratory (3/1)
ETM 334 - Applied Heating and Air Conditioning (4)
ETM 335/335L - Heating and Air Conditioning/Laboratory (3/1)
ETM 410/410L - Internal Combustion Engines/Laboratory (3/1)
MFE 126/126L - Engineering Graphics I/Laboratory (2/1)
MFE 221/221L - Manufacturing Processes I--Material Removal/Laboratory (2/1)
MFE 226/226L - Engineering Graphics II/Laboratory (2/1)
MFE 230/230L - Manufacturing Processes II--Forming, Casting and Joining/Laboratory (2/1)
<b>Total Units 81</b>

Elective Core Courses
ET XXX- Technical Electives (23) (300 and 400 level courses ONLY)
<b>Total Units 23</b>

Required Support Courses
CHM 121 - General Chemistry (3) and
CHM 121L - General Chemistry Laboratory (1) (B3)
EGR 100/100L - Engineering, Society, and You (3/1) (E)
EGR 481 - Project Design Principles and Applications (2) (B5)
EGR 482 - Project Design Principles and Applications (2) (B5)
MAT 130 - Technical Calculus I (4) (B4)
MAT 131 - Technical Calculus II (4)
MAT 132 - Technical Calculus III (4)
PHY 121 - College Physics (3) (B1) and
PHY 121L - College Physics Laboratory (1) (B3)
PHY 122 - College Physics (3) and
PHY 122L - College Physics Laboratory (1)
PHY 123 - College Physics (3) and
PHY 123L - College Physics Laboratory (1)
<b>Total Units 36</b>

Interdisciplinary General Education		
An alternate pattern for partial fulfillment of GE Areas A, C, D, and E available for students is the Interdisciplinary General Education (IGE) program. Students should see an advisor for specific GE coursework required by their major. Students must be exempt from or score at least 147 on the EPT to qualify for IGE. Please refer to the University Catalog General Education Program section for additional information.		
<b>How IGE fulfills General Education Requirements:</b>		
<b>Year</b> <b>Completion of IGE Courses</b> <b>Satisfies GE Requirements</b>		
Freshman	IGE 120, IGE 121, IGE 122	A2 as well as any 2 courses from C1-C3
Sophomore	IGE 220, IGE 221, IGE 222	D1 (8 units) and D3
Junior	IGE 223, IGE 224	D2 and Area E
<b>Total Units 32</b>		

General Education Requirements
<b>Area A Communication &amp; Critical Thinking (12 units)</b>
1. Oral Communication
2. Written Communication
3. Critical Thinking
<b>Area B Mathematics &amp; Natural Sciences (16 units)</b>
1. Physical Science
2. Biological Science
3. Laboratory Activity
4. Math/Quantitative Reasoning
5. Science & Technology Synthesis
<b>Area C Humanities (16 units)</b>
1. Visual and Performing Arts
2. Philosophy and Civilization
3. Literature and Foreign Language
4. Humanities Synthesis
<b>Area D Social Sciences (20 units)</b>
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
<b>Area E Lifelong Understanding &amp; Self Development (4 units)</b>
<b>Total Units 68</b>

American Institutions	
Courses that satisfy this requirement may also satisfy GE Area D1	<b>8</b>

American Cultural Perspectives Requirement	
Refer to the University Catalog General Education Program section for a list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	<b>4</b>

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.