Cal Poly Pomona

Name: _____
Plan: **Electronic Systems Engineering Technology, B.S.**
SubPlan/Option: _____
Min. Units Required: **124 units**

**2019-2020 University Catalog
Degree Curriculum Sheet**

Major Required — 81 units

EGR1000 - Engineering, Society, and You (2) (E)
EGR1000L - Engineering, Society, and You Laboratory (1) (E)
EGR4810 - Project Design Principles and Applications (1) (B5)
EGR4820 - Project Design Principles and Applications (1) (B5)
EGR4830 - Project Design Principles and Applications (1) (B5)
ETE1021 - Circuit Analysis I (3)
ETE1021L - Circuit Analysis I Laboratory (1)
ETE1151 - C/C++ Programming (3)
ETE1151L - C/C++ Programming Laboratory (1)
ETE2041 - Electronic Devices and Circuits (3)
ETE2041L - Electronic Devices and Circuits Laboratory (1)
ETE2101 - Circuit Analysis II (3)
ETE2101L - Circuit Analysis II Laboratory (1)
ETE2301 - Digital Circuits (3)
ETE2301L - Digital Circuits Laboratory (1)
ETE2721 - Electronic CAD, Manufacturing and PCB Fabrication (3)
ETE2721L - Electronic CAD, Manufacturing and PCB Fabrication Laboratory (1)
ETE2801 - Industrial Electronics and PLC's (3)
ETE2801L - Industrial Electronics and PLC's Laboratory (1)
ETE3351 - Electronic Communication Circuits and Systems (3)
ETE3351L - Electronic Communication Circuits and Systems Laboratory (1)
ETE3441 - Microcontroller Applications (3)
ETE3441L - Microcontroller Applications Laboratory (1)
ETE3501 - Feedback Control Systems (3)
ETE3501L - Feedback Control Systems Laboratory (1)
ETE4201 - Electronic Test Instrumentation and Data Acquisition Systems (3)
ETE4201L - Electronic Test Instrumentation and Data Acquisition Systems Laboratory (1)
ETE4351 - Data Communication and Networking (3)
ETE4351L - Data Communication and Networking Laboratory (1)
ETE4751 - Introduction to Robotics Control and Application (3)
ETE4751L - Introduction to Robotics Control and Applications Laboratory (1)
ETM2121 - Applied Mechanics for Electronic Systems Engineering Technology (4)
IME4020 - Ethical Concepts in Technology and Applied Science (3) (B5 or C3)
MAT1300 - Technical Calculus I (4) (B4)
MAT1310 - Technical Calculus II (4)
PHY1210 - Physics of Motion, Fluids, and Heat (3) (B1)
PHY1210L - Physics of Motion, Fluids, and Heat Laboratory (1) (B3)
PHY1220 - Physics of Electromagnetism, Circuits, and Light (3)
PHY1220L - Electromagnetism, Circuits, and Light Laboratory (1)

Major Electives — 14 units

Select 14 units from the following list:
ETE4141 - Advanced Java Programming (3) and
ETE4141L - Advanced Java Programming Laboratory (1)

ETE4371 - RF and Microwave Systems (3) and
ETE4371L - RF and Microwave Systems Laboratory (1)

ETE4451 - Advanced Digital Design FPGA/Verilog HDL (3) and
ETE4451L - Advanced Digital Design Using FPGA/Verilog HDL Laboratory (1)

ETE4501 - Digital Signal Processing (3) and
ETE4501L - Digital Signal Processing Laboratory (1)

ETE4521 - Photonics-Optical Communication (3) and
ETE4521L - Photonics-Optical Communication Laboratory (1)

ETE4801 - Introduction to Motion Control (3) and
ETE4801L - Introduction to Motion Control Laboratory (1)

ETE4901 - Advanced Industrial Automation Systems (3) and
ETE4901L - Advanced Industrial Automation Systems Laboratory (1)

ETE4990 - Special Topics for Upper Division Students (1-3)

General Education Requirements — 48 Units

Students should consult the Academic Programs website
    https://www.cpp.edu/~academic-programs/general-education-course-listings.shtml
for current information regarding this requirement. Unless specific courses are required, please refer to the list of approved courses under General Education Requirements, Areas A through E.

Area A. English Language Communication and Critical Thinking (9 units)
At least 3 units from each sub-area
  1. Oral Communication
  2. Written Communication
  3. Critical Thinking (Satisfied by completion of undergraduate Engineering degree)

Area B. Scientific Inquiry and Quantitative Reasoning (12 units)
At least 3 units from B1, B2, B4, and B5 including 1 unit of lab from B1 or B2 to fulfill B3
  1. Physical Sciences
  2. Life Sciences
  3. Laboratory Activity
  4. Mathematics/Quantitative Reasoning
  5. Science and Technology Synthesis

Area C. Arts and Humanities (12 units)
At least 3 units from each sub-area and 3 additional units from sub-areas 1 and/or 2
  1. Visual and Performing Arts
  2. Literature, Modern Languages, Philosophy and Civilization
  3. Arts and Humanities Synthesis

Area D. Social Sciences (12 units)
At least 3 units from each sub-area
  1. U.S. History and American Ideals
  2. U.S. Constitution and California Government
  3. Social Sciences: Principles, Methodologies, Value Systems, and Ethics
  4. Social Science Synthesis

Area E. Lifelong Learning and Self-Development (3 units)

Interdisciplinary General Education — 21 Units

An alternate pattern for partial fulfillment of GE Areas A, C, and D available for students is the Interdisciplinary General Education (IGE) program. Students should see an advisor for specific GE coursework required by their major. Please refer to the University Catalog General Education Program section for additional information.

How IGE fulfills General Education Requirements:

Year	Completion of IGE Courses	Satisfies GE Requirements
First	IGE 1100, IGE 1200	A2 and C2
Second/Third	IGE 2100, IGE 2200	C1 and C2
	IGE 2300, IGE 2400	D1 and D3
Third/Fourth	IGE 3100	C3 or D4

American Institutions — 6 Units

Courses that satisfy this requirement may also satisfy GE Area D1 and D2.

American Cultural Perspectives Requirement — 3 Units

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.

Graduation Writing Test

All persons who receive undergraduate degrees from Cal Poly Pomona must pass the Graduation Writing Test (GWT). The test must be taken by the semester following completion of 60 units for undergraduates.