# CAL POLY POMONA

Name:		
Plan:	Electronic Systems Engineering Technology, B.S.	
SubPlan/Option:		

Min. Units Required: 124 units

units

units

2018-2019	Universi	ity Cata	log
Degree C	urriculuı	n Sheet	

Major Required Core	81
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)	
ETE1021 - 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)	١
ETE4201L - Electronic Test Instrumentation and Data Acquisition Systems L	
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	gy (4)
IME4020 - Ethical Concepts in Technology and Applied Science (3) (B5 or C	3)
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
Select 14 units from the following list:	
ETE4141 - Advanced Java Programming (3) and	
ETE4141L - Advanced Java Programming Laboratory (1)	
ETETTTE Travarious sava i regisariiming Eaboratory (1)	
ETE4371 - RF and Microwave Systems (3) and	
ETE4371L - RF and Microwave Systems Laboratory (1)	
ETE4451 - Advanced Digital Design FPGA/Verilog HDL (3) and	4)
ETE4451L - Advanced Digital Design Using FPGA/Verilog HDL Laboratory (	1)
ETE4501 - Digital Signal Processing (3) and	
ETE4501 - Digital Signal Processing (3) and ETE4501L - Digital Signal Processing Laboratory (1)	
ETE 100 TE Digital Digital F 1000001119 Euboratory (1)	
ETE4521 - Photonics-Optical Communication (3) and	

ETE4521L - Photonics-Optical Communication 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)

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

## 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)

- 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)

- 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)

- 1. Visual and Performing Arts
- 2a. Philosophy and Civilization
- 2b. Literature and Language Other than English
- Arts and Humanities Synthesis

#### Area D. Social Sciences (12 units)

- 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
Freshman	IGE 1100, IGE 1200	A2 and C2b
Sophomore	IGE 2100, IGE 2200	C1 and C2a
Junior	IGE 2300, IGE 2400	D1 and D3
Senior	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.