



Electronics Engineering Technology A.S. Degree (S0681)

Total units for Degree including G.E.'s: 60.5 units

This degree is recommended for those who plan on transferring
Cal Poly Pomona's Electronic Systems Engineering Technology Program

1st Semester – 11+ Units

Electronics Theory (DC) ELEC 50A* 4 Units	Electronics Theory (AC) ELEC 50B* 4 Units	Trigonometry Math 150 3 Units
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plus GE Coursework***

2nd Semester – 12+ Units

Digital Electronics ELEC 56* 4 Units	Semiconductor Devices ELEC 51** 4 Units <small>(advisory ELEC50B)</small>	General Physics PHYS 2AG 4 Units
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plus GE Coursework***

3rd Semester – 7+ Units

Electronic Assembly & Fabrication ELEC 61** 3 Units	General Physics PHYS 2BG 4 Units
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plus GE Coursework***

4th Semester – 6.5+ Units

Industrial Systems ELEC 54B** 3 Units <small>(advisory ELEC50B)</small>	Programming in C++ Programming in C++ Lab CISP 31 and 31L 3.5 Units
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plus GE Coursework***



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and degrees.

*After completing ELEC 50A, 50B and 56, students are eligible to receive the Electronics Technology Level 1 Certificate. (M0679)

**After completing the 6 ELEC courses in the boxes above, plus 2 more ELEC units, students are eligible to receive the Electronics Technology Level 2 Certificate. (N0680)

*** For G.E. graduation requirements please see a counselor as well as:
<https://www.mtsac.edu/counseling/ge-sheets/>

Other HIGHLY Recommended Courses:

ELEC 53	Communications Systems
ELEC 55	Microwave Communications
ELEC 10	Introduction to Mechatronics

For more information including our future class offerings, alternate certificates, class scheduling, etc, please visit:

www.mtsac.edu/electronics

Electronics Engineering Technology

This A.S. Degree in Electronics Engineering Technology combines core courses in Electronics Technology plus additional math and science support courses. This degree is ideal for students who want the flexibility of receiving a skills based vocational degree that can immediately be applied to the job market, or for transfer towards a 4 year degree in Electronics Engineering Technology or Electronic Systems Engineering Technology at a local four year university. This degree aims at maximizing the number of courses that meet the lower division requirements of the four year Electronics Systems Engineering Technology program that Cal Poly Pomona offers.

Topics in core courses focus on direct and alternating current, electronic devices, digital and industrial electronics, as well as the electronic assembly and fabrication. Students completing this degree will be prepared with the necessary knowledge to make them versatile employees. Typical technician-level job classifications include electronics technician, electronics drafter, calibration technologist, field service technician, field engineer, customer service technician, and maintenance technician

The degree consists of 36.5 units of Electronics and other science related courses, plus at least 24 additional units of General Education coursework.

Specialized training is offered in the following:

- Test Instruments - Laboratory-grade analog and digital meters, oscilloscopes, function generators, frequency counters, bench top dual powers supplies, and bench top meters. (Keysight, Rigol, Tektronix, etc brands)
- Electronic assembly and fabrication techniques (including through-hole and surface-mount components using PACE stations) in accordance with IPC771/IPC7721 specifications.
- Arduino and FPGA programming.
- Digital logic trainer.
- Allen Bradley 1766/Micrologix 1400 programmable logic controllers with RS Logix software
- National Instruments Multisim and Ultiboard schematic capturing and simulation software.

Students are encouraged to further their education through other Electronics courses not required for the degree.