

Electronics and Computer Engineering Technology

The Electronics and Computer Engineering Technology degree and certificate programs prepare individuals either for initial employment or for enhancement of existing skills in electronics, or for transfer into B.S. programs in Electronics and Computer Engineering Technology or Industrial Technology offered in the California State University system.

The 44 semester units of electronics courses include four units of electronics math that fulfill the math-competency requirement required for the A.S. degree. The program consists of 576 hours of classroom instruction and 648 hours of laboratory work.

In addition to training in electronics fundamentals, the program includes advanced course work in microprocessors/microcomputers and interfaces; electronic communications (analog and digital); and industrial electronics. Specialized training is offered on the following:

- Test Instruments (including analog and digital meters, oscilloscopes, function generators, frequency counters, power supplies, and spectrum analyzers).
- Electronic Assembly and Fabrication Techniques (including through-hole and surface-mount components using PACE stations).
- Fox Z-80 Microprocessor Trainer.
- Digital Logic Trainer.
- Communications modules (including AM, FM, SSB, FDM/TDM, PCM, and fiber optics).
- X-Band (10.6-GHz) Gunn diode microwave trainer.
- FACET software training in industrial controls and components.
- Allen-Bradley SLC 100, 150, 500 Programmable Logic Controllers (RS Logix and Windows software).
- Multisim/Electronics Workbench computer simulation software.
- Personal computers and Windows operating systems.

Computer skills are enhanced by course work in Windows, Microsoft Office (word processing, spreadsheets, database, and presentations), and the Internet. Also offered is a course in computer simulation and troubleshooting for both digital and analog electronic circuits using Electronics Workbench Multisim.

Excluding textbooks, fees for a full-time student taking 12 units are \$371 per semester; state funding covers all other costs. Financial aid is available for those who qualify.

Mt. SAC is an authorized testing center for FCC license examinations administered by the National Association of Radio and Telecommunications Engineers (NARTE).