

ELECTRONICS TECHNOLOGY

Program Description

This program prepares individuals to apply basic engineering principles and technical skills in support of electrical, electronics, and communication engineers. Includes instruction in electrical circuitry, prototype development and testing; systems analysis and testing. Systems maintenance, instrument calibration, and report preparation.

Campus NOR

Award Type AS, S, CP

Career Opportunities

- Electronic Equipment Technician
- Electro-Mechanical Engineer
- Electronic Production Worker
- Electronic Engineering Technician
- Refurbishment Technician
- Electronics Test Technician
- Engineering Aide
- Failure Analysis Technician

Wages

	Annual	Hourly
Electrician	\$49,200	\$23.64
Electro-Mechanical Technician	\$45,600	\$21.94
Electronics Engineering Technicians	\$54,600	\$26.27
Electronics Equipment Assemblers	\$25,400	\$12.21
Electronics Equipment Installers, Repairers	\$27,100	\$13.05

Contact Information

Norco - (951) 372-7067

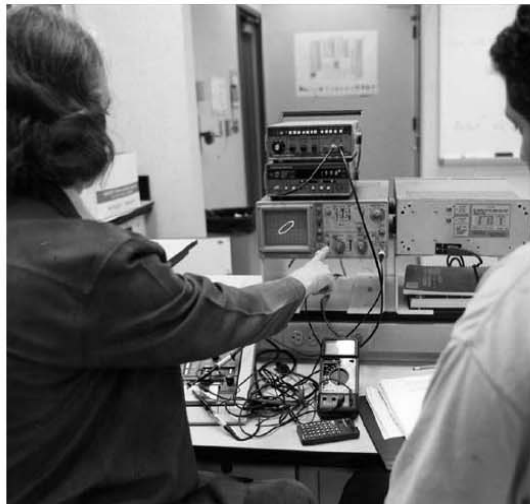
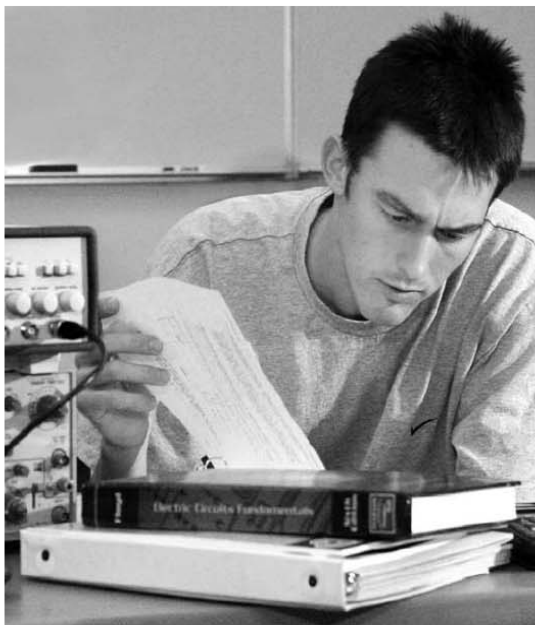
ELECTRONICS COMPUTER SYSTEMS AS545/CE545 Certificate Program

Required Courses (35-39 units)		Units
ELE-10 or both ELE-21 and ELE-23	Survey of Electronics	4
ELE-25	DC-AC Electronics	4
ELE-26	Electronics Devices and Circuits	4
ELE/ENE-27	Digital Techniques	4
ELE-36	Microprocessors and Microcontrollers	4
ELE-38	Technical Communication	3
ELE-39	Advanced Microprocessors	4
ELE-40	Computer Systems Troubleshooting	4
Electives	PCM and Digital Transmission	3
	Fiber Optic Basics	3
	(Choose from list below)	6

Electives (6 Units)		Units
CIS-5	Fundamentals of Programming Logic using C++	3
CIS-17A	C++ Programming: Objects	3
CIS-17B	C++ Programming: Advanced Objects	3
ELE-22	Passive Circuit Analysis	3
ELE-24	Active Circuit Analysis	3
ELE-200	Electronics Work Experience	1-4
ENE-22	Engineering Drawing	3
ENE-31	Computer-Aided Drafting and Design	3
ENE-60	Math for Engineering Technology	3
MAN-47A	Statistical Process Control	3
MAN-51	Machine Processes	3
MAN-60	Hydraulic and Pneumatic Systems	3
MAN-75A	Robotic Systems	4
MAN-76	Automated Systems Lab	1

Associate in Science Degree

The Associate in Science degree in Electronics Computer Systems will be awarded upon completion of the requirements for the certificate, plus completion of the graduation requirements as described in the catalog, as well as electives totaling 60 units of college work as required for the associate degree.



ELECTRONICS TECHNOLOGY

ELECTRONICS TECHNOLOGY Certificate Program

AS546/CE546

Required Courses (28 units)		Units
ELE-21	DC-AC Electronics	4
ELE-23	Electronics Devices and Circuits	4
ELE-25	Digital Techniques	4
ELE-26	Microprocessors and Microcontrollers	4
ELE/ENE-27	Technical Communication	3
Electives	(Choose from list below)	9

Electives (9 Units)		Units
CIS-5	Fundamentals of Programming Logic using C++	3
CIS-17A	C++ Programming: Objects	3
CIS-17B	C++ Programming: Advanced Objects	3
ELE-22	Passive Circuit Analysis	3
ELE-24	Active Circuit Analysis	3
ELE-36	Advanced Microprocessors	4
ELE-38	Computer Systems Troubleshooting	4
ELE-39	PCM and Digital Transmissions	3
ELE-40	Fiber Optic Basics	3
ELE-200	Electronics Work Experience	1-4
ENE-22	Engineering Drawing	3
ENE-31	Computer-Aided Drafting and Design	3
ENE-60	Math for Engineering Technology	3
MAN-47A	Statistical Process Control	3
MAN-51	Machine Processes	3
MAN-60	Hydraulic and Pneumatic Systems	2
MAN-75A	Robotic Systems	4
MAN-76	Automated Systems Lab	1

Associate in Science Degree

The Associate in Science degree in Electronics Technology will be awarded upon completion of the requirements for the certificate, plus completion of the graduation requirements as described in the catalog, as well as electives totaling 60 units of college work as required for the associate degree.

The following locally approved certificates may lead to employment competency, but do not lead to an associate in science degree:

ANALOG AND DIGITAL MICROELECTRONICS Certificate Program

CE831

Required Courses (15 units)		Units
ELE-23	Electronics Devices and Circuits	4
ELE-24	Active Circuit Analysis	3
ELE-25	Digital Techniques	4
ELE-26	Microprocessors and Microcontrollers	4

ANALOG ELECTRONICS, ANALYSIS AND DOCUMENTATION Certificate Program

CE834

Required Courses (15 units)		Units
ELE-22	Passive Circuit Analysis	3
ELE-23	Electronics Devices and Circuits	4
ELE-24	Active Circuit Analysis	3
ELE/ENE-27	Technical Communication	3
ELE-28	Automated Electronics Design and Documentation Tools	2

ANALOG ELECTRONICS TECHNOLOGY Certificate Program

CE835

Required Courses (11 units)		Units
ELE-10	Survey of Electronics	4
or		
ELE-21	DC-AC Electronics	4
ELE-23	Electronics Devices and Circuits	4
ELE-24	Active Circuit Analysis	3

DIGITAL ELECTRONICS TECHNOLOGY Certificate Program

CE837

Required Courses (11 units)		Units
ELE-25	Digital Techniques	4
ELE-26	Microprocessors and Microcontrollers	4
or		
ELE-36	Advanced Microprocessors	4
ELE-39	PCM and Digital Transmission	3

DIGITAL TECHNOLOGY AND DOCUMENTATION Certificate Program

CE839

Required Courses (16 units)		Units
ELE-10	Survey of Electronics	4
or		
ELE-21	DC-AC Electronics	4
ELE-25	Digital Techniques	4
ELE-28	Automated Electronics Design and Documentation Tools	2
ELE-39	PCM and Digital Transmission	3
ENE-27	Technical Communication	3

ELECTRONIC CIRCUIT ANALYSIS Certificate Program

CE836

Required Courses (10 units)		Units
ELE-10	Survey of Electronics	4
or		
ELE-21	DC-AC Electronics	4
ELE-22	Passive Circuit Analysis	3
ELE-24	Active Circuit Analysis	3

ELECTRONIC COMMUNICATIONS Certificate Program

CE838

Required Courses (15 units)		Units
ELE-10	Survey of Electronics	4
ELE/ENE-27	Technical Communication	3
ELE-28	Automated Electronics Design and Documentation Tools	2
ELE-32	FCC Radiotelephone License Exam Preparation	3
ELE-39	PCM and Digital Transmission	3

ELECTRONICS DOCUMENTATION Certificate Program

CE844

Required Courses (9 units)		Units
ELE-10	Survey of Electronics	4
or		
ELE-21	DC-AC Electronics	4
ELE/ENE-27	Technical Communication	3
ELE-28	Automated Electronics Design and Documentation Tools	2

ELECTRONICS TECHNOLOGY

GENERAL ELECTRONICS CORE Certificate Program

CE847

Required Courses (16 units)		Units
ELE-10	Survey of Electronics	4
ELE-23	Electronics Devices and Circuits	4
ELE-25	Digital Techniques	4
ELE-26	Microprocessors and Microcontrollers	4

MICROCOMPUTER TECHNOLOGY Certificate Program

CE848

Required Courses (12 units)		Units
ELE-26	Microprocessors and Microcontrollers	4
ELE-36	Advanced Microprocessors	4
ELE-38	Computer Systems Troubleshooting	4

MICROPROCESSOR TECHNOLOGY Certificate Program

CE845

Required Courses (12 units)		Units
ELE-25	Digital Techniques	4
ELE-26	Microprocessors and Microcontrollers	4
ELE-36	Advanced Microprocessors	4

WIRELESS AND FIBER-OPTIC COMMUNICATIONS Certificate Program

CE846

Required Courses (13 units)		Units
ELE-10	Survey of Electronics	4
ELE-32	FCC Radiotelephone License Exam Preparation	3
ELE-39	PCM and Digital Transmission	3
ELE-40	Fiber-Optic Basics	3

