ELECTRONICS ENGINEERING TECHNOLOGY

Alternative Electrical Energy Certificate

NOTE: This program is being withdrawn. Its inclusion in our catalog is for those students who are finishing the requirements.

This 24 credit-hour certificate program is designed to prepare students for careers in the emerging field of alternative electrical energy installation and service, and other related sustainable electrical power generation and distribution maintenance areas. The curriculum is tailored to provide entry-level career training in the least amount of time. Emphasis is placed on equipment operation, application, installation and servicing. Courses specific to instruction include: basic electricity and electronics, residential/commercial electrical wiring and codes, industrial control systems, and solar and wind power generation. Topics within these courses involve: practical electrical concepts and measurements, digital and analog circuits, hydraulic and pneumatic controls, AC/DC motors, variable frequency drives, industrial motor controls, optics and sensors, and programmable logic controllers.

Students completing this program may find employment as electrical technicians, electrician apprentices, electricians, and facilities or plant maintenance technicians in alternative electrical energy or related fields.

Students may also continue their education by pursuing an Associate in Applied Science degree. Students considering this option are encouraged to meet with the program coordinator and their Student Development Faculty Counselor prior to beginning the program and also when planning their schedule each semester.

Required:

Number	Course Title	Credits
ELT 110	Introductory Electronics	4
ELT 135	Optics and Sensors	2
ELT 140	Introduction to Programmable Logic Controllers	2
ELT 142	Residential Wiring	2
ELT 143	Commercial Wiring	2
ELT 144	AC and DC Motors	2
ELT 145	Variable Frequency Drives	2
ELT 150	Solar Power Generation Systems	2
ELT 151	Wind Power Generation Systems	2
ELT 215	Industrial Control Systems	4