ELECTRONIC SYSTEMS TECHNOLOGY - CABLING AND WIRING

Certificate of Completion
#35909

The Electronic Systems Technology – Cabling and Wiring skills certificate is a short-term vocational program within the field of electronics technology. This program, which has no prerequisites and minimal math analysis, provides job skills in the installation and testing of low-voltage copper, coaxial, structured cable, and fiber-optic systems. Such installations are found in public and private telephone and datacommunications networks, in business and residential computer and security systems, and in the custom home-theater and home-automation industries.

Holders will have entry-level skills in fundamental electronics technology, use of general and specialized hand and power tools, familiarity with fabrication techniques, and ability to identify cabling and wiring standards for voice, video, and data. Included within the coursework is customer-relations training and application of skills in the installation, calibration, setup, maintenance, and troubleshooting of home theater, automation, and security systems. Completers will be prepared for employment with telephone companies, satellite/cable TV providers, low-voltage electrical contractors, computer and network specialists, and home audio/video retailers. Typical job titles in these areas are data or cable technician, low-voltage wiring technician, home theater installer, and security system installer.

Program Learning Outcomes

- Students will demonstrate job readiness
- Students will be employed or seeking employment in the field or a related field.
- Students will demonstrate technical competence by constructing a completely wired telecommunications network using electronic test equipment and hand tools.

Review Student Learning Outcomes (SLOs) (https://www.mtsac.edu/slo/) for this program.

Required Courses

Course Prefix	Course Name	Units
VOC EST50	Electrical Fundamentals for Cable Installations	
VOC EST54	Cable and Wiring Standards	
VOC EST56	Home Theater, Home Integration & Home Security Systems	

Recommended Electives

Course Prefix	Course Name	Units
VOC EL11	Technical Applications in Microcomputers	
VOC EST52	Fabrication Techniques for Cable Installations	

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