

# ELECTRICAL TECHNOLOGY

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## Program Description

The Electrical Technology Program provides students the opportunity to gain technical knowledge and experience in residential and commercial wiring phases of the electrical industry.

Training is in basic electricity, blueprint reading, motors, motor controls, programmable logic controls, and the National Electrical Code. Students experience hands-on work, including actual residential and commercial wiring installation. Options available to students include an Associate of Applied Science Degree and Diploma.

By the end of the fifth week, students are required to furnish a complete hand tool set that meets minimum requirements established by the department. Tools purchased are individual transactions directly with vendors and are the property of the students to be used daily on program projects. Students are required to have OSHA-approved safety glasses.

Successful completion of the one-year electrical program may enable students to obtain one year of credit toward a journeyman's license. State and local requirements may vary.

## Program Objectives

- Understand the hazards of working with electrical circuits and equipment and the procedures to follow to prevent injury.
- Perform basic installation of electrical equipment and materials.
- Demonstrate an understanding of personal and work characteristics that contribute to effective job performance.
- Use effective communication skills appropriate to the electrical trades.
- Apply the theory of electrical technology to specific jobs using critical thinking/reasoning and the ability to work independently.
- Use mathematical data and reasoning to compute and theorize electrical circuits.
- Interpret the basic NEC sections as applied to Residential and Commercial occupancies.

## Career Opportunities

Employment opportunities include electrical contractors, maintenance, railroad industry, electrical inspectors, electrical wholesaling, and manufacturing.

## Associate of Applied Science Degree

- Electrical Technology, AAS (<https://catalog.mpcc.edu/course-catalog/programs/electrical-technology/electrical-technology-aas/>)

## Diploma

- Electrical Technology Diploma (<https://catalog.mpcc.edu/course-catalog/programs/electrical-technology/electrical-technology-diploma/>)