



Electricity

TECHNICAL DIPLOMA

Program Code: 31-413-1

Downtown Milwaukee Campus

Learn skills needed for entry-level electrician positions in industry and the building trades. This program does not substitute for an electrical apprenticeship, but does offer you the basic knowledge needed to begin working for some electrical contractors.

Career Outlook

Some graduates use the training as a step toward an electrician apprenticeship.

This program is being developed as a Career Pathway. Contact an MATC advisor for information.

Program Learning Outcomes

- Apply electrical theory
- Install electrical equipment in a residential setting
- Install electrical equipment in a commercial setting
- Analyze industrial equipment

Admission Requirements

- A high school diploma or GED
- Ability to drive and a valid driver's license



Manufacturing, Construction & Transportation
MILWAUKEE AREA Technical College

COURSES

	Credits
ELECTY-308	Basic Skills for Electrical Wiring ‡ 2
ELECTY-310	Cable Wiring ‡ 2
ELECTY-312	Electrical Raceway Installation ‡ 2
ELECTY-340	Electrical Code Fundamentals 1 ‡ 2
ELECTY-378	Construction Blueprint Reading ‡ 1
ELECTY-392	Principles of Electricity 5 (or) ELECTY-390 Principles of Electricity 1 and ELECTY-391 Principles of Electricity 2
ELECTY-314	Electrical Service Installation ‡ 1
ELECTY-328	Electric Motor Control Wiring ‡ 2
ELECTY-341	Electrical Code Fundamentals 2 ‡ 1
ELECTY-382	Electrical Equipment Circuit Analysis ‡ 1
ELECTY-384	Electrical Design and Estimating ‡ 1
ELECTY-386	Solid State Devices ‡ 2
ELECTY-394	Electrical Apparatus ‡ 4
ENG-340	Workplace Communication 2 (or) ENG-195 Written Communication ‡

TOTAL CREDITS: 28

‡ Prerequisite required.
Program curriculum requirements are subject to change.

Current MATC students should consult their
[Academic Program Plan](#) for specific curriculum
requirements.

Possible Careers

- Electrician (Entry Level)
- Construction Electrician Apprentice
- Industrial Maintenance Electrician Apprentice
- Electrician’s Helper
- Electrical Inspector
- Wholesale Electrical Parts Distribution
- Industrial Control Panel Wireman (Entry Level)
- Manufacturing Electrical Assembler
- Manufacturing Electrical Testing (Entry Level)
- Maintenance Electrician Apprentice (For full description, see matc.edu.)

Related Program

- Electrical Power Distribution/Line Mechanic



10% Post Consumer Recycled



matc.edu or 414-297-MATC
Wisconsin Relay System 711

Downtown Milwaukee Campus
700 West State Street

Mequon Campus
5555 West Highland Road

Oak Creek Campus
6665 South Howell Avenue

West Allis Campus
1200 South 71st Street

**MATC Education Center
at Walker’s Square**
816 West National Avenue, Milwaukee