



# 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**

[matc.edu](http://matc.edu) | 414-297-MATC

**Start dates:** August and January

**For complete information, go to**  
[matc.edu/course-catalog/manufacturing-construction-transportation](http://matc.edu/course-catalog/manufacturing-construction-transportation)

To apply for financial aid, visit [fafsa.gov](http://fafsa.gov) School Code: 003866

## COURSES

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

## Related Program

- Electrical Power Distribution/Line Mechanic



10% Post Consumer Recycled



[matc.edu](http://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