# RESIDENTIAL AND COMMERCIAL ELECTRICAL

Flip on the switch to your future and be wired for success

Brighten your future with the skills of an electrician and illuminate your path from novice to expert. Get plugged into electrical fundamentals and code. Spark your knowledge of wiring, grounding and advanced techniques. Electrify your future in installations and layouts. Equip yourself with the skills to light up homes and businesses, handle emergencies, and explore alternative energy sources.













#### **Units of Study**

- Electrical Fundamentals
- Introduction to The National Electrical Code
- Conductor Properties
- · Emergency Power
- Professional Techniques for Electricians
- Advanced Branch Circuits and Feeders
- Transformers
- Basic Motor Control
- Alternative Energy-Wind/Solar
- Wiring Methods
- Electrical Installations
- Branch Circuits and Feeders
- Grounding
- Electrical Planning and Print Reading



# Available High School Academic Credits

At district request, students may earn:

- English
- Science

# Licensing/Industry-Based Certifications

Students have opportunities to earn:

- OSHA 10 Construction Industry
- National Occupational Competency Testing Institute (NOCTI) Certification
- Ironridge Pitched Roof Solar Installation Certification

#### **Work-Based Learning**

Organizations that support this program:

- CM Armitage
- Monroe 2-Orleans BOCES
   Operations and Maintenance
- RADEC Corporation
- Tambe Electric Inc.
- Douglass Electric Co. Inc
- IBEW Local 86/IATC
- Agile Manufacturing



#### **Career Opportunities**

Minimal Requirement Beyond CTE

• Electrician Apprentice

#### Additional Education and/or Experience

- Electrician
- Electrical Inspector
- Electrical Contractor
- Engineer

## **Postsecondary Pathways**

**Dual Enrollment** 

- Monroe Community College
  - System Electricity (ELT130)

## **Articulation Agreements**

Alfred State

Now You Can **KNOW** 

According to the Bureau of Labor Statistics, employment of electricians is projected to grow 10% from 2018 to 2028.





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