

# **Construction Electricity**

Accredited Training & Education Facility - National Center for Construction & Education Research



CONSTRUCTION ELECTRICITY develops skills and knowledge necessary to pursue a career in the electrical construction industry or to continue on to post-secondary education. Instruction includes electrical theory, wiring methods for commercial and residential applications with a focus on implementing green technology. Solar and wind energy sources are explored. Students install wiring and devices for residential use, conduit systems which supply power and lighting for use in commercial settings and basic industrial motor control.

#### Work Environment

The electrician may work indoors or outdoors. The construction electrician requires a working knowledge of the construction field, often working closely with other trades such as carpenters and plumbers. Skills in reading plans and schematics are essential. Work involves residential, business, and industrial applications, as well as installation and repair of various electrical devices, systems, and controls.

### **Career Opportunities**

Building Maintenance Business Owner– Electrical Contractor Designer Electrician Electrician Helper Engineer Estimator

# Advanced Standing Available\*

Alfred State College Electrical Training Center of L.I. Five Towns College Lincoln Technical Institute New England Institute of Technology SUNY Canton SUNY Delhi \*College credits may be earned by meeting the criteria of articulation agreements (see listing in Handbook) Tech has established with SELECT colleges. In addition, check directly with the post-secondary institutions for any additional credits they may offer.

# Academic Credits integrated:

Tech Math, Tech Phys Sci, English 12, CFM, Comp App

#### **CTE Endorsement**

Students must successfully meet the academic and attendance criteria for a two-year Wilson Tech Certificate of Completion, be High School diploma eligible, and pass the following exam: National Center for Construction and Education Research (NCCER) Electrical Exam.

# **Student Supplies**

Additional supplies will need to be purchased for this program.

#### **Average Annual Wage**

Salaries are subject to market fluctuations. For the most current updates on local & national wages go to job search engines on the internet and www.careerzone.ny.gov

#### Helpful Preparatory Courses

- Drafting
- Industrial Arts
- Ninth and Tenth Grade Math (Highly Recommended)

#### **Course Outline**

- Basic Electrical Theory
- Residential Wiring
- Commercial Wiring
- Industrial Wiring
- Installation of Wiring Systems
- Drawings and Schematics
- Control Equipment
- Test Equipment
- Electric Codes
- Industrial Motor Control
- Troubleshooting
- OSHA Standards
- PLC's
- OSHA 30