

ELECTRICAL OCCUPATIONS INSTRUCTOR: MR. VINCE SPEER

Electrical Occupations

Shocking Careers

Necessary Skills:

- Critical Thinking
- Troubleshooting
- Control Precision
- Communication
- Deductive Reasoning
- Manual Dexterity
- Complex Problem Solving
- Near Vision
- Repairing

JOB DEMANDS

Working as an Electrician is not for everyone.

Electricians must work in various environments, both indoors and out.

Electricians must be able to climb ladders and scaffolding and be comfortable working at high elevations.

Working around high voltage and high amperage machinery is dangerous and requires constant attention to detail while working.



Keeping America's Lights On!

Electricians bring electricity into homes, businesses, and factories. They install and maintain the wiring, fuses, and other components through which electricity flows. Many electricians also install and maintain electrical machines in factories. Electricians usually start their work by reading blueprints. Blueprints are technical diagrams that show the locations of circuits, outlets, load centers, panel boards, and other equipment. To ensure public safety, electricians follow the National Electrical Code, and State and local building codes. Maintenance electricians repair or replace electric and electronic equipment when it breaks. They make needed repairs as quickly as possible in order to minimize inconvenience.

Work & Wages

Electrician: \$12-24/hr

Highly skilled Electricians are sought by numerous employers in Southwest Pennsylvania!

Sources: bls.gov
cwds.state.pa.us

Program of Study advantage:

By completing all of your task list and NOCTI tests, you will be eligible to receive Articulated Credits (college credit for CTC classes) toward your Associates Degree—saving you time and \$\$\$!

Take the Right Classes !

Math

Algebra I
Algebra II
Geometry
College Prep Math (recommended)

English

College Prep English I
College Prep English II
College Prep English III
College Prep English IV

Science

Biology
Chemistry
Physics
Humanities
Civics
U.S. History
World History

Electrical & Power Transmission Installers, Other CIP #46.0339

Colleges that are participating in the Statewide Articulation Agreement for this program include:

Johnson College
Rosedale Technical Institute
Orleans Technical Institute



Notice of Non-Discrimination

The Connellsville Area School District is an equal opportunity employer and educational institution and will not discriminate on the basis of race, color, national origin, sex, disability or age in its activities, programs or employment practices as required by Title VI, Title IX and Section 504. Inquiries or grievances should be directed to Karen Marko 724-628-3300

Clothing Requirements:

1st year: Safety Glasses and Steel-toed Boots
(Prior to 3rd Monday of School Year)

2nd year: Safety Glasses and Steel-toed Boots
(Prior to 3rd Monday of School Year)

3rd year: Safety Glasses and Steel-toed Boots
(Prior to 3rd Monday of School Year)

Certifications:

National Association of Homebuilders: Basic Principles of Construction, Electrical Principles, House Wiring

NOCTI: Pa Skills Certificate: Electrical Construction

10 Hour OSHA Construction Industry

Student Organization: Skills USA

ELECTRICAL COMPETENCY TASK LIST

1st Year (360 Hours)	2nd Year (360 Hours)	3rd Year (360 Hours)
The Construction Industry (28)	Safety (33)	Preparing and Planning a Residential Wiring Job (91)
Safety (54)	Basic Electric Theory (36)	Residential Service Entrances and Equipment (55)
Construction Math (88)	DC Theory (101)	Residential Electrical System Rough-In (146)
Tools and Fasteners (104)	Using Wire Tables & Determining Conductor Size (18)	Residential Electrical System Trim-Out (51)
Print Reading (86)	Alternating Current Theory (86)	Maintaining and Troubleshooting a Residential Electrical Wiring System (17)
	Capacitors (33)	Entrepreneurship (50)
	Single-Phase Transformers (30)	
	Single-Phase Motors (23)	