

# CONSTRUCTION ELECTRICITY

2022-2023



**Construction Electricity** provides students with the skills required for successful employment in electrical construction positions. Students develop the concepts, knowledge, and skills that are applicable to many other construction occupations. Additionally, this program prepares students for a wide array of post-secondary and career options through the Advanced Career Energy and Power curriculum. By fusing a rigorous academic core with challenging project work and advanced technology in a career pathway program of study, Advanced Career Energy and Power courses give students a greater depth of knowledge and skills to prepare them for more options after high school.

### Program Highlights:

- Design and install commercial and residential power systems from “rough in” to “finish”
- Power advanced motor controls while utilizing specialized tools and equipment
- Work with professional electricians on commercial, residential and community projects

### The Program Focuses on the Following State Approved Courses:

- Construction Technology - Core and Sustainable Construction
- Residential Electrical Systems

- Construction Electrical Systems
- Plan Reading and Estimating



### COST-FREE COLLEGE CREDIT OPPORTUNITIES

#### College Credit Plus through Owens Community College

- SKT 131: Electrical Prints (3 Credit Hours)
- SKT 171: Electricity: DC Principles (3 Credit Hours)
- SKT 172: Electricity: Mag/DC Motors/Gen (2 Credit Hours)
- SKT 174: Electricity: AC Principles (3 Credit Hours)
- SKT 175: Electricity: Electrical Applications (3 Credit Hours)
- SKT 184: National Electrical Code (3 Credit Hours)

#### Career Technical Assurance Guides (CTAGs)

- CTS001: OSHA 10-Hour Safety (1 Credit Hour)
- CTC001: Plan Reading (3 Credit Hours)

Articulated Credits through Hocking College – 6 Credit Hours

### INDUSTRY-RECOGNIZED CREDENTIALS (POINT VALUES)

- Ohio State Apprenticeship Council Recognized Pre-apprenticeship Program Certificate of Completion (12 Points)
- Electrical Training Alliance Interim Credential (12 Points)
- OSHA 10-Hour Training (1 Point)
- Aerial Work Platform (AWP) Operator Training Program (2 Points)
- CPR First Aid (1 Point)
- NC3/Greenlee Professional Tools - Advanced Conduit Bending (1 Point)
- NC3/Greenlee Professional Tools - Cable Pulling (1 Point)
- NC3/Greenlee Professional Tools - Electrical Branch/Series Level Wire Termination (1 Point)
- NC3/Greenlee Professional Tools - Fishing Conduits and Raceways (1 Point)
- NC3/Greenlee Professional Tools - Hand Bending (1 Point)
- NC3/Greenlee Professional Tools - Insulation and Ground Rod Resistance Testing (1 Point)
- NC3/Greenlee Professional Tools - Wire Pathways: Knockout (1 Point)
- NC3/Greenlee Professional Tools - Wire Pathways: Rotary (1 Point)
- NC3/Greenlee Professional Tools - Phase Sequencing and Motor Rotation (1 Point)
- Ohio Driver’s License (1 Point)

### OHIO MEANS JOBS OCCUPATIONS LISTED ACCORDING TO TYPICAL SALARY

OCCUPATION TITLE	TYPICAL SALARY-	TYPICAL SALARY-	TYPICAL SALARY-	TYPICAL EDUCATION	ANNUAL JOB OPENINGS
	BOTTOM 10%	MEDIAN	TOP 10%		
Electrical and Electronics Repairers, Commercial and Industrial Equipment*	\$34,870	\$60,460	\$77,410	Postsecondary Certificate	140
Electricians*	\$36,160	\$59,380	\$80,040	HS Diploma or Equivalent	2,950
First-Line Supervisors of Construction Trades and Extraction Workers*	\$45,450	\$63,230	\$100,060	HS Diploma or Equivalent	1,730
Electrical Power-Line Installers and Repairers*	\$48,440	\$79,310	\$101,010	HS Diploma or Equivalent	320
Construction Managers*	\$52,200	\$97,930	\$165,870	Bachelor’s Degree	900
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay*	\$55,010	\$80,250	\$102,90	Postsecondary Certificate	40
Electrical Engineers*	\$60,980	\$95,440	\$128,470	Bachelor’s Degree	480

**JOB OUTLOOK COMPILED BY OHIO MEANS JOBS AS OF SEPTEMBER 2022; VISIT OHIOMEANSJOBS.COM FOR MORE INFORMATION.**

\*Denotes an In-Demand Occupation in the State of Ohio

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# EDUCATION WITH PURPOSE CAREER TREE



## TECHNICAL CAREERS

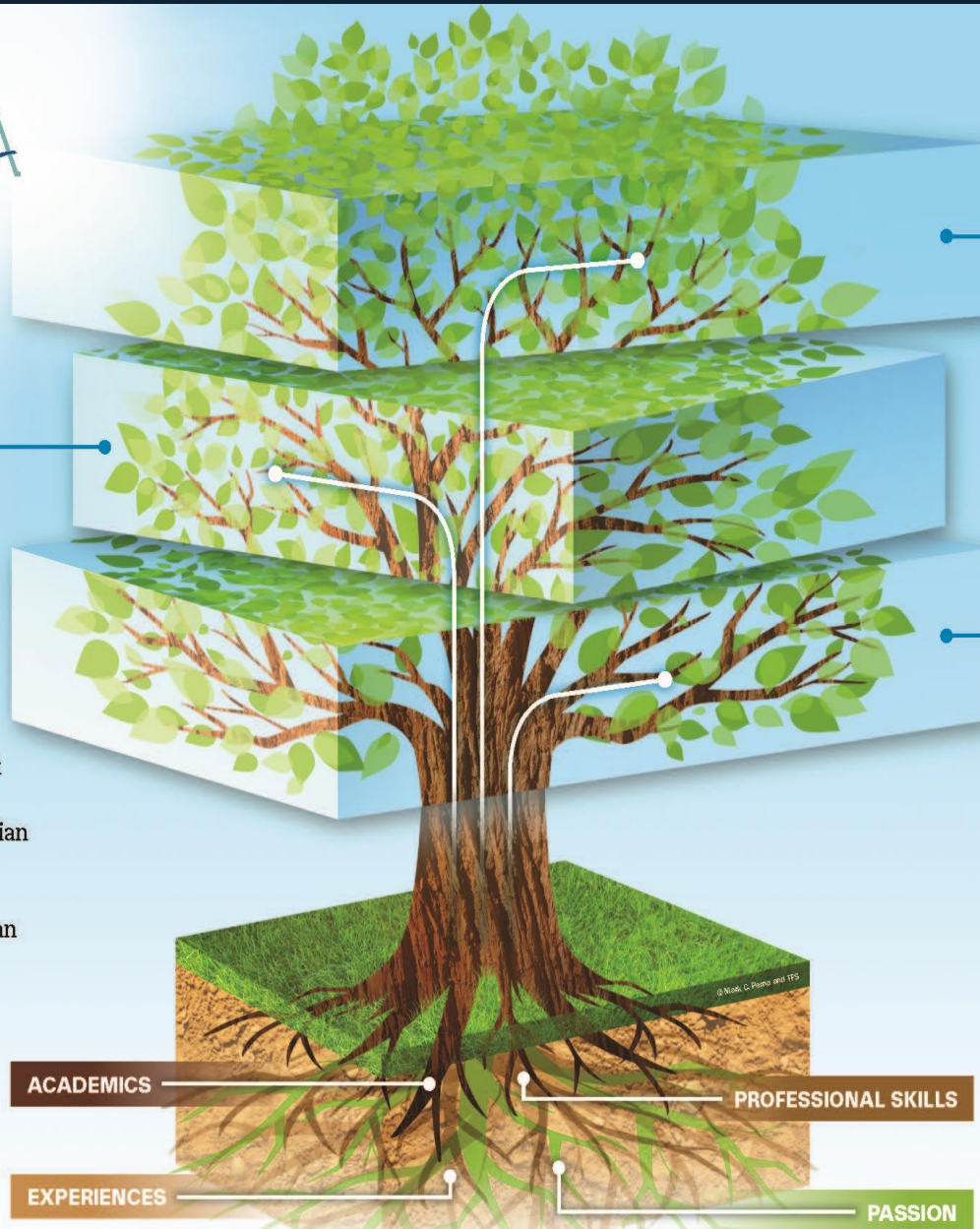
- Master Electrician – Residential & Commercial
- Journeyman Electrician – Residential & Commercial
- Low Voltage System Technician – Fire & Security
- Business Owner
- Job Foreman
- Marine Electrician
- Industrial Control Specialist
- Electrical Estimator
- Maintenance Facility Electrician
- Instrumentation Installer
- Theme Park Electrician
- Aviation/Aerospace Electrician

## PROFESSIONAL CAREERS

- Electrical Engineer
- Electrical System Project Designer
- Project Manager
- Electrical Inspector
- Home Automation Installer
- System Integrator
- Renewable Energy System Designer
- Power Plant Electrician
- Utility System Infrastructure Designer
- Electrical Designer/Architect
- Electrical Instructor
- Nuclear Engineer

## ENTRY-LEVEL CAREERS

- Apprentice Electrician
- Apprentice Fire Alarm Technician
- Apprentice Security System Installer
- Cable Television Installer
- Telecommunications Wire Puller
- Customer Service/Sales Representative
- Material and Equipment Managers
- Office Managers
- Utility Workers
- Manufacturer's Representative
- Material and Equipment Delivery Person
- Electrical Meter Reader



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For Career Tree® tools and materials please visit [TFSresults.com](http://TFSresults.com) and call our team at 330.840.2680.

The Education Entry Point of Career Tree® is not intended to be a replacement for any other educational program. It is a tool to help you understand the career path and the skills you need to succeed in the industry.