

# Electrician

## About my job:

As an electrician, I install, maintain and repair electrical power, communications, lighting and control systems in homes, businesses and factories.



## What I do every day:

- Plan layout and installation of electrical wiring, equipment, or fixtures based on job specifications and local codes
- Connect wires to circuit breakers, transformers or other components.
- Test electrical systems or continuity of circuits in electrical wiring, equipment or fixtures, using testing devices such as ohmmeters, voltmeters, and oscilloscopes to ensure compatibility and safety
- Use a variety of tools and equipment such as power construction equipment, measuring devices, power tools and testing equipment along with oscilloscopes, ammeters or test lamps
- Inspect electrical systems, equipment or components to identify hazards, defects or the need for adjustment or repair

## What makes my job great?

### Job growth:

The projected job growth for electricians needed in the state of Ohio is 16 percent from 2012 to 2022.

### Short-term training:

Although most electricians learn through an apprenticeship, many start out by attending a technical school. Most states require electricians to be licensed.

### Good pay:

The average median salary is \$50,190. (That means that 50 percent of electricians earn less than this number and the other 50 percent earn more.)

### Benefits:

Most electricians work full time. Some may have to work more than 40 hours per week in order to meet deadlines.

Benefits may include:

- **Health care**
- **Paid vacation**

# How can you become an electrician?



## Academic/training credentials:

Most electricians learn their trade in a 4 or 5 year apprenticeship program. For each year of the program, apprentices must complete at least 144 hours of technical training and 2,000 hours of paid on-the-job training.

After completing an apprenticeship program, electricians are considered to be journey workers and may perform duties on their own. Most occupations in this field require training in vocational schools, related on-the-job experience or an associate degree.

## Internship/apprenticeship:

Electricians must undergo an apprenticeship to become fully certified. Most employers offer apprenticeship through their organization.

## Skills and requirements:

- Knowledge of machines and tools required for the job
- Knowledge of the building and construction process
- Sensitivity to determining problems that may arise
- Well-developed problem-solving skills
- Able to distinguish between specific colors

## Potential job titles:

- Control electrician
- Electrician
- Industrial electrician
- Inside wireman
- Journeyman electrician
- Journeyman wireman
- Maintenance electrician
- Qualified Craft Worker, electrician

## Where you can find jobs:

- Online job boards
- Local career fairs
- Networking
- Company websites
- Social media
- Department of Career Services at colleges

## Potential local employers:

- Novis Marine
- American Electric Control
- D.T. Custom Landscapes
- Component Repair Technologies
- Time Warner Cable
- Lubrizol
- Air Technical Industries
- Marous Brothers Construction
- TT Electronics



# Local educational opportunities

## Two-year Institutions:

- Lakeland Community College Electrical Construction Certificate
- Lakeland Community College: Associate of Technical Studies Electronic Technologies

## Technical prep:

- A-Tech: building maintenance technology
- Auburn Career Center: electrical engineering prep



## Coursework per educational entity:

**Secondary pathway:**  
Construction

**Postsecondary program:**  
Construction Management

An Example of Course with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Mechanical, Electrical, & Plumbing Sys.	Construction Electrical Systems	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Commercial & Industrial Systems	World Languages		
	12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Alternative Power Generation	Construction Safety & Leadership		
Postsecondary	Year 1 1st Semester	Machining Process	Direct Current Circuit Analysis	English Composition I	Intro to Engineering Technology	First Year Experience	Technical Mathematics I		
	Year 1 2nd Semester	Materials Processing	Alternating Current Circuit Analysis	DC and AC Current Laboratory	Digital Systems Fundamentals	Technical Mathematics II	Engineering Mechanics I	Applied Physics I	
	Year 2 1st Semester	Programmable Logic Controllers	Engineering Mechanics II	Strength of Materials	Applied Physics II	Arts & Humanities Elective			
	Year 2 2nd Semester	Fluid Power Technology	Effective Interpersonal Comm.	Sensors, Actuators and Control	Motor Control & Servo Systems	Advanced Programmable Controller Applications	Social & Behavioral Science Elective		
High School Career-Technical Education Program Courses									
High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses									
Required Courses									
Visit <a href="http://education.ohio.gov/CareerConnections">education.ohio.gov/CareerConnections</a> for reference information. Recommended Electives									

Ohio | Department of Education

Ohio  
MEANS  
Jobs

Ohio | Board of Regents  
University System of Ohio

# How can I grow my career?



## Where could I focus or specialize in my career?

- Service technician
- Field manager
- Operation manager
- Distribution manager

## The career ladder



### Sources/References:

Ohio Means Jobs, Bureau of Labor Statistics – Occupational Outlook Handbook  
O\*Net Online-Summary Report, Ohio Labor Market Information