Early childhood development

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

<table>
<thead>
<tr>
<th>Coursework per educational entity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary pathway: Construction</td>
</tr>
<tr>
<td>Postsecondary program: Construction Management</td>
</tr>
</tbody>
</table>

An Example of Course with Secondary and Postsecondary Credits

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postsecondary</td>
<td>MATH Process</td>
<td>English Composition I</td>
</tr>
<tr>
<td>Year 1</td>
<td>Materials Processing</td>
<td>Alternating Current Circuit Analysis</td>
</tr>
<tr>
<td>Year 2</td>
<td>Programmable Logic Controllers</td>
<td>Engineering Mechanics II</td>
</tr>
<tr>
<td>1st Semester</td>
<td>Fluid Power Technology</td>
<td>Effective Interpersonal Comm.</td>
</tr>
<tr>
<td>2nd Semester</td>
<td>Basic Engineering, Scientific, &amp; Math</td>
<td>Servo, Actuators and Control</td>
</tr>
</tbody>
</table>

High School/Career Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

<table>
<thead>
<tr>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit education.ohio.gov/CareerConnections for reference materials</td>
</tr>
</tbody>
</table>

Recommended Elective Courses

| Electrician | P 3 |
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

Electrician apprentice
- Supervised experience
- Internship
- $26,410 annual salary

Professional electrician
- Associate degree, skilled trades
- Supervised experience
- $44,330 annual salary

Crew leader
- Bachelor’s Degree, operations management
- Internship
- $57,500 annual salary

Sources/References:

O*Net Online-Summary Report, Ohio Labor Market Information