



Electricians

DOES THIS DESCRIBE YOU?

OVERVIEW

Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. Belongs to the Architecture and Construction career cluster and Construction career pathway.

SKILLS & KNOWLEDGE NEEDED

Basic Skills:

- Troubleshooting
- Repairing
- Active Listening
- Critical Thinking
- Judgment and Decision Making

Technology Skills:

- Analytical or Scientific Software
- Computer Aided Design Software
- Data Base User Interface and Query Software
- Spreadsheet Software
- Word Processing Software

Knowledge:

- Building and Construction
- Mechanical
- Mathematics
- Design
- English Language

Work Interests involve descriptive categories (compatible with Holland's Model) attributed to success in this career:

- **Realistic**—Involves work activities that include practical, hands-on problems and solutions; often dealing with plants, animals, and real-world materials like wood, tools, and machinery.
- **Investigative**—Involves working with ideas requiring an extensive amount of research, fact finding, problem solving, and thought analysis.
- **Conventional**—Enjoy following set procedures and routines developed through higher authority; includes working with data and details more than with ideas.

Work Styles depict worker characteristics conducive for this career:

- **Dependability**
- **Attention to Detail**
- **Integrity**
- **Analytical Thinking**
- **Initiative**

Work Values are associated with aspects of work that provide satisfaction in this career:

- **Independence**—Autonomy; working on your own.
- **Achievement**—Sense of accomplishment; results oriented.
- **Support**—Management backing.

Aptitudes reflect an ability to acquire skills and knowledge for success in this career:

- **Problem Sensitivity**
- **Deductive Reasoning**
- **Inductive Reasoning**
- **Near Vision**
- **Oral Comprehension**

ESTIMATED & PROJECTED EMPLOYMENT

Occupational Title	2014 Estimated Employment	2024 Projected Employment	2014-24 Employment Change	Annual Growth Rate (%)	Total Annual Openings
Total, All Occupations	1,795,100	1,949,240	154,140	0.9	58,145
Construction & Extraction Occupations	80,275	91,315	11,040	1.4	2,335
Electricians	7,380	8,875	1,495	2.0	260

Source: <https://www.iowaworkforcedevelopment.gov/occupational-projections>

2017 WAGE & SALARY (\$)

Occupational Title	Mean Wage	Mean Salary	Entry Wage	Entry Salary	Exp Wage	Exp Salary
Total All Occupations	20.93	43,539	10.09	20,991	26.35	54,813
Construction & Extraction Occupations	21.27	44,237	13.89	28,882	24.96	51,914
Electricians	24.98	51,956	16.06	33,415	29.44	61,226

Source: <https://www.iowaworkforcedevelopment.gov/occupational-employment-and-wages>

EDUCATION & TRAINING



Education	Work Experience	Job Training
High School Diploma	None	Apprenticeship

A diploma is required for most electrician positions with training received from vocational schools, industry-based programs, and/or apprenticeships. Sources: <https://www.iowaworkforcedevelopment.gov/occupational-projections>, https://www.bls.gov/emp/ep_education_training_system.htm, and <https://www.dol.gov/apprenticeship/>

NATIONAL CAREER READINESS CERTIFICATE (NCRC)

Skill	Median Skill Level	Minimum Skill Level	Maximum Skill Level
Applied Mathematics	4	3	7
Locating Information	5	3	6
Reading for Information	5	3	6
Applied Technology	4	3	6
Business Writing	3	1	4
Workplace Observation	3	2	4
Listening for Understanding	2	2	3

An ACT assessment-based credential issued in determining essential work skills needed for employment success across industries and occupations. The greater the score, the greater the skill level (Bronze = 3, Silver = 4, Gold = 5, Platinum = 6 & higher). Source: <http://www.act.org/content/act/en/products-and-services/workkeys-for-employers/assessments.html>

PRIMARY INDUSTRY SECTORS

(Where are Electricians Employed?)

Specialty Trade Contractors
Machinery Mfg
Self Employed
Construction of Buildings
Local Government
Transportation Equipment Mfg
Animal Production
Food Mfg
Utilities

Source: <https://www.iowaworkforcedevelopment.gov/occupational-projections>

ADDITIONAL SOURCES:

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