

Electrical Technology Education Report

CIP 46.0302

Cochise, Pima, SC

Electrician

CIP 2010: A program that prepares individuals to apply technical knowledge and skills to install, operate, maintain, and repair electric apparatus and systems such as residential, commercial, and industrial electric-power wiring; and DC and AC motors, controls, and electrical distribution panels. Includes instruction in the principles of electronics and electrical systems, wiring, power transmission, safety, industrial and household appliances, job estimation, electrical testing and inspection, and applicable codes and standards.

** Program Description – Settings*

Target Occupations

	4,034 Jobs (2016) 12% below National average	3.3% % Change (2017-2022) Nation: 4.7%	\$22.10/hr Median Hourly Earnings Nation: \$26.00/hr		
Occupation	2017 Jobs	Annual Openings	Median Hourly Earnings	Growth (2017 - 2022)	Location Quotient (2017)
First-Line Supervisors of Construction Trades and Extraction Workers	2,055	26	\$23.97/hr	-1.41%	1.07
Electricians	1,621	56	\$20.21/hr	9.07%	0.77
Security and Fire Alarm Systems Installers	188	8	\$15.42/hr	7.45%	0.84
Helpers--Electricians	56	4	\$10.92/hr	26.79%	0.23
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	40	1	\$34.90/hr	-42.50%	0.56
Signal and Track Switch Repairers	23	1	\$29.78/hr	4.35%	0.88

** Target Occupations - Settings*

November 30, 2016



Programs by Institution

CIP Code	Title	Institution	Award Level	Completions (2015)
46.0000	Construction Trades, General	Cochise County Community College District	Award of less than 1 academic year	8
46.0000	Construction Trades, General	Tohono O'Odham Community College	Award of less than 1 academic year	0
46.0101	Mason/Masonry	Cochise County Community College District	Award of less than 1 academic year	0
46.0101	Mason/Masonry	Cochise County Community College District	Award of at least 1 but less than 2 academic years	0
46.0201	Carpentry/Carpenter	Cochise County Community College District	Award of less than 1 academic year	3
46.0201	Carpentry/Carpenter	Tohono O'Odham Community College	Award of at least 1 but less than 2 academic years	0
46.0301	Electrical and Power Transmission Installation/Installer, General	Pima Community College	Award of less than 1 academic year	61
46.0302	Electrician	Cochise County Community College District	Award of less than 1 academic year	3
46.0302	Electrician	Tucson College	Award of less than 1 academic year	0
46.0302	Electrician	Tucson College	Award of at least 1 but less than 2 academic years	80
46.0303	Lineworker	Cochise County Community College District	Award of less than 1 academic year	1
46.0399	Electrical and Power Transmission Installers, Other	Pima Community College	Award of less than 1 academic year	5
46.0401	Building/Property Maintenance	Cochise County Community College District	Award of less than 1 academic year	0
46.0401	Building/Property Maintenance	Pima Community College	Award of less than 1 academic year	9
46.0401	Building/Property Maintenance	Pima Community College	Award of at least 1 but less than 2 academic years	8
46.0401	Building/Property Maintenance	Cochise County Community College District	Award of at least 1 but less than 2 academic years	0
46.0401	Building/Property Maintenance	Pima Community College	Associates degree	14
46.0401	Building/Property Maintenance	Tohono O'Odham Community College	Award of at least 2 but less than 4 academic years	0
46.0412	Building/Construction Site Management/Manager	Pima Community College	Associates degree	0
46.0415	Building Construction Technology	Pima Community College	Award of at least 1 but less than 2 academic years	0
46.0415	Building Construction Technology	Cochise County Community College District	Associates degree	3
47.0105	Industrial Electronics Technology/Technician	Pima Community College	Award of less than 1 academic year	253
47.0105	Industrial Electronics Technology/Technician	Pima Community College	Award of at least 1 but less than 2 academic years	40
47.0105	Industrial Electronics Technology/Technician	Pima Community College	Associates degree	11

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Occupational Programs						
11.00	499.00	109.00				
Programs (2015)	Completions (2015)	Openings (2015)				
CIP Code	Program	Completions (2011)	Completions (2012)	Completions (2013)	Completions (2014)	Completions (2015)
47.0105	Industrial Electronics Technology/Technician	13	9	104	203	304
46.0401	Building/Property Maintenance	921	908	612	168	31
46.0302	Electrician	4	3	95	115	83
46.0000	Construction Trades, General	27	38	34	28	8
46.0415	Building Construction Technology	15	42	26	10	3
46.0399	Electrical and Power Transmission Installers, Other	0	7	16	7	5
46.0201	Carpentry/Carpenter	0	5	16	7	3
46.0303	Lineworker	0	0	2	3	1
46.0301	Electrical and Power Transmission Installation/Installer, General	0	0	0	1	61
46.0101	Mason/Masonry	0	0	0	0	0
46.0412	Building/Construction Site Management/Manager	0	0	0	0	0

Regional Completions by Award Level

Award Level	Completions (2015)	Percent
• Award of less than 1 academic year	3	3.6% 
• Award of at least 1 but less than 2 academic years	80	96.4% 
Associates degree	0	0.0%
Award of at least 2 but less than 4 academic years	0	0.0%
Bachelors degree	0	0.0%
Postbaccalaureate certificate	0	0.0%
Masters degree	0	0.0%
Post-masters certificate	0	0.0%
Doctors degree	0	0.0%

* Regional Completions by Award Level - Settings

Regional Completions by Institution

Institution	Certificates (2015)	Degrees (2015)	Total Completions (2015)
Tucson College	80	0	80
Cochise County Community College District	3	0	3

* *Regional Completions by Institution - Settings*

Appendix A - Data Sources and Calculations

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

State Data Sources

This report uses state data from the following agencies: Arizona Department of Administration, Office of Employment and Population Statistics