

Electrical and Computer Engineering Technology Occupation Overview

Emsi Q1 2018 Data Set

March 2018

Western Technical College



400 Seventh Street
La Crosse, Wisconsin 54601
608.785.9200

Parameters

Occupations

Code	Description
17-2061	Computer Hardware Engineers
17-2072	Electronics Engineers, Except Computer
17-3012	Electrical and Electronics Drafters
17-3023	Electrical and Electronics Engineering Technicians
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay

Regions

Code	Description
55011	Buffalo County, WI
55053	Jackson County, WI
55057	Juneau County, WI
55063	La Crosse County, WI
55081	Monroe County, WI
55121	Trempealeau County, WI
55123	Vernon County, WI

Timeframe

2019 - 2023

Datarun

2018.1 – QCEW Employees, Non-QCEW Employees, and Self-Employed

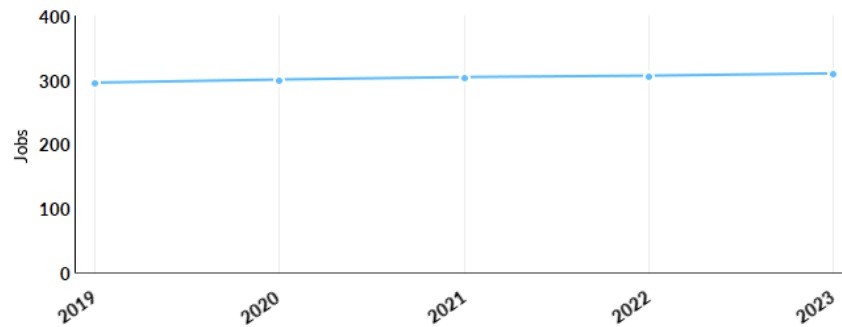
106632 EECT in Western District

Occupation Summary for 106632 EECT

296 Jobs (2019) 51% below National average	4.7% % Change (2019-2023) Nation: 1.1%	\$26.53/hr Median Hourly Earnings Nation: \$33.03/hr
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Growth

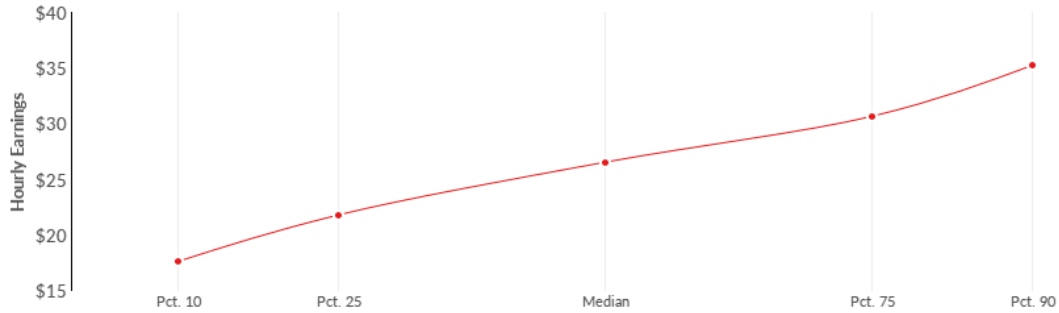
296 2019 Jobs	310 2023 Jobs	14 Change (2019-2023)	4.7% % Change (2019-2023)
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Occupation	2019 Jobs	2023 Jobs	Change	% Change
Computer Hardware Engineers (17-2061)	12	13	1	8%
Electronics Engineers, Except Computer (17-2072)	26	28	2	8%
Electrical and Electronics Drafters (17-3012)	8	8	0	0%
Electrical and Electronics Engineering Technicians (17-3023)	58	60	2	3%
Telecommunications Equipment Installers and Repairers, Except Line Installers (49-2022)	174	180	6	3%
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)	18	21	3	17%

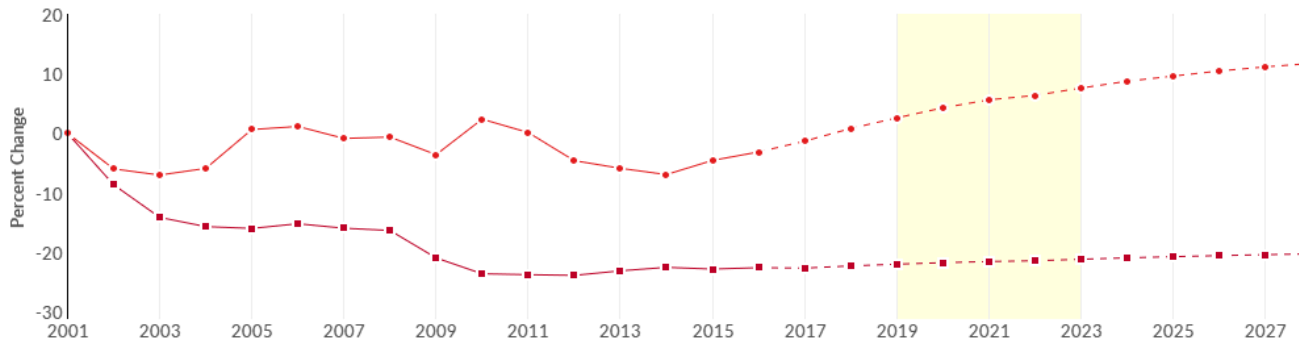
Percentile Earnings

\$21.78/hr 25th Percentile Earnings	\$26.53/hr Median Earnings	\$30.66/hr 75th Percentile Earnings
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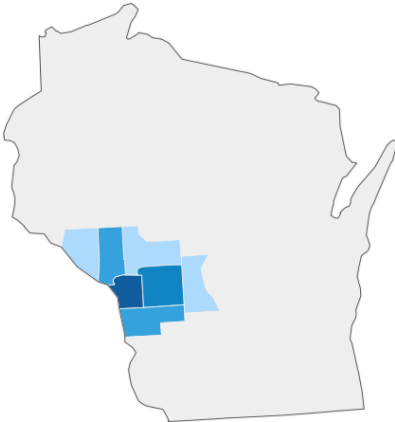
Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings
Computer Hardware Engineers (17-2061)	\$27.30	\$33.94	\$42.92
Electronics Engineers, Except Computer (17-2072)	\$27.61	\$32.05	\$39.69
Electrical and Electronics Drafters (17-3012)	\$17.08	\$20.90	\$26.00
Electrical and Electronics Engineering Technicians (17-3023)	\$20.20	\$24.57	\$28.68
Telecommunications Equipment Installers and Repairers, Except Line Installers (49-2022)	\$21.48	\$26.03	\$29.39
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)	\$28.68	\$32.96	\$37.85

Regional Trends



	Region	2019 Jobs	2023 Jobs	Change	% Change
●	Region	296	310	14	4.7%
●	Nation	645,978	652,865	6,887	1.1%

Regional Breakdown



County	2023 Jobs
La Crosse County, WI	163
Monroe County, WI	49
Vernon County, WI	34
Trempealeau County, WI	23
Jackson County, WI	18

Occupation Gender Breakdown



	Gender	2017 Jobs	2017 Percent
●	Males	251	88.4%
●	Females	33	11.6%

Occupation Age Breakdown



	Age	2017 Jobs	2017 Percent
•	14-18	1	0.3%
•	19-24	18	6.3% ■
•	25-34	50	17.6% ■■
•	35-44	69	24.2% ■■■
•	45-54	75	26.3% ■■■■
•	55-64	64	22.5% ■■■■
•	65+	8	2.9% ■

Occupation Race/Ethnicity Breakdown



	Race/Ethnicity	2017 Jobs	2017 Percent
●	White	269	94.5%
●	Asian	5	1.9%
●	Black or African American	4	1.5%
●	Hispanic or Latino	4	1.4%
●	Two or More Races	1	0.4%
●	American Indian or Alaska Native	1	0.3%
●	Native Hawaiian or Other Pacific Islander	0	0.0%

Occupational Programs

4		43	36
Programs (2016)		Completions (2016)	Openings (2016)
CIP Code	Program	Completions (2016)	
47.0105	Industrial Electronics Technology/Technician	23	
15.1201	Computer Engineering Technology/Technician	14	
46.0302	Electrician	6	
15.0303	Electrical, Electronic and Communications Engineering Technology/Technician	0	

Industries Employing 106632 EECT

Industry	Occupation Group Jobs in Industry (2017)	% of Occupation Group in Industry (2017)	% of Total Jobs in Industry (2017)
Wired Telecommunications Carriers	99	34.7%	33.3%
Federal Government, Civilian, Excluding Postal Service	22	7.8%	0.7%
Electrical Contractors and Other Wiring Installation Contractors	21	7.3%	4.4%
Fossil Fuel Electric Power Generation	19	6.8%	3.1%
Wireless Telecommunications Carriers (except Satellite)	13	4.7%	34.2%

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.

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

State Data Sources

This report uses state data from the following agencies: Illinois Department of Employment Security, Employment Projections; Iowa Workforce Development; Michigan Department of Labor and Economic Growth, Bureau of Labor Market Information and Strategic Initiatives; Minnesota Department of Employment and Economic Development; Wisconsin Department of Workforce Development, Bureau of Workforce Information