

Air Conditioning, Heating and Refrigeration Technician 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
17-3029	Engineering Technicians, Except Drafters, All Other
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers

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

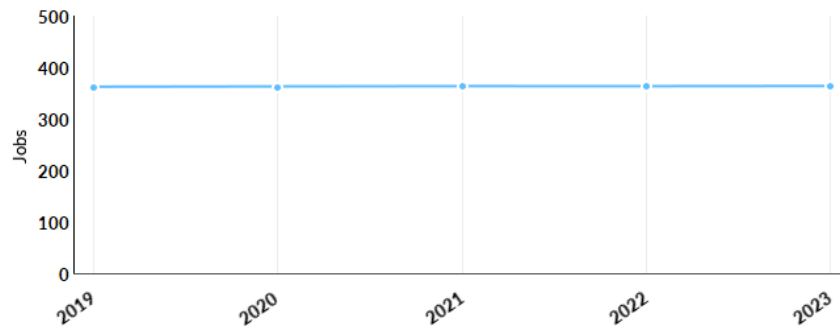
2 Occupations in Western District

Occupation Summary for 2 Occupations

362 Jobs (2019) 11% below National average	0.3% % Change (2019-2023) Nation: 4.5%	\$19.91/hr Median Hourly Earnings Nation: \$22.30/hr
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Growth

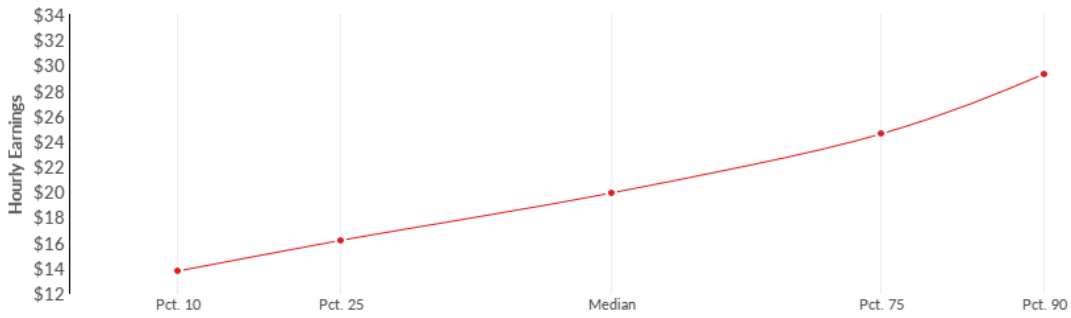
362 2019 Jobs	363 2023 Jobs	1 Change (2019-2023)	0.3% % Change (2019-2023)
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Occupation	2019 Jobs	2023 Jobs	Change	% Change
Engineering Technicians, Except Drafters, All Other (17-3029)	51	51	0	0%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)	311	312	1	0%

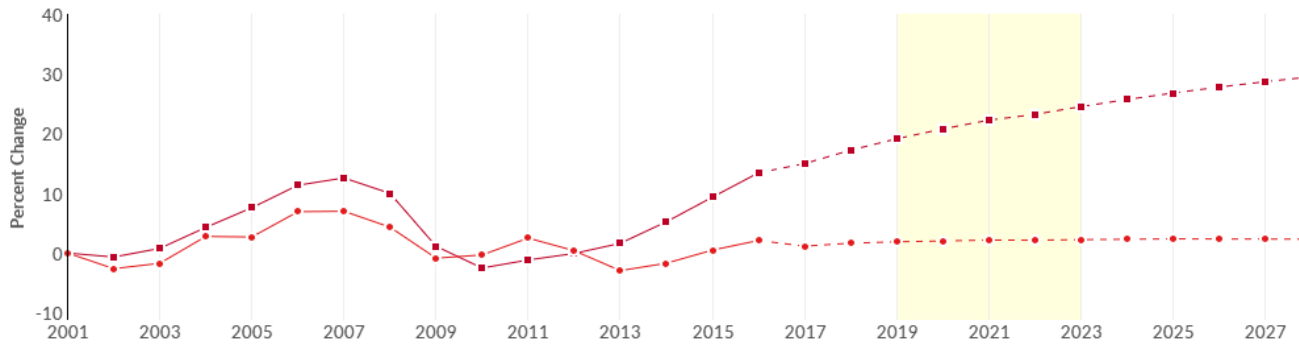
Percentile Earnings

\$16.16/hr 25th Percentile Earnings	\$19.91/hr Median Earnings	\$24.58/hr 75th Percentile Earnings
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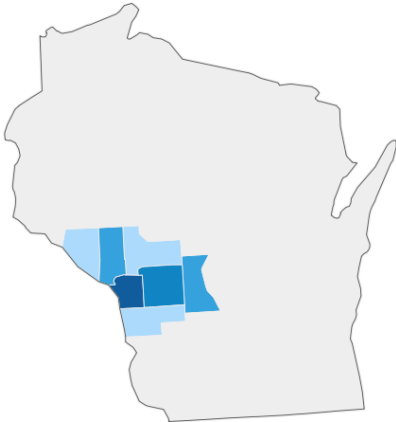
Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings
Engineering Technicians, Except Drafters, All Other (17-3029)	\$23.61	\$27.68	\$31.07
Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)	\$15.73	\$18.85	\$23.00

Regional Trends



	Region	2019 Jobs	2023 Jobs	Change	% Change
●	Region	362	363	1	0.3%
●	Nation	436,754	456,550	19,796	4.5%

Regional Breakdown



County	2023 Jobs
La Crosse County, WI	231
Monroe County, WI	65
Juneau County, WI	20
Trempealeau County, WI	13
Buffalo County, WI	12

Occupation Gender Breakdown



	Gender	2017 Jobs	2017 Percent
●	Males	345	96.1% 
●	Females	14	3.9% 

Occupation Age Breakdown



	Age	2017 Jobs	2017 Percent
•	14-18	2	0.4%
•	19-24	28	7.7% ■
•	25-34	82	22.8% ■■
•	35-44	89	24.6% ■■■
•	45-54	88	24.4% ■■■
•	55-64	62	17.4% ■■
•	65+	9	2.6% ■

Occupation Race/Ethnicity Breakdown



	Race/Ethnicity	2017 Jobs	2017 Percent
•	White	342	95.2%
•	Hispanic or Latino	7	1.9%
•	Black or African American	5	1.4%
•	Asian	3	0.8%
•	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		31		36	
Programs (2016)		Completions (2016)		Openings (2016)	
CIP Code	Program	Completions (2016)			
47.0201	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	18			
15.0503	Energy Management and Systems Technology/Technician	8			
15.0101	Architectural Engineering Technology/Technician	5			
15.0501	Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician	0			

Industries Employing 2 Occupations

Industry	Occupation Group Jobs in Industry (2017)	% of Occupation Group in Industry (2017)	% of Total Jobs in Industry (2017)
Plumbing, Heating, and Air-Conditioning Contractors	165	45.9%	21.2%
Federal Government, Civilian, Excluding Postal Service	27	7.4%	0.9%
Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	26	7.1%	1.7%
Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	12	3.4%	3.9%
Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	<10	2.7%	3.2%

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