

# Occupation Overview

Energy Technology Related Occupations in Kern

EMSI Q2 2015 Data Set



## Taft College



29 Emmons Park Drive  
Taft, California 93268  
661.763.7700

# Parameters

## Occupations

Code	Description
17-3027	Mechanical Engineering Technicians
19-4041	Geological and Petroleum Technicians
29-9012	Occupational Health and Safety Technicians
47-5011	Derrick Operators, Oil and Gas
47-5012	Rotary Drill Operators, Oil and Gas
47-5013	Service Unit Operators, Oil, Gas, and Mining
47-5071	Roustabouts, Oil and Gas
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers
53-7071	Gas Compressor and Gas Pumping Station Operators

## Regions

Code	Description
6029	Kern County, CA

## Timeframe

2016 - 2017

## Datarun

2015.2 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

## Energy Technology Related in Kern County, CA

## Occupation Summary for Energy Technology Related

<b>5,647</b> Jobs (2015) 679% above National average	<b>3.5%</b> % Change (2016-2017) Nation: 2.6%	<b>\$21.92/hr</b> Median Hourly Earnings Nation: \$23.22/hr
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## Growth

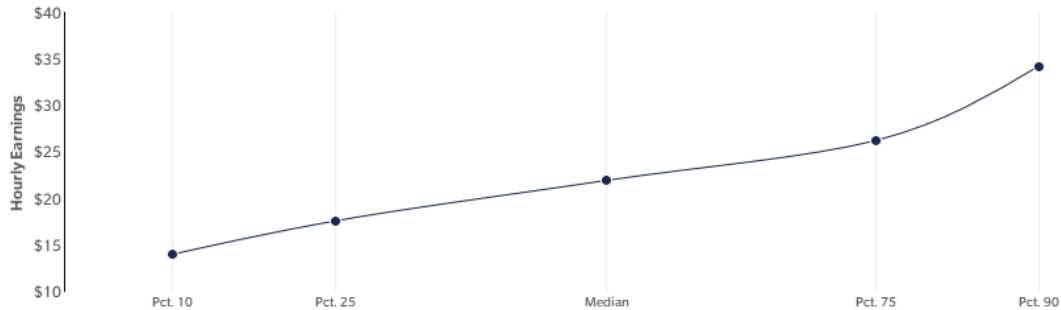
<b>5,911</b> 2016 Jobs	<b>6,117</b> 2017 Jobs	<b>206</b> Change (2016-2017)	<b>3.5%</b> % Change (2016-2017)
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Occupation	2016 Jobs	2017 Jobs	Change	% Change
Mechanical Engineering Technicians (17-3027)	126	130	4	3%
Geological and Petroleum Technicians (19-4041)	360	371	11	3%
Occupational Health and Safety Technicians (29-9012)	39	41	2	5%
Derrick Operators, Oil and Gas (47-5011)	571	592	21	4%
Rotary Drill Operators, Oil and Gas (47-5012)	399	410	11	3%
Service Unit Operators, Oil, Gas, and Mining (47-5013)	1,549	1,605	56	4%
Roustabouts, Oil and Gas (47-5071)	2,457	2,551	94	4%
Petroleum Pump System Operators, Refinery Operators, and Gaugers (51-8093)	384	390	6	2%
Gas Compressor and Gas Pumping Station Operators (53-7071)	26	27	1	4%

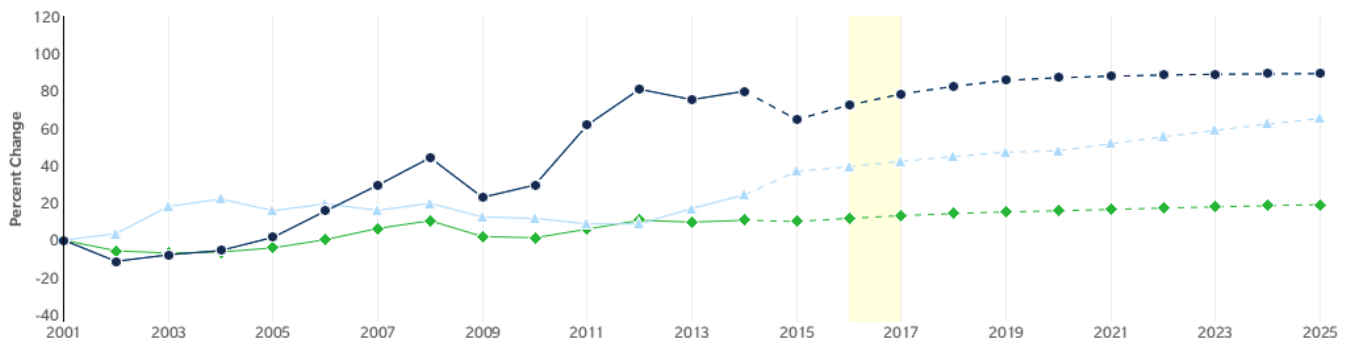
## Percentile Earnings

<b>\$17.57/hr</b> 25th Percentile Earnings	<b>\$21.92/hr</b> Median Earnings	<b>\$26.24/hr</b> 75th Percentile Earnings
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Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings
Mechanical Engineering Technicians (17-3027)	\$20.26	\$25.17	\$32.97
Geological and Petroleum Technicians (19-4041)	\$21.34	\$29.15	\$36.73
Occupational Health and Safety Technicians (29-9012)	\$18.70	\$23.46	\$27.98
Derrick Operators, Oil and Gas (47-5011)	\$23.40	\$26.80	\$31.73
Rotary Drill Operators, Oil and Gas (47-5012)	\$27.82	\$32.78	\$36.43
Service Unit Operators, Oil, Gas, and Mining (47-5013)	\$18.61	\$25.57	\$29.31
Roustabouts, Oil and Gas (47-5071)	\$12.17	\$14.34	\$18.09
Petroleum Pump System Operators, Refinery Operators, and Gaugers (51-8093)	\$24.22	\$29.12	\$35.24
Gas Compressor and Gas Pumping Station Operators (53-7071)	\$18.30	\$24.55	\$26.68

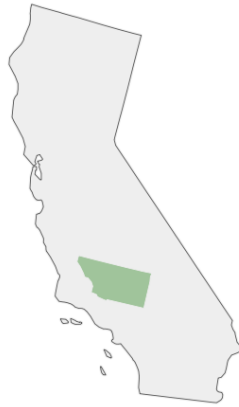
# Regional Trends



	Region	2016 Jobs	2017 Jobs	Change	% Change
●	Region	5,911	6,117	206	3.5%
●	Kern County	5,911	6,117	206	3.5%
●	Tulare County, CA	66	68	2	3.0%
●	California	23,374	23,676	302	1.3%

## Regional Breakdown

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\* Highlighted areas show counties that contain the selected zip codes

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<b>ZIP</b>	<b>2017 Jobs</b>
Bakersfield, CA 93308 (in Kern county)	2,472
Fellows, CA 93224 (in Kern county)	634
Taft, CA 93268 (in Kern county)	502
Bakersfield, CA 93313 (in Kern county)	398
Bakersfield, CA 93388 (in Kern county)	341

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# Occupation Gender Breakdown

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	Gender	2015 Jobs	2015 Percent
•	Males	5,458	96.7% 
•	Females	189	3.3% 

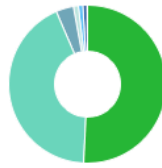
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# Occupation Age Breakdown



	Age	2015 Jobs	2015 Percent
●	14-18	9	0.2%
●	19-24	728	12.9% █
●	25-34	2,312	40.9% ██████████
●	35-44	1,231	21.8% ████████
●	45-54	823	14.6% ██████
●	55-64	448	7.9% ████
●	65+	95	1.7% █

## Occupation Race/Ethnicity Breakdown



	Race/Ethnicity	2015 Jobs	2015 Percent
●	White	2,867	50.8% 
●	Hispanic or Latino	2,413	42.7% 
●	Black or African American	203	3.6% 
●	Two or More Races	58	1.0% 
●	American Indian or Alaska Native	52	0.9% 
●	Asian	47	0.8% 
●	Native Hawaiian or Other Pacific Islander	7	0.1% 

## Occupational Programs

<b>3</b>			<b>36</b>			<b>198</b>		
Programs (2014)			Completions (2014)			Openings (2014)		
CIP Code	Program	Completions (2014)						
51.0000	Health Services/Allied Health/Health Sciences, General	36						
15.0903	Petroleum Technology/Technician	0						
15.0000	Engineering Technology, General	0						

## Industries Employing Energy Technology Related

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Industry	Occupation Group Jobs in Industry (2015)	% of Occupation Group in Industry (2015)	% of Total Jobs in Industry (2015)
Support Activities for Oil and Gas Operations	3,024	53.5%	49.4%
Drilling Oil and Gas Wells	884	15.7%	49.0%
Crude Petroleum and Natural Gas Extraction	728	12.9%	14.1%
Oil and Gas Pipeline and Related Structures Construction	371	6.6%	7.2%
Petroleum Refineries	183	3.2%	18.6%

# Appendix A - Data Sources and Calculations

## 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.

## 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.

## 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.

## Completers Data

The completers 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.

## Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

## Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

## State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department