



## Engineering Occupations

17-2071	Electrical Engineers
17-2072	Electronics Engineers, Except Computer
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors
17-2112	Industrial Engineers
17-2131	Materials Engineers
17-2141	Mechanical Engineers
17-2199	Engineers, All Other

Visit [https://www.bls.gov/soc/major\\_groups.htm](https://www.bls.gov/soc/major_groups.htm) for more information.

Emsi Q1 2017 Data Set

March 2017

**Sonoma County Economic Development Board**



## Percentile Earnings

Presented below are the salary ranges for the occupations included in this report. In general, the 25th percentile earnings represent the wage one might expect to receive at an entry level position for a given occupation if they have the appropriate skills, training, and certifications. Wage growth could be expected to follow the path depicted in the graph as the employee successfully completes job training and gains experience in the occupation. A more detailed explanation of percentile earnings can be found here: <https://admin.utep.edu/Default.aspx?tabid=6726>

\$39.38/hr

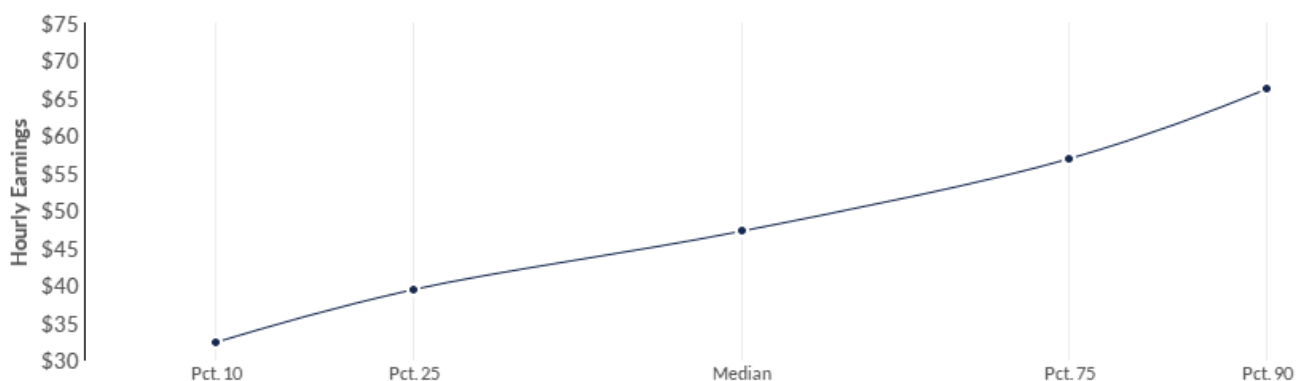
25th Percentile Earnings

\$47.19/hr

Median Earnings

\$56.88/hr

75th Percentile Earnings



Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings
Electrical Engineers (17-2071)	\$43.56	\$51.60	\$63.38
Electronics Engineers, Except Computer (17-2072)	\$42.03	\$51.69	\$64.08
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (17-2111)	\$32.93	\$41.95	\$47.70
Industrial Engineers (17-2112)	\$38.22	\$44.02	\$51.93
Materials Engineers (17-2131)	\$43.92	\$54.69	\$63.41
Mechanical Engineers (17-2141)	\$36.26	\$45.92	\$55.58
Engineers, All Other (17-2199)	\$39.29	\$47.35	\$57.22

## Occupation Age Breakdown



Age	2016 Jobs	2016 Percent
14-18	0	0.0%
19-24	28	2.7%
25-34	185	17.5%
35-44	239	22.6%
45-54	313	29.5%
55-64	241	22.7%
65+	55	5.1%

## Industries Employing Engineering Occupations

Industry	Occupation Group Jobs in Industry (2016)	% of Occupation Group in Industry (2016)	% of Total Jobs in Industry (2016)
Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	160	15.0%	11.3%
Engineering Services	94	8.9%	7.8%
Semiconductor and Related Device Manufacturing	61	5.7%	11.9%
Wineries	41	3.8%	0.6%
Wired Telecommunications Carriers	40	3.7%	5.0%

## Most Relevant Hard Skills

Skill	Skill
Balanced Unbalanced Transformer (BALUN)	Signal Generators
Phase Noise	Fluid Dynamics
Electronic Circuit Design	Torque (Physics)
High Frequency	Hardware Design
Baseband	Thermal
Modulation	Metal Coating
Tolerance Analysis	Creo Elements/Pro (Computer-Aided Design Software)
Material Selection	Radio Frequency
Alternative Transients Program	Failure Analysis
Wave (Band)	Failure Mode Effects Analysis
Network Analysis	3D Modeling
Packaging Engineering	Design Review
Heat Transfer	Design For Six Sigma
JMP (Statistical Software)	Microscopy
Minitab	Digital Electronics
Electronic Circuit Simulation	Google Chrome
Digital Signals	Circuit Design
Analogue Electronics	Root Cause Analysis
Microwaves	Design Failure Mode And Effects Analysis
Injection Molding	Electronic Circuits
Schematic Capture	ISO 13485
Conceptual Design	
Deposition (Geology)	
Reliability Engineering	
Molding	
Computational Fluid Dynamics	
Tolerance	
Statistical Methods	

## Most Relevant Soft Skills

### Skill

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Reliability

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Coordinating

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Leadership

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Creativity

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Learning

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Scheduling (Project Management)

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Listening

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## Most Relevant Certifications

### Certification

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Certified Purchasing Professional

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Professional Engineer

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# Top Companies Job Postings

Jan. 2017 - Feb. 2017

Company	Total/Unique Postings	Company	Total/Unique Postings
Keysight Technologies, Inc.	137 / 32	Kelly Services, Inc.	5 / 2
General Electric Company	36 / 14	Ricoh Company, Ltd.	4 / 2
Medtronic, Inc.	58 / 14	Rieke Pkg C	6 / 2
Calix	28 / 8	Thermo Fisher Scientific Inc.	6 / 2
Oracle Corporation	90 / 8	Zolon Tech Solutions, Inc	7 / 2
General Dynamics Corporation	14 / 7	Albion Engineering	2 / 1
Volt Information Sciences, Inc.	22 / 6	Amtec, LLC	3 / 1
ATW Companies, Inc.	16 / 5	Benevis, LLC	2 / 1
Appleone	29 / 5	Entegee, Inc.	2 / 1
Rieke Packaging Systems	36 / 5	Manpower Inc.	2 / 1
Rose International, Inc	12 / 5	Pni Sensor Corporation	3 / 1
IDEX Corporation	8 / 4	Solopoint Solutions, Inc.	2 / 1
Jarden Corporation	12 / 4	Summit Engineering, Inc.	2 / 1
Lem U.S.A., Inc.	64 / 4	Taylor Nelson Sofres plc	2 / 1
Lockheed Martin Corporation	17 / 4	Technical Pro Inc	2 / 1
Microsemi Corporation	17 / 4	Tekmark Global Solutions, LLC	3 / 1
TriMas Corporation	8 / 4	Verify, Inc.	2 / 1
Amy's Kitchen Inc	8 / 3	Vivint Solar, Inc.	2 / 1
Lancesoft Inc	7 / 3		
Target Corporation	51 / 3		
Best Buy Co., Inc.	14 / 2		
Esterline Technologies Corporation	12 / 2		
Experis Us, Inc.	19 / 2		
II- VI Incorporated	5 / 2		

# Appendix A - Data Sources and Calculations

The Sonoma County Economic Development Board (EDB) prepares custom EDB Job Market Tracker Reports to provide insights into current workforce demands of the local economy by analyzing online job posting data and historical job data. Data used to inform the development of this report was collected by the EDB from the data provider Economic Modeling Specialists, Inc. (Emsi), a labor market database that compiles job postings from national, public, and corporate sources. If you have any questions, please contact the EDB at 707-565-7170.

## 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.

## CareerBuilder/Emsi Job Postings

Job postings are collected from various sources and processed/enriched by Careerbuilder to provide information such as standardized company name, occupation, skills, and geography. Emsi performs additional filtering and processing to improve compatibility with Emsi data.

## State Data Sources

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