Source: Labor Insight (Burning Glass Technologies)

## **Occupation Deep Dive (Snapshot view)**

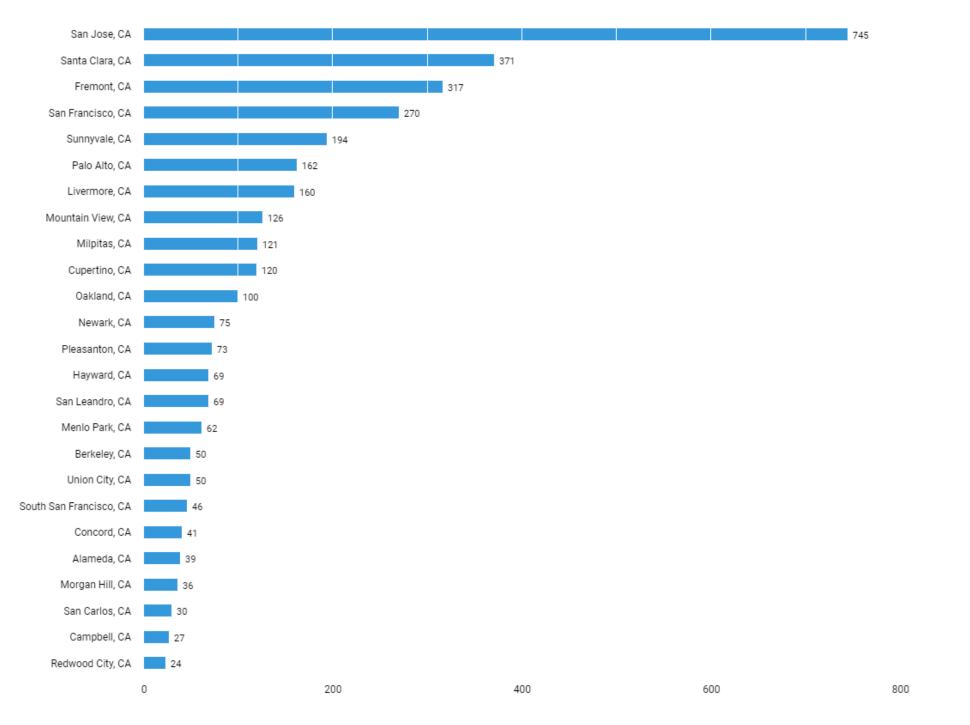
There are (3,685 job postings) between (Jan. 01, 2021 - Dec. 31, 2021) in your area for the selected criteria.

#### **Active Selections**

Last 12 months AND (County : San Mateo, CA OR County : San Francisco, CA OR County : Santa Clara, CA OR County : Alameda, CA OR County : Contra Costa, CA ) AND ( BGTOCC : Electrical and Electronics Technician OR BGTOCC : Electrical / Electronic Designer ) AND ( (Education : Both sub-baccalaureate and bachelor's-level credentials (inferred) ) OR (Education : High school or vocational training (specified) OR Education : Associate's degree (specified) OR Education : Not listed (specified) ) )

#### What does demand for this occupation look like?

### The jobs are in the following locations



## **Occupation Deep Dive (Snapshot view)**

There are (3,685 job postings) between (Jan. 01, 2021 - Dec. 31, 2021) in your area for the selected criteria.

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#### The following occupations and job titles are in demand

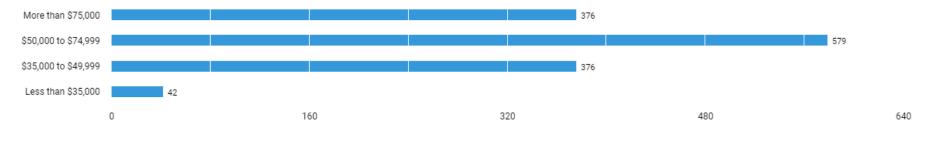
BGTOCC Electrical and Electronics Technician		Job Posting 2,7	
Test Technician	250	Calibration Technician	39
Electromechanical Technician	111	Electro Mechanical Assembler	37
Electrical Technician	106	Engineering Technician	33
Electronics Technician	90	Cleanroom Technician	31
Low Voltage Technician	45	Automation Technician	30
lectrical / Electronic Designer			
Job Titles	Job Posting	Job Titles	9 Job Posting
	Job Posting 46	Job Titles Pcb Layout Designer	Job Posting
Job Titles			
Job Titles Analog Design Engineer	46	Pcb Layout Designer	Job Posting
Job Titles Analog Design Engineer Electrical Designer Senior Analog Design	46	Pcb Layout Designer Plc Programmer	Job Posting 15 14

Unspecified postings: 1

#### What are salary indicators for this occupation?

The salaries of these jobs are distributed across the following categories

Mean real-time salary = \$67K Median real-time salary = \$60K



Unspecified postings: 2,312

Source: Labor Insight (Burning Glass Technologies)

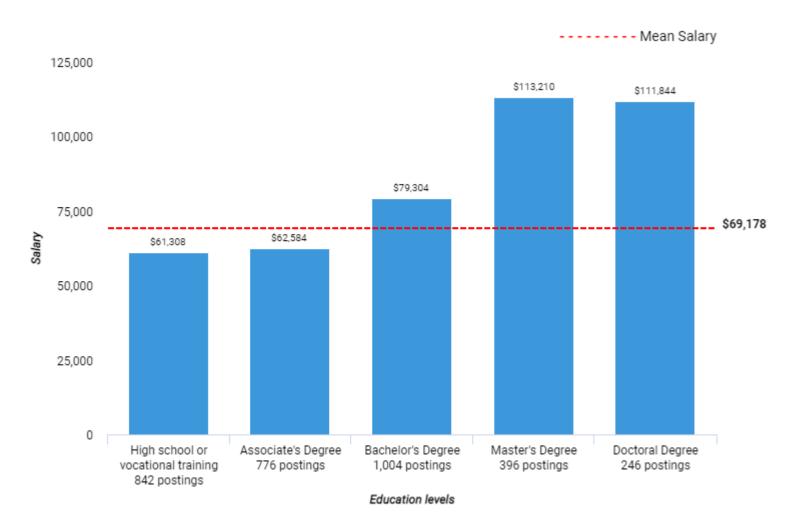
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#### The salaries of these jobs are distributed across the following education attainment levels



Unspecified postings: 2,987

Source: Labor Insight (Burning Glass Technologies)

## **Occupation Deep Dive (Snapshot view)**

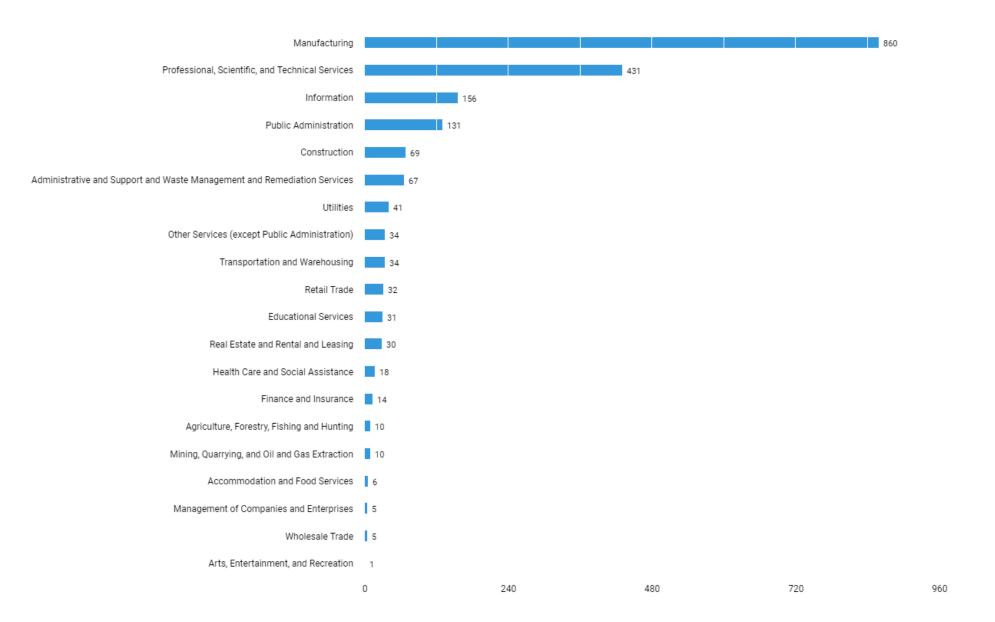
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#### Who is hiring and in what industries?

### The jobs are categorized into the following industries



Unspecified postings: 1,700

Employer

## **Occupation Deep Dive (Snapshot view)**

There are (3,685 job postings) between (Jan. 01, 2021 - Dec. 31, 2021) in your area for the selected criteria.

#### **Active Selections**

Last 12 months AND (County : San Mateo, CA OR County : San Francisco, CA OR County : Santa Clara, CA OR County : Alameda, CA OR County : Contra Costa, CA ) AND ( BGTOCC : Electrical and Electronics Technician OR BGTOCC : Electrical / Electronic Designer ) AND ( (Education : Both sub-baccalaureate and bachelor's-level credentials (inferred) ) OR (Education : High school or vocational training (specified) OR Education : Associate's degree (specified) OR Education : Not listed (specified) ) )

**Job Postings** 

### The following employers are hiring for these job titles

Impioyei		300 FC		FUSII	
<b>Fesla</b>					
Job Titles	Job Posting		Job Titles	Job Posting	
Instrumentation Technician		3	Localization Test Technician		
Pcb Layout Designer		3	Low Voltage Test Engineer Technician		
Electrical Technician		2	Renewable Commodities Technician		
Electrical Technician, Facilities		2	Calibration Control Technician		
Engineering Technician, Power Electronics		2	Calibration Technician		
sys Design Systems					
Job Titles	Job Posting		Job Titles	Job Posting	
Analog Design Engineer, Staff		4	Analog Design Engineer, Senior II		
Senior Analog Design Engineer		4	Analog Design Engineer, Senior Staff		
Analog Design Engineer		3	Analog Design Manager		
Analog Design Engineer, II		3	Analog Design Engineer, I		
Analog Design Engineer, Senior I		3	Cad Engineer		
ntel Corporation					
Job Titles	Job Posting		Job Titles	Job Posting	
Analog Design Engineer		3	Senior Rf Analog Design Engineer		
Senior Rtl Designer		3	Cad Automation Engineer		
Facilities Electrical Technician		2	Cad Engineer		
Memory Circuit Designer		2	Cad Engineer Synthesis, Place And Route		
Senior Fabric Logic Designer		2	Dft Cad Development Engineer		

ucid Motors Inc			
Job Titles	Job Posting	Job Titles	Job Posting
Restraint Systems Cad Designer	12	Maintenance Technician - Electrical, Paint	1
Technician, Powertrain Advanced Manufacturing - Power Electronics	11	Maintenance Technician, Electrical Paint	1
Low Voltage Harness Technician	10	Powertrain, Power Electronics Repair Technician	1
Technician, Electrical	6	Repair Technician, Power Electronics	1
Restraint Systems Cad Designer In	2	Senior Manager, Adas/Ad Domain Controller Hw Design Group	1

Apple Inc.

47

42

Job Titles	Job Posting	Job Titles	Job Posting
Systems Validation And Calibration Epm - Technology Development Group	3	Electronics Laboratory Technician	2
Analog Layout Designer	2	lc Designer - Power Management	2
Csm Analog Power Design Lead	2	Senior Cad Engineer Circuit Simulation Flow & Methodology	2
Csm Sensors Analog Design Lead	2	Senior Rfic Design Lead	2
Design Prototyper	2	Analog Design Engineer	1

#### Lawrence Livermore National Laboratory

Job Posting Job Titles Job Titles Job Posting Engineering Technical Associate/Weapon Production Quality Electronics Technologist -Mid/Senior 2 4 Electronics Engineering Technical Associate/Senior Engineering Associate Nif Electronics Engineering Technical Associate/Senior Engineering Associate 2 2 2 Technical Coordinator, Electronic & Mechanical 2 **Electronics Fabrication** Technician Electronics Technologist For Nif&Ps 2 **Designer - Electrical** 1 Dodt Electronics Engineering Technical Associate/Senior Engineering Technical Associate Electronics Technologist/Senior Electronics Technologist 2 1

#### Actalent

30

Job Titles	Job Posting	Job Titles	Job Posting
Calibration Technician	4	Electromechanical Technician	
Electronics Technician	4	Low Voltage Engineering Technician	
Electrical Coordinator	2	Test Technician	
Electrical Engineering Technician	2	Altium Pcb Designer - Remote	
Electrical Technician	2	Calibration Technician-Tesla	

dvanced Micro Devices, Inc.			
Job Titles	Job Posting	Job Titles	Job Posting
Analog Design Engineer		4 Analog Designer	
Senior Analog Designer		3 Circuit Cad Engineer	
Serdes Analog Design Engineer		3 Director Analog Design	
Smts Analog Design Engineer		3 Fellow Analog Design	
Pmts Analog Design Engineer		2 Mixed Signal Digital Design	
upp Draft Services			
Job Titles		Job Posting	
Draft Beer Technician			
rotech Automotive			
Job Titles	Job Posting	Job Titles	Job Posting
Automotive Adas Calibration Technician		16 Automotive Calibration Technician	
andia Corporation			
Job Titles	Job Posting	Job Titles	Job Posting
Electromechanical Technologist		4 Calibration General Technologist Mid-Career	
Electronics Technologist		3 Calibration Services General Technologist Mid-Career	
Electrical Design Assurance Lead		2 Calibration Support Technologist Early Career	
Electrical Engineer - Power Supply Or Analog Design		2 Electrical Engineer - Power Supply Or Analog Design Early/Mid-C	
Telemetry Fpga And Electronics Designer		2 Electromechanical Technologist - Test Assembly Gro	
llied Universal			
Job Titles	Job Posting	Job Titles	Job Posting
Security Officer-Electronics Technician Campus		6 Low Voltage Installation Technician	
Security Guard - Electronics Technician Campus		4 Low Voltage Senior Service Technician	
Low Voltage Installation Technician II		3 Low Voltage Service Technician	
Security Officer- Electronics		2 Security Guard - Electronics Technician Campus In	
Technician Campus			

Amazon			19
Job Titles	Job Posting	Job Titles	Job Posting
Control Systems Technician	14	Senior Sdet - Solid State Devices	2
Sdet - Solid State Devices	2	Ecad Application Engineer	1
			·

Danaher Corporation			
Job Titles	Job Posting	Job Titles	Job Posting
Automation Technician	7	Automation Technician Cepheid	1
Automation Technician II	2	Calibration Technician III	1
Calibration Technician I	2	Test Technician 2 Molecular Devices	1
Calibration Technician II	2	Test Technician 3 Molecular Devices	1
Test Technician	2		

#### **Department of Veterans Affairs**

19

Job Titles	Job Posting	Job Titles	Job Posting
Medical Instrument Technician Polysomnography	5	Lead Medical Instrument Technician Diagnostic Ultrasound/Vascular	1
Medical Instrument Technician Diagnostic Ultrasound	2	Lead Medical Instrument Technician Vascular	1
Medical Instrument Technician Echocardiography	2	Medical Instrument Technician Diagnostic Ultrasound Vascular	1
Medical Instrument Technician Electrocardiograph Ekg	2	Medical Instrument Technician Diagnostic Ultrasound/Vascular	1
Electronics Technician	1	Medical Instrument Technician Gastroenterology Gi	1

#### Facebook

18

17

ob Titles	Job Posting	Job Titles	Job Posting
Depth Technician Lead, Technology Engineering For Devices	4	Electrical Technician	
Analog & Mixed-Signal Designer	2	Lead Electrical Technician	
Analog Design Electrical Engineer	2	Oled Panel Designer	
Analog Design Engineer	1	Pcb Design Manager	
Electrical Debug And Test Technician	1	Physical Design Director	

#### Google Inc.

Job Titles	Job Posting	Job Titles	Job Posting
Director, Cpu Front End Design	3	Manager, Chip Design Verification, Platforms	1
Thermal Test Technician	3	Pcb Design Manager, Nest	1
Ecad Support Engineer, Devices & Services	2	Phd Residency - Electronics - Vlsi Design/Eda/Machine Learning/High-Performance Computing	1

Electronic Packaging Technician Lead, Google Pixel	2	Physical Design Implementation Manager	1
Digital Designer	1	Soc Design Lead, Platforms	1

vidia Corporation			
Job Titles	Job Posting	Job Titles	Job Posting
Senior Cad Engineer	4	Rtl Analysis Cad Engineer	2
Senior Sram Circuit Designer	4	Asic Design Verification, Low Power - College Grad	1
Cad Engineer	3	Cad Engineer - College Grad	1
Engineering Validation Technician	2		
3Harris			
Job Titles	Job Posting	Job Titles	Job Posting
Electro Mechanical Assembler	10	Senior Specialist Computer - Aided Design	1
Senior Specialist, Design	5		
roadcom			
Job Titles	Job Posting	Job Titles	Job Posting
Rf Power Amplifier Designer	3	Analog Mixed Signal Layout Designer	1
Staff Analog Circuit Designer	3	High Speed Analog Design Lead	1
Fbar Designer	2	High Speed Analog Designer	1
Ic Cad Engineer	2	Senior Pcb Designer	1
Analog Design Engineer	1		
uminous Computing			
Job Titles	Job Posting	Job Titles	Job Posting
High Speed Analog Design	14	Analog Design Engineer - High-Speed, Serdes, Pll, Finfet	1
ualcomm			
Job Titles	Job Posting	Job Titles	Job Posting
Rf/Analog Design Engineer	6	Rf/Analog Design Engineer, Senior	1
Vlsi Cad Engineer - Senior Staff	4	Rf/Analog Design Engineer, Staff	1
Cad Engineer	1	Staff Test Technician	1
Mask Layout Designer, Staff	1		
rescal Inc			
Job Titles	Job Posting	Job Titles	Job Posting
Calibration Technician - Rf Microwave	4	Electromechanical Calibration Technician - Entry Level - Training Provided	3

		Training Provided	
Calibration Technician - General Purpose	3	Calibration Technician - Entry Level At Trescal Inc	1
Calibration Technician - Lead	3	Calibration Technician - General Purpose At Trescal Inc	1

cobs Engineering Group Inco	orporated		
Job Titles	Job Posting	Job Titles	Job Posting
Electrical Design Technician		5 Entry Level Instrumentation & Controls Design Technician	
Electrification Specialist		2 Hmi/Plc Programmer	
Instrument And Controls Design Technician	:	2 Senior Designer-Electrical	
Machining Technician		2	
exas Instruments			
Job Titles	Job Posting	Job Titles	Job Posting
Analog Design Engineer - Custom Power Products		2 Analog Design Engineer Custom Power Products	
Analog Design Verification Engineer	:	2 Analog Design Engineer Development Program - /Phd	
Analog Design Engineer		1 Analog Design Engineer Development Program - Bachelors	
Analog Design Engineer - Chip Architect		1 Analog Design Engineer Development Program Custom Power Products ,	
Analog Design Engineer Chip Architect		Analog Design Engineer Development Program Custom Power Products - ,	

Unspecified postings: 857

Source: Labor Insight (Burning Glass Technologies)

## **Occupation Deep Dive (Snapshot view)**

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#### **Active Selections**

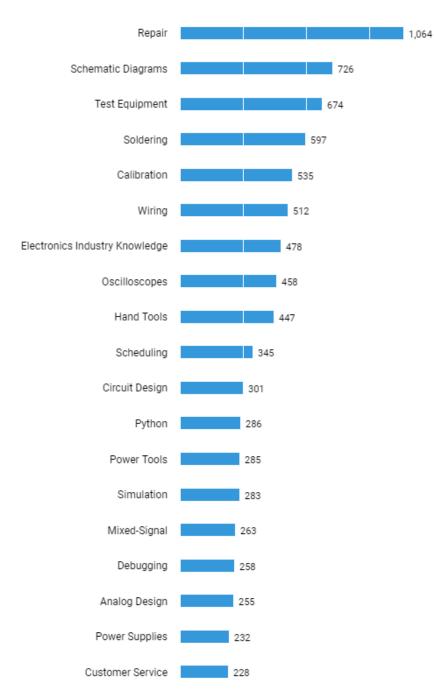
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#### What credentials are needed for the job?

# The following skills are most requested (Specialized Skills)

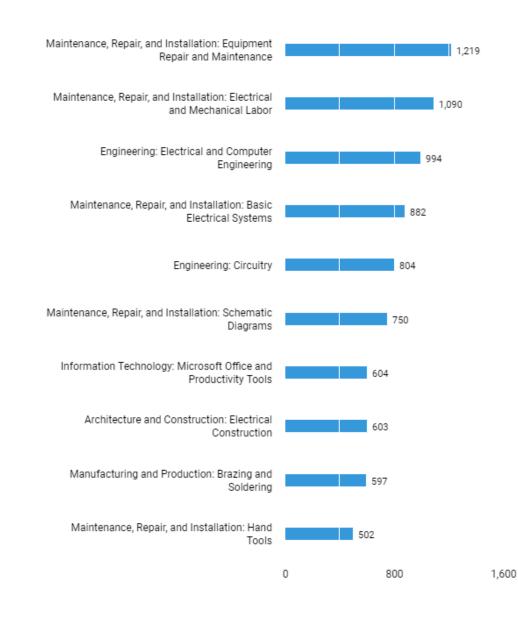
Jan. 01, 2021 - Dec. 31, 2021

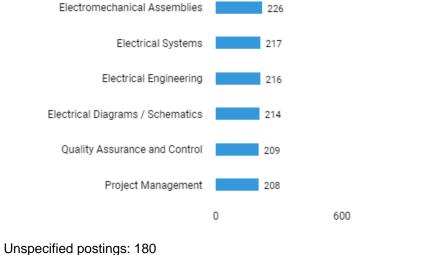
There are 3,685 postings available with the current filters applied. There are 180 unspecified or unclassified postings.



#### The following skill clusters are most requested

Jan. 01, 2021 - Dec. 31, 2021 There are 3,685 postings available with the current filters applied. There are 461 unspecified or unclassified postings.





Unspecified postings: 461

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1,200

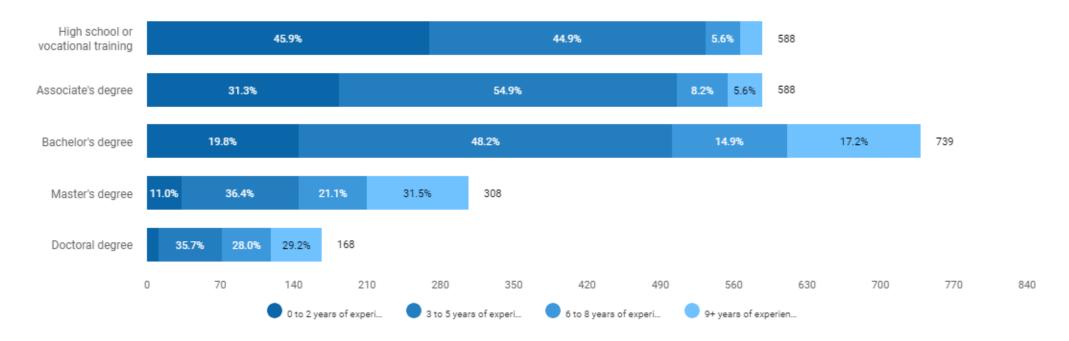
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### The following levels of education and levels of experience are requested



Unspecified postings: 1,933

Source: Labor Insight (Burning Glass Technologies)

### **Certification Analysis**

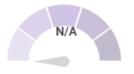
#### **Active Selections**

Contra Costa, CA, Alameda, CA, San Francisco, CA, Santa Clara, CA, San Mateo, CA, Basic Electronics, Certified Electronics Technician Associate, Electronic Technician Certification

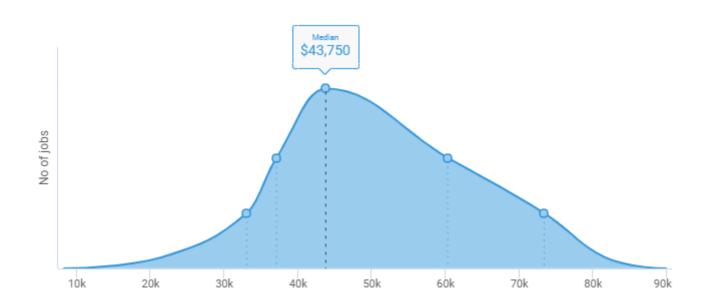
#### **Certification Metrics**



### **Location Quotient**



### Salary Overall



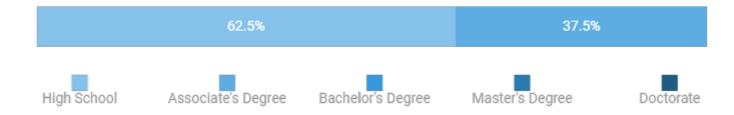
**Salary By Education** 

Salary By Experience

Years of Experience

No data available for this report with your selected filters.

## **Education Level**



## Top Occupations Requesting Certification(s)

Occupation	Associated Education Level
Electrical and Electronics Technician	Associate's
General Engineering Technician / Technologist	High school or vocational
Controls / Valve Technician	NA
Building and General Maintenance Technician	NA
Field Service Technician	Associate's
Satellite / Broadband Technician	NA
Computer Support Specialist	Associate's

## **Certification Taxonomy**

Certification Group	Job Pos	ting
lectronics		11
Certification	Job Postings	
Computer Engineering Certificate		46
Mobile Electronics Certified Professional (MECP)		21
Electronic Technician Certification		19
Soldering Certification		15
Certified Electronics Technician Associate		8
Electronic Assembly		1
Electronic Engineering Certification		1

## **Top Occupations**

Specialized Occupation	Total Job Postings (Last 12 Months)	Job Postings Requesting Certification(s)(#)	Job Postings Requesting Certification(s)(%)	Occupation Projected Growth (10 Years)	Associated Education Level
General Engineering Technician / Technologist	2,788	6	0.2%	11.3% 🖍	High school or vocational training
Controls / Valve Technician	215	5	2.3%	2.1% 🖍	NA
Electrical Engineering Technician	708	4	0.6%	7.4% 🖍	NA
Building and General Maintenance Technician	9,847	3	0.0%	18.8% 🖍	NA
Field Service Technician	1,853	2	0.1%	9.5% 🖍	Associate's degree
Engineering Test Technician	628	2	0.3%	5.7% 🖍	High school or vocational training
Telecommunications Field Technician	337	2	0.6%	3.9% 🖍	NA
Technical Support Engineer / Analyst	3,400	1	0.0%	10.8% 🖍	Associate's degree
Electronics Repair Technician	221	1	0.5%	1.7% 🗡	Associate's degree

## **Top Co-occurring Skills**

	Skill	Job Postings
1	Repair	17
2	Calibration	14
3	Electronics Industry Knowledge	14
4	Schematic Diagrams	13
5	Wiring	13
6	Servo Drives / Motors	12
7	Local Area Network (LAN)	8
8	Oscilloscopes	8
9	Power Tools	8
10	Predictive / Preventative Maintenance	8

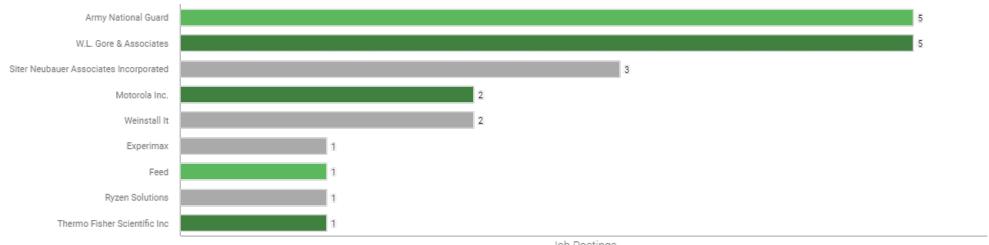
Currently displaying: Specialized

### **Top Industries**

Currently displaying: 2digit

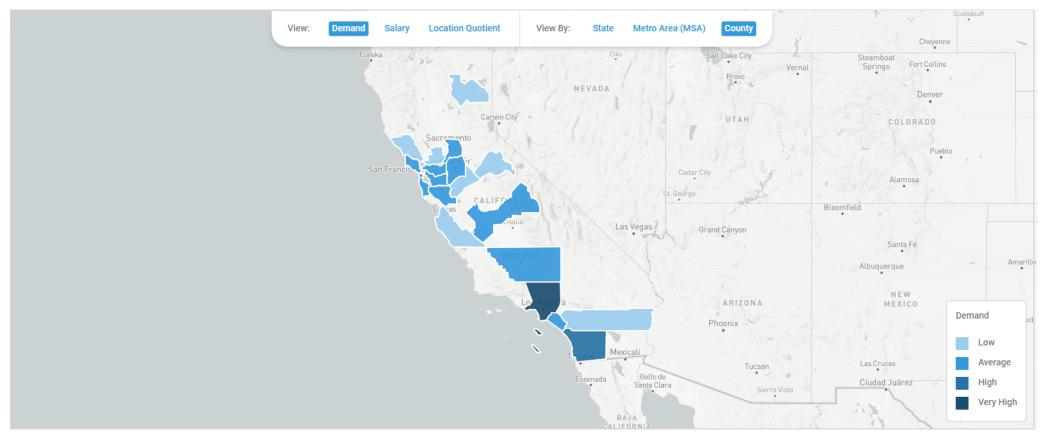


## **Top Employers**



#### Job Postings

## **Top Locations**



County	Job Postings (Last 12 Months)	Median Salary	Location Quotient
Los Angeles, CA	37	\$32k	N/A
San Diego, CA	29	\$40k	N/A
Santa Clara, CA	19	\$41k	N/A
Kern, CA	6	\$38k	N/A
San Francisco, CA	4	\$53k	N/A
Orange, CA	3	\$40k	N/A
San Joaquin, CA	3	\$71k	N/A
Fresno, CA	2	\$51k	N/A
Sacramento, CA	2	\$56k	N/A
San Mateo, CA	2	\$75k	N/A

#### CSM Research Request, Fall 2021 Submission Cycle: Student Success and Core Program Indicators Academic Years 2018/19 to 2020/21

_		Academic Yea	ır	STUDENT SUCCESS	Ac	Academic Year		
INDICATOR	18-19	19-20	20-21	INDICATORS	18-19	19-20	20-21	
Enrollments (Dup. Headcnt)	178	144	148	Success %	70.2%	70.8%	79.1%	
WSCH	742.7	605.7	573.9	Retention %	79.8%	81.9%	93.2%	
FTES	24.8	20.2	19.1	Withdraw %	20.2%	18.1%	6.8%	
LOAD (WSCH/FTEF)*	370.8	330.4	264.1					
Classroom Teaching FTEI	-				Ac	ademic Ye	ar	
Classroom Teaching FTEI Full-time FTEF	= 1.2	1.2	1.5	Sections	<u>Ac</u> 18-19	<u>ademic Ye</u> 19-20	ear 20-21	
Full-time FTEF		1.2 0.7	1.5 0.7	Sections Total				
•	1.2				18-19	19-20	20-21	
Full-time FTEF Adjunct FTEF Overload FTEF (FT Faculty)	1.2 0.9	0.7	0.7	Total	<b>18-19</b> 9	<b>19-20</b> 10	<b>20-21</b> 11	
Full-time FTEF Adjunct FTEF	1.2 0.9 0.0	0.7 0.0	0.7 0.0	Total % CTE	<b>18-19</b> 9 100.0%	<b>19-20</b> 10 100.0%	<b>20-21</b> 11 100.0%	

	Division: 4411 – Electronics Technology ELEC Successful Course Completion Rates: 2018-19 to 2020-21											
Successful Cour				1			1			1		
Demographic		Enrollment licate Headc			Enrollm		Perc	ent Suc	cess	Perc	ent Witl	ndraw
Variable	18-19	19-20	20-21	18-19	19-20	20-21	18-19	19-20	20-21	18-19	19-20	20-21
Ethnicity												
Asian-Domestic	23	18	26	12.9	12.5	17.6	95.7	83.3	92.3	4.3	16.7	3.8
Asian-Int'l	0	0	2	0.0	0.0	1.4			0.0			0.0
Black	6	3	11	3.4	2.1	7.4	66.7	66.7	45.5	33.3	0.0	18.2
Filipino	13	12	11	7.3	8.3	7.4	61.5	75.0	100.0	38.5	16.7	0.0
Hispanic	68	58	45	38.2	40.3	30.4	52.9	65.5	75.6	32.4	15.5	11.1
Native Am	0	0	2	0.0	0.0	1.4			0.0			0.0
Pac Islander	2	2	0	1.1	1.4	0.0	50.0	100.0		0.0	0.0	
White	57	37	40	32.0	25.7	27.0	78.9	70.3	87.5	10.5	27.0	2.5
Other	3	7	10	1.7	4.9	6.8	100.0	100.0	80.0	0.0	0.0	0.0
Unrecorded	6	7	1	3.4	4.9	0.7	100.0	42.9	0.0	0.0	28.6	100.0
Total	178	144	148	100	100	100	70.2	70.8	79.1	20.2	18.1	6.8
Gender												
Female	8	9	9	4.5	6.3	6.1	75.0	66.7	77.8	25.0	22.2	0.0
Male	167	120	133	93.8	83.3	89.9	69.5	70.0	78.2	20.4	19.2	7.5
Unrecorded	3	15	6	1.7	10.4	4.1	100.0	80.0	100.0	0.0	6.7	0.0
Total	178	144	148	100	100	100	70.2	70.8	79.1	20.2	18.1	6.8
Age												
19 or less	6	9	17	3.4	6.3	11.5	50.0	11.1	82.4	0.0	55.6	5.9
20-24	50	31	14	28.1	21.5	9.5	78.0	67.7	85.7	22.0	12.9	0.0
25-29	45	22	27	25.3	15.3	18.2	62.2	72.7	74.1	22.2	13.6	11.1
30-34	25	29	30	14.0	20.1	20.3	56.0	75.9	66.7	20.0	17.2	10.0
35-39	23	13	27	12.9	9.0	18.2	73.9	84.6	85.2	21.7	15.4	3.7
40-49	14	17	18	7.9	11.8	12.2	71.4	76.5	94.4	28.6	11.8	0.0
50+	15	23	15	8.4	16.0	10.1	93.3	78.3	73.3	6.7	21.7	13.3
Unrecorded	0	0	0	0.0	0.0	0.0						
Total	178	144	148	100	100	100	70.2	70.8	79.1	20.2	18.1	6.8
<b>Disability Status</b>												
Has disability	2	6	4	1.1	4.2	2.7	0.0	50.0	50.0	50.0	33.3	0.0
No disability	176	138	144	98.9	95.8	97.3	71.0	71.7	79.9	19.9	17.4	6.9
First Generation C												
First generation	103	90	78	57.9	62.5	52.7	68.9	63.3	71.8	21.4	21.1	9.0
Not first generation	64	45	56	36.0	31.3	37.8	79.7	80.0	89.3	17.2	15.6	5.4
Income Status												
Low income	35	14	13	19.7	9.7	8.8	48.6	64.3	30.8	31.4	0.0	15.4
Not low income	143	130	135	80.3	90.3	91.2	75.5	71.5	83.7	17.5	20.0	5.9

vision: 4411 – Electronics Techno		Fall Term	2020
INDICATOR	2018	2019	2020
Enrollments/Dup.Headcount	82	73	63
WSCH	404.0	322.0	225.7
FTES	13.5	10.7	7.5
LOAD (WSCH/FTEF)*	541.1	431.3	246.3
Success %	67.1%	58.9%	81.0%
Retention %	76.8%	72.6%	90.5%
Withdraw %	23.2%	27.4%	9.5%
Classroom Teaching FTEF			
Full-time FTEF	0.4	0.4	0.7
Adjunct FTEF	0.3	0.3	0.2
Overload FTEF (F-T Faculty)	0.0	0.0	0.0
Retired FTEF	0.0	0.0	0.0
Total FTEF	0.7	0.7	0.9
Percent Full-time	54.5%	54.5%	81.5%
Sections			
Total Number of Sections	3	4	5
% CTE	100.0%	100.0%	100.0%
% Transferable	0.0%	0.0%	0.0%
% Degree Applicable	0.0%	0.0%	0.0%
% Basic Skills	0.0%	0.0%	0.0%

#### Division: 4411 – Electronics Technology ELEC

#### **Division: 4411 – Electronics Technology ELEC**

	2019	Spring Term 2020	2021
Enrollments/Dup.Headcount	96	71	85
WSCH	338.7	283.7	348.2
FTES	11.3	9.5	11.6
LOAD (WSCH/FTEF)*	269.6	261.1	277.1
Success %	72.9%	83.1%	77.6%
Retention %	82.3%	91.5%	95.3%
Withdraw %	17.7%	8.5%	4.7%
Classroom Teaching FTEF			
Full-time FTEF	0.7	0.7	0.7
Adjunct FTEF	0.5	0.3	0.5
Overload FTEF (F-T Faculty)	0.0	0.0	0.0
Retired FTEF	0.0	0.0	0.0
Total FTEF	1.3	1.1	1.3
Percent Full-time	59.4%	68.7%	59.4%
Sections			
Total Number of Sections	6	6	6
% CTE	100.0%	100.0%	100.0%
% Transferable	0.0%	0.0%	0.0%
% Degree Applicable	0.0%	0.0%	0.0%
% Basic Skills	0.0%	0.0%	0.0%

INDICATOR	2018	Summer Term 2019	2020
Enrollments/Dup.Headcount	0	0	0
WSCH			
FTES			
LOAD (WSCH/FTEF)*			
Success %	%	%	%
Retention %	%	%	%
Withdraw %	%	%	%
Classroom Teaching FTEF			
Full-time FTEF			
Adjunct FTEF			
Overload FTEF (F-T Faculty)			
Retired FTEF			
Total FTEF			
Percent Full-time	%	%	%
Sections			
Total Number of Sections			
% CTE	%	%	%
% Transferable	%	%	%
% Degree Applicable	%	%	%
% Basic Skills	%	%	%

#### CSM Program Review, Fall 2018 Submission Cycle: Student Success and Core Program Indicators Academic Years 2015/16 to 2017/18

Division: 4411 – Electronics Technology ELEC								
		Academic Yea	r	STUDENT SUCCESS	Ac	ademic Ye	ear	
INDICATOR	15-16	16-17	17-18	INDICATORS	15-16	16-17	17-18	
Enrollments (Dup. Headcnt)	445	435	300	Success %	74.6%	75.9%	70.3%	
WSCH	1628.8	1273.9	1202.4	Retention %	84.7%	84.8%	83.0%	
FTES	54.3	42.5	40.1	Withdraw %	15.3%	15.2%	17.0%	
LOAD (WSCH/FTEF)*	520.4	381.1	393.0					
Classroom Teaching FTE	:				Ac	ademic Ye	ear	
Full-time FTEF	1.6	1.5	1.5	Sections	15-16	16-17	17-18	
Adjunct FTEF	1.6	1.8	1.6	Total	16	18	16	
Overload FTEF (FT Faculty)	0.0	0.1	0.0	% CTE	100.0%	100.0%	100.0%	
Retired FTEF	0.0	0.0	0.0	% Transferable	0.0%	0.0%	0.0%	
Total FTEF	3.1	3.3	3.1	% Degree Applicable	0.0%	0.0%	0.0%	
Percent Full-time	49.9%	46.9%	48.8%	% Basic Skills	0.0%	0.0%	0.0%	

Division: 4411 – Electronics Technology ELEC												
Successful Cour	Successful Course Completion Rates: 2015-16 to 2017-18											
Demographic	Enrollments Demographic (Duplicate Headcount)		Pct. Enrollments (Duplicate Headcount)		Percent Success		Percent Withdraw					
Variable	15-16	16-17	17-18	15-16	16-17	17-18	15-16	16-17	17-18	15-16	16-17	17-18
Ethnicity												
Asian	69	59	45	15.5	13.6	15.0	81.2	86.4	82.2	17.4	10.2	11.1
Black	24	19	17	5.4	4.4	5.7	50.0	57.9	70.6	37.5	26.3	23.5
Filipino	24	42	21	5.4	9.7	7.0	91.7	73.8	66.7	4.2	26.2	14.3
Hispanic	164	162	117	36.9	37.2	39.0	72.6	67.9	65.8	12.8	19.8	19.7
Native Am	1	0	0	0.2	0.0	0.0	100.0	-	-	0.0	-	-
Pac Islander	7	5	3	1.6	1.1	1.0	71.4	100.0	33.3	0.0	0.0	66.7
White	94	104	71	21.1	23.9	23.7	72.3	85.6	73.2	19.1	5.8	18.3
Other	41	30	20	9.2	6.9	6.7	73.2	83.3	75.0	14.6	6.7	5.0
Unrecorded	21	14	6	4.7	3.2	2.0	90.5	57.1	50.0	4.8	28.6	0.0
Total	445	435	300	100	100	100	74.6	75.9	70.3	15.3	15.2	17.0
Gender												
Female	14	29	21	3.1	6.7	7.0	64.3	79.3	66.7	28.6	0.0	19.0
Male	412	387	275	92.6	89.0	91.7	75.7	75.5	70.9	14.1	16.8	17.1
Unrecorded	19	19	4	4.3	4.4	1.3	57.9	78.9	50.0	31.6	5.3	0.0
Total	445	435	300	100	100	100	74.6	75.9	70.3	15.3	15.2	17.0
Age												
19 or less	35	19	21	7.9	4.4	7.0	62.9	73.7	47.6	20.0	15.8	28.6
20-24	111	89	83	24.9	20.5	27.7	75.7	77.5	73.5	15.3	7.9	12.0
25-29	80	118	78	18.0	27.1	26.0	77.5	73.7	71.8	16.3	18.6	19.2
30-34	90	65	43	20.2	14.9	14.3	78.9	76.9	60.5	11.1	15.4	23.3
35-39	45	67	31	10.1	15.4	10.3	68.9	70.1	67.7	17.8	22.4	19.4
40-49	62	61	28	13.9	14.0	9.3	72.6	86.9	82.1	16.1	8.2	14.3
50+	22	16	16	4.9	3.7	5.3	77.3	62.5	87.5	13.6	25.0	0.0
Unrecorded	0	0	0	0.0	0.0	0.0	-	_	_	-	_	_
Total	445	435	300	100	100	100	74.6	75.9	70.3	15.3	15.2	17.0
<b>Disability Status</b>												
Has disability	6	5	2	1.3	1.1	0.7	50.0	40.0	50.0	16.7	20.0	0.0
No disability	439	430	298	98.7	98.9	99.3	74.9	76.3	70.5	15.3	15.1	17.1
First Generation C	College											
First generation	277	254	169	62.2	58.4	56.3	70.8	75.2	74.0	17.3	16.1	15.4
Not first generation	109	134	87	24.5	30.8	29.0	78.0	74.6	69.0	13.8	14.9	14.9
Income Status												
Low income	91	99	43	20.4	22.8	14.3	78.0	66.7	81.4	11.0	21.2	14.0
Not low income	354	336	257	79.6	77.2	85.7	73.7	78.6	68.5	16.4	13.4	17.5

Division: 4411 – Electronics Techno		Fall Term	2017
INDICATOR	2015	2016	2017
Enrollments/Dup.Headcount	223	216	177
WSCH	817.5	481.5	733.3
FTES	27.2	16.0	24.4
LOAD (WSCH/FTEF)*	491.5	277.2	406.7
Success %	74.9%	81.5%	73.4%
Retention %	86.1%	91.7%	85.9%
Withdraw %	13.9%	8.3%	14.1%
Classroom Teaching FTEF			
Full-time FTEF	0.7	0.7	0.7
Adjunct FTEF	0.9	1.1	1.1
Overload FTEF (F-T Faculty)	0.0	0.0	0.0
Retired FTEF	0.0	0.0	0.0
Total FTEF	1.7	1.7	1.8
Percent Full-time	44.9%	39.2%	41.4%
Sections			
Total Number of Sections	8	9	10
% CTE	100.0%	100.0%	100.0%
% Transferable	0.0%	0.0%	0.0%
% Degree Applicable	0.0%	0.0%	0.0%
% Basic Skills	0.0%	0.0%	0.0%

#### Division: 4411 – Electronics Technology ELEC

Division: 4411 – Electronics Techno		Spring Term	
INDICATOR	2016	2017	2018
Enrollments/Dup.Headcount	222	219	123
WSCH	811.3	792.5	469.1
FTES	27.0	26.4	15.6
LOAD (WSCH/FTEF)*	553.2	493.3	373.3
Success %	74.3%	70.3%	65.9%
Retention %	83.3%	78.1%	78.9%
Withdraw %	16.7%	21.9%	21.1%
Classroom Teaching FTEF			
Full-time FTEF	0.8	0.8	0.7
Adjunct FTEF	0.7	0.7	0.5
Overload FTEF (F-T Faculty)	0.0	0.1	0.0
Retired FTEF	0.0	0.0	0.0
Total FTEF	1.5	1.6	1.3
Percent Full-time	55.7%	55.2%	59.4%
Sections			
Total Number of Sections	8	9	6
% CTE	100.0%	100.0%	100.0%
% Transferable	0.0%	0.0%	0.0%
% Degree Applicable	0.0%	0.0%	0.0%
% Basic Skills	0.0%	0.0%	0.0%

#### Division: 4411 – Electronics Technology ELEC

INDICATOR	2015	Summer Term 2016	2017
Enrollments/Dup.Headcount	17	21	23
WSCH	0.0	38.4	126.7
FTES	0.0	1.3	4.2
LOAD (WSCH/FTEF)*	0.0	288.1	372.6
Success %	76.5%	100.0%	91.3%
Retention %	76.5%	100.0%	100.0%
Withdraw %	23.5%	0.0%	0.0%
Classroom Teaching FTEF			
Full-time FTEF	0.0	0.0	0.0
Adjunct FTEF	0.3	0.0	0.0
Overload FTEF (F-T Faculty)	0.0	0.1	0.3
Retired FTEF	0.0	0.0	0.0
Total FTEF	0.3	0.1	0.3
Percent Full-time	0.0%	100.0%	100.0%
Sections			
Total Number of Sections	1	1	1
% CTE	100.0%	100.0%	100.0%
% Transferable	0.0%	0.0%	0.0%
% Degree Applicable	0.0%	0.0%	0.0%
% Basic Skills	0.0%	0.0%	0.0%

## **Program Overview**

Electrical/Electronics Maintenance and Repair Technologies/Technicians

Lightcast Q1 2023 Data Set

April 2023

### San Mateo County Community College District



3401 CSM Drive San Mateo, California 94402 650.358.6880

## **Parameters**

Completions Year: 2021								
Jobs Time	Jobs Timeframe: 2017 - 2028							
Job Postin	gs Timeframe: Sep 2021 - Sep 2022							
Programs:	Programs:							
Code	Code Description							
47.01	7.01 Electrical/Electronics Maintenance and Repair Technologies/Technicians							
Regions:								
Code	Description	Code	Description					
6001	Alameda County, CA	6081	San Mateo County, CA					
6075	San Francisco County, CA	6085	Santa Clara County, CA					
Education Level: Any								
Tuition Type: Tuition & Fees								
Graduate S	Graduate Status: Undergraduate							

Residency: In-State

4	65	Completions Distribution
Institutions -20% Growth (2017-2021)	Completions -40% Growth (2017-2021)	Average: 16.3 2 44 Median: 9.5

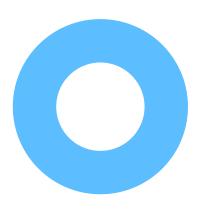
#### **Program Overview**



#### Market Share by Institution Type

Institution Type	Completions (2021)	Market Share
Public, 2-year	65	100.0%

### Market Share by Program

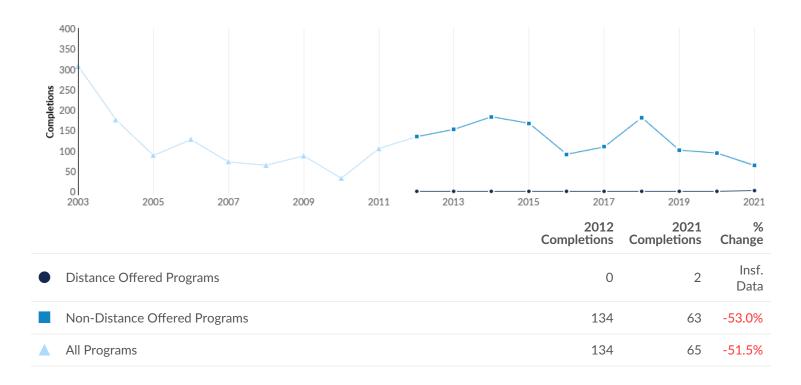


Program	Completions (2021)	Market Share
Electrical/Electronics Equipment Installation and Repair Technology/Technician, General (47.0101)	65	100.0%

#### **Completions by Institution**

Institution	Completions (2021)	Growth % YOY (2021)	Market Share (2021)	IPEDS Tuition & Fees (2021)	Completions Trend (2017-2021)
Laney College	44	7.3%	67.7%	\$1,148	$\frown$
Chabot College	14	40.0%	21.5%	\$1,150	$\frown$
City College of San Francisco	5	-86.1%	7.7%	\$1,168	
College of San Mateo	2	-71.4%	3.1%	\$1,440	$\frown$

### **Regional Trends**



#### **Regional Completions by Award Level**

	Award Level	Completions (2021)	Percent	
	Award of less than 1 academic year	16	24.6%	_
•	Award of at least 1 but less than 2 academic years	33	50.8%	
	Associate's Degree	16	24.6%	
	Award of at least 2 but less than 4 academic years	0	0.0%	
	Bachelor's Degree	0	0.0%	
	Postbaccalaureate certificate	0	0.0%	
	Master's Degree	0	0.0%	
	Post-masters certificate	0	0.0%	
	Doctor's Degree	0	0.0%	

7	5
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Programs (2021)

## 21,949

Completions (2021)

CIP Code	Program	Completions (2021)
52.0201	Business Administration and Management, General	8,648
24.0101	Liberal Arts and Sciences/Liberal Studies	6,538
11.0701	Computer Science	2,849
11.0199	Computer and Information Sciences, Other	614
09.0701	Radio and Television	386
46.0302	Electrician	371
15.1501	Engineering/Industrial Management	341
47.0604	Automobile/Automotive Mechanics Technology/Technician	263
11.0103	Information Technology	256
30.9999	Multi-/Interdisciplinary Studies, Other	242

## **Target Occupations**

97,273 Jobs (2017) 1% above National average	-2.5% % Change (2017-2028) Nation: +13.3%	\$31.73/hr \$66.0K/yr <b>Median Earnings</b> Nation: \$23.87/hr; \$49.6K/yr	10,663 Annual Openings
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Occupation	2017 Jobs	Annual Openings	Median Earnings	Growth (2017 - 2028)	Location Quotient (2017)
Computer User Support Specialists	25,942	2,045	\$36.20/hr	-18.37%	1.96
Maintenance and Repair Workers, General	23,394	2,717	\$27.35/hr	+7.92%	0.78
Electrical and Electronic Engineering Technologists and Technicians	8,308	826	\$35.98/hr	-17.90%	3.12
First-Line Supervisors of Mechanics, Installers, and Repairers	6,410	776	\$44.17/hr	+14.74%	0.65
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	4,897	687	\$33.62/hr	+25.40%	0.70
Telecommunications Equipment Installers and Repairers, Except Line Installers	4,562	433	\$35.23/hr	-26.19%	0.94
Installation, Maintenance, and Repair Workers, All Other	3,318	431	\$23.34/hr	+11.97%	0.81
Computer, Automated Teller, and Office Machine Repairers	2,799	238	\$26.22/hr	-35.16%	1.14
Semiconductor Processing Technicians	2,737	458	\$22.78/hr	+7.09%	5.73
Telecommunications Line Installers and Repairers	2,633	263	\$41.76/hr	-30.42%	1.16
Industrial Machinery Mechanics	2,548	383	\$36.16/hr	+42.07%	0.36
Engineering Technologists and Technicians, Except Drafters, All Other	2,172	391	\$26.08/hr	+43.09%	1.47
HelpersInstallation, Maintenance, and Repair Workers	1,580	159	\$22.34/hr	-24.11%	0.70
Security and Fire Alarm Systems Installers	1,455	323	\$32.82/hr	+73.26%	0.97
Electrical and Electronics Repairers, Commercial and Industrial Equipment	1,234	86	\$35.59/hr	-43.44%	0.87
Industrial Engineering Technologists and Technicians	894	122	\$33.51/hr	+13.98%	0.68

Electro-Mechanical and Mechatronics Technologists and Technicians	740	56	\$31.62/hr	-36.76%	2.81
Home Appliance Repairers	374	46	\$24.81/hr	-2.41%	0.44
Audiovisual Equipment Installers and Repairers	271	48	\$27.66/hr	+17.71%	0.43
Electric Motor, Power Tool, and Related Repairers	222	17	\$28.00/hr	-30.18%	0.49
Coil Winders, Tapers, and Finishers	196	16	\$26.00/hr	-55.10%	0.66
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	175	29	\$51.52/hr	+23.43%	0.32
Calibration Technologists and Technicians	115	23	\$35.42/hr	+52.17%	0.75
Radio, Cellular, and Tower Equipment Installers and Repairers	115	54	\$37.31/hr	+180.00%	0.32
Camera and Photographic Equipment Repairers	77	14	\$15.56/hr	+12.99%	1.04
Communications Equipment Operators, All Other	57	12	\$14.00/hr	-24.56%	0.36
Signal and Track Switch Repairers	48	10	\$40.19/hr	+37.50%	0.23

#### Growth



Occupation	2017 Jobs	2028 Jobs	Change	% Change
Computer User Support Specialists (15-1232)	25,942	21,177	-4,765	-18%
Electrical and Electronic Engineering Technologists and Technicians (17-3023)	8,308	6,821	-1,487	-18%
Electro-Mechanical and Mechatronics Technologists and Technicians (17-3024)	740	468	-272	-37%
Industrial Engineering Technologists and Technicians (17-3026)	894	1,019	125	14%
Calibration Technologists and Technicians (17-3028)	115	175	60	52%
Engineering Technologists and Technicians, Except Drafters, All Other (17-3029)	2,172	3,108	936	43%
Communications Equipment Operators, All Other (43-2099)	57	43	-14	-25%
First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)	6,410	7,355	945	15%
Computer, Automated Teller, and Office Machine Repairers (49-2011)	2,799	1,815	-984	-35%
Radio, Cellular, and Tower Equipment Installers and Repairers (49-2021)	115	322	207	180%
Telecommunications Equipment Installers and Repairers, Except Line Installers (49-2022)	4,562	3,367	-1,195	-26%

Electric Motor, Power Tool, and Related Repairers (49-2092)	222	155	-67	-30%
Electrical and Electronics Repairers, Commercial and Industrial Equipment (49-2094)	1,234	698	-536	-43%
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)	175	216	41	23%
Audiovisual Equipment Installers and Repairers (49-2097)	271	319	48	18%
Security and Fire Alarm Systems Installers (49-2098)	1,455	2,521	1,066	73%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)	4,897	6,141	1,244	25%
Home Appliance Repairers (49-9031)	374	365	-9	-2%
Industrial Machinery Mechanics (49-9041)	2,548	3,620	1,072	42%
Telecommunications Line Installers and Repairers (49-9052)	2,633	1,832	-801	-30%
Camera and Photographic Equipment Repairers (49- 9061)	77	87	10	13%
Maintenance and Repair Workers, General (49- 9071)	23,394	25,246	1,852	8%
Signal and Track Switch Repairers (49-9097)	48	66	18	38%
HelpersInstallation, Maintenance, and Repair Workers (49-9098)	1,580	1,199	-381	-24%
Installation, Maintenance, and Repair Workers, All Other (49-9099)	3,318	3,715	397	12%
Coil Winders, Tapers, and Finishers (51-2021)	196	88	-108	-55%
Semiconductor Processing Technicians (51-9141)	2,737	2,931	194	7%

## Percentile Earnings



Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings
Computer User Support Specialists (15-1232)	\$27.67	\$36.20	\$46.67
Electrical and Electronic Engineering Technologists and Technicians (17-3023)	\$28.79	\$35.98	\$44.67
Electro-Mechanical and Mechatronics Technologists and Technicians (17-3024)	\$22.24	\$31.62	\$36.97
Industrial Engineering Technologists and Technicians (17-3026)	\$28.47	\$33.51	\$41.09
Calibration Technologists and Technicians (17-3028)	\$28.44	\$35.42	\$44.90
Engineering Technologists and Technicians, Except Drafters, All Other (17-3029)	\$23.49	\$26.08	\$39.45
Communications Equipment Operators, All Other (43-2099)	\$14.00	\$14.00	\$17.13
First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)	\$33.72	\$44.17	\$56.93
Computer, Automated Teller, and Office Machine Repairers (49-2011)	\$20.87	\$26.22	\$30.57
Radio, Cellular, and Tower Equipment Installers and Repairers (49-2021)	\$24.75	\$37.31	\$41.94
Telecommunications Equipment Installers and Repairers, Except Line Installers (49-2022)	\$27.88	\$35.23	\$44.62

Electric Motor, Power Tool, and Related Repairers (49-2092)	\$22.94	\$28.00	\$37.29
Electrical and Electronics Repairers, Commercial and Industrial Equipment (49-2094)	\$25.45	\$35.59	\$46.18
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)	\$49.58	\$51.52	\$68.97
Audiovisual Equipment Installers and Repairers (49-2097)	\$22.60	\$27.66	\$32.01
Security and Fire Alarm Systems Installers (49-2098)	\$25.16	\$32.82	\$36.95
Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)	\$25.34	\$33.62	\$43.31
Home Appliance Repairers (49-9031)	\$19.24	\$24.81	\$31.14
Industrial Machinery Mechanics (49-9041)	\$28.55	\$36.16	\$46.87
Telecommunications Line Installers and Repairers (49- 9052)	\$29.48	\$41.76	\$50.88
Camera and Photographic Equipment Repairers (49- 9061)	\$14.27	\$15.56	\$18.60
Maintenance and Repair Workers, General (49-9071)	\$21.28	\$27.35	\$35.82
Signal and Track Switch Repairers (49-9097)	\$37.57	\$40.19	\$42.44
HelpersInstallation, Maintenance, and Repair Workers (49-9098)	\$18.02	\$22.34	\$27.16
Installation, Maintenance, and Repair Workers, All Other (49-9099)	\$20.38	\$23.34	\$29.31
Coil Winders, Tapers, and Finishers (51-2021)	\$20.10	\$26.00	\$30.64
Semiconductor Processing Technicians (51-9141)	\$18.29	\$22.78	\$28.78

### Job Postings Summary



There were **176**,666 total job postings for your selection from September 2021 to September 2022, of which **51**,830 were unique. These numbers give us a Posting Intensity of **3-to-1**, meaning that for every 3 postings there is 1 unique job posting.

This is close to the Posting Intensity for all other occupations and companies in the region (4-to-1), indicating that they are putting average effort toward hiring for this position.

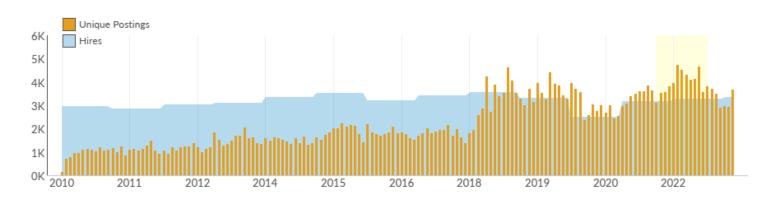
3,987

Avg. Monthly Postings (Sep 2021 - Sep 2022)

3,256

Avg. Monthly Hires (Sep 2021 - Sep 2022)

In an average month, there were **3**,**987** newly posted job postings for *27 Occupations*, and **3**,**256** actually hired. This means there was approximately 1 hire for every 1 unique job posting for *27 Occupations*.



Maintenance and Repair Workers, General1,085935Computer User Support Specialists1,057603Industrial Engineering Technologists and Technicians48728First-Line Supervisors of Mechanics, Installers, and Repairers298258Engineering Technologists and Technicians, Except Drafters, All Other259111Fechnicians181192Fechnicians133238Electrical and Electronic Engineering Technologists and Technologists and Refrigeration Mechanics133238Fleecommunications Equipment Installers and Repairers, Except Line Installers82133Electro-Mechanical and Mechatronics Technologists and Fechnicians7515Industrial Machinery Mechanics61115Installation, Maintenance, and Repair Workers, All Other60158	Occupation	Avg Monthly Postings (Sep 2021 - Sep 2022)	Avg Monthly Hires (Sep 2021 - Sep 2022)
Industrial Engineering Technologists and Technicians48728First-Line Supervisors of Mechanics, Installers, and Repairers298258Engineering Technologists and Technicians, Except Drafters, All Other259111Electrical and Electronic Engineering Technologists and Technicians181192Heating, Air Conditioning, and Refrigeration Mechanics and Installers133238Electro-Mechanical and Mechatronics Technologists and Technicians7515Industrial Machinery Mechanics61115	Maintenance and Repair Workers, General	1,085	935
First-Line Supervisors of Mechanics, Installers, and Repairers298258Engineering Technologists and Technicians, Except Drafters, All Other259111Electrical and Electronic Engineering Technologists and Technicians181192Heating, Air Conditioning, and Refrigeration Mechanics and Installers133238Telecommunications Equipment Installers and Repairers, Except Line Installers82133Electro-Mechanical and Mechatronics Technologists and Technicians7515Industrial Machinery Mechanics61115	Computer User Support Specialists	1,057	603
Repairers298238Engineering Technologists and Technicians, Except Drafters, All Other259111Electrical and Electronic Engineering Technologists and Technicians181192Heating, Air Conditioning, and Refrigeration Mechanics and Installers133238Telecommunications Equipment Installers and Repairers, Except Line Installers82133Electro-Mechanical and Mechatronics Technologists and Technicians7515Industrial Machinery Mechanics61115	Industrial Engineering Technologists and Technicians	487	28
Drafters, All Other239111Electrical and Electronic Engineering Technologists and Technicians181192Heating, Air Conditioning, and Refrigeration Mechanics and Installers133238Telecommunications Equipment Installers and Repairers, Except Line Installers82133Electro-Mechanical and Mechatronics Technologists and Technicians7515Industrial Machinery Mechanics61115	•	298	258
Technicians181192Heating, Air Conditioning, and Refrigeration Mechanics and Installers133238Telecommunications Equipment Installers and Repairers, Except Line Installers82133Electro-Mechanical and Mechatronics Technologists and Technicians7515Industrial Machinery Mechanics61115		259	111
and Installers133238Telecommunications Equipment Installers and Repairers, Except Line Installers82133Electro-Mechanical and Mechatronics Technologists and Technicians7515Industrial Machinery Mechanics61115		181	192
Except Line Installers82133Electro-Mechanical and Mechatronics Technologists and Technicians7515Industrial Machinery Mechanics61115		133	238
Technicians7515Industrial Machinery Mechanics61115		82	133
,	-	75	15
Installation, Maintenance, and Repair Workers, All Other 60 158	Industrial Machinery Mechanics	61	115
	Installation, Maintenance, and Repair Workers, All Other	60	158

Telecommunications Line Installers and Repairers	44	66
Security and Fire Alarm Systems Installers	37	126
Home Appliance Repairers	35	17
HelpersInstallation, Maintenance, and Repair Workers	32	64
Audiovisual Equipment Installers and Repairers	23	13
Computer, Automated Teller, and Office Machine Repairers	14	65
Radio, Cellular, and Tower Equipment Installers and Repairers	8	12
Semiconductor Processing Technicians	7	61
Electric Motor, Power Tool, and Related Repairers	3	5
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	2	6
Communications Equipment Operators, All Other	1	1
Signal and Track Switch Repairers	1	2
Camera and Photographic Equipment Repairers	1	4
Coil Winders, Tapers, and Finishers	1	3
Electrical and Electronics Repairers, Commercial and Industrial Equipment	1	21
Calibration Technologists and Technicians	0	5

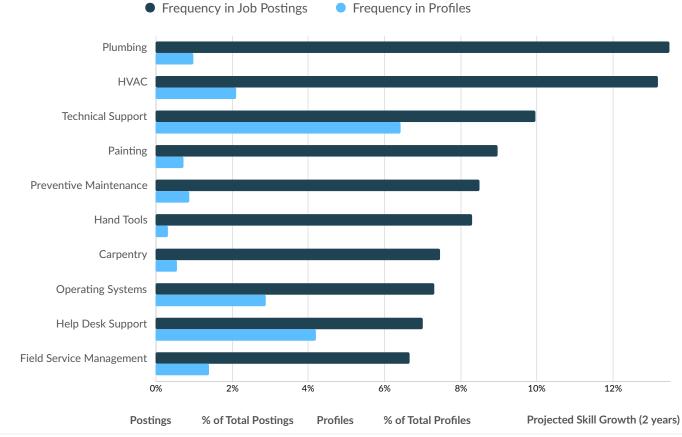
# **Top Companies Posting**

Company	Total/Unique (Sep 2021 - Sep 2022)	Posting Intensity	Median Posting Duration
Randstad	2,427 / 1,107	2:1	27 days
Tesla	1,687 / 607	3:1	28 days
Aerotek	1,320 / 410	3:1	29 days
Robert Half	683 / 374	2:1	24 days
Kelly Services	773 / 348	2:1	25 days
Greystar	782 / 320	2:1	37 days
AvalonBay Communities	1,114 / 277	4:1	32 days
Cynet Systems	482 / 273	2:1	3 days
TEKsystems	793 / 267	3:1	25 days
Cushman & Wakefield	759 / 256	3:1	32 days

## **Top Posted Job Titles**

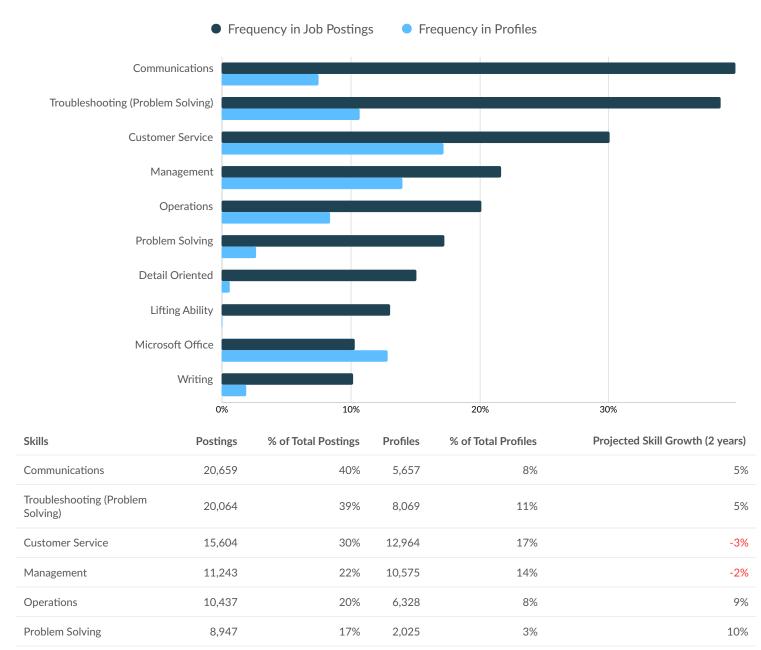
Job Title	Total/Unique (Sep 2021 - Sep 2022)	Posting Intensity	Median Posting Duration
Maintenance Technicians	13,572 / 3,476	4:1	32 days
Manufacturing Technicians	6,486 / 1,651	4:1	26 days
Field Service Technicians	4,391 / 1,383	3:1	26 days
Service Technicians	3,625 / 1,092	3:1	34 days
Engineering Technicians	2,310 / 892	3:1	27 days
Facilities Technicians	2,302 / 675	3:1	31 days
Installation Technicians	3,893 / 629	6:1	28 days
Maintenance Supervisors	1,990 / 628	3:1	35 days
Desktop Support Technicians	1,708 / 579	3:1	24 days
IT Support Specialists	1,558 / 546	3:1	29 days

## **Top Specialized Skills**



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles	Projected Skill Growth (2 years)
Plumbing	6,992	13%	750	1%	2%
HVAC	6,839	13%	1,596	2%	15%
Technical Support	5,165	10%	4,840	6%	-7%
Painting	4,656	9%	548	1%	21%
Preventive Maintenance	4,403	8%	659	1%	23%
Hand Tools	4,305	8%	236	0%	12%
Carpentry	3,868	7%	429	1%	16%
Operating Systems	3,798	7%	2,179	3%	-13%
Help Desk Support	3,632	7%	3,167	4%	-13%
Field Service Management	3,458	7%	1,050	1%	9%

### **Top Common Skills**



**Detail Oriented** 

Microsoft Office

Lifting Ability

Writing

7,836

6,780

5,365

5,281

15%

13%

10%

10%

486

36

9,696

1,418

1%

0%

13%

2%

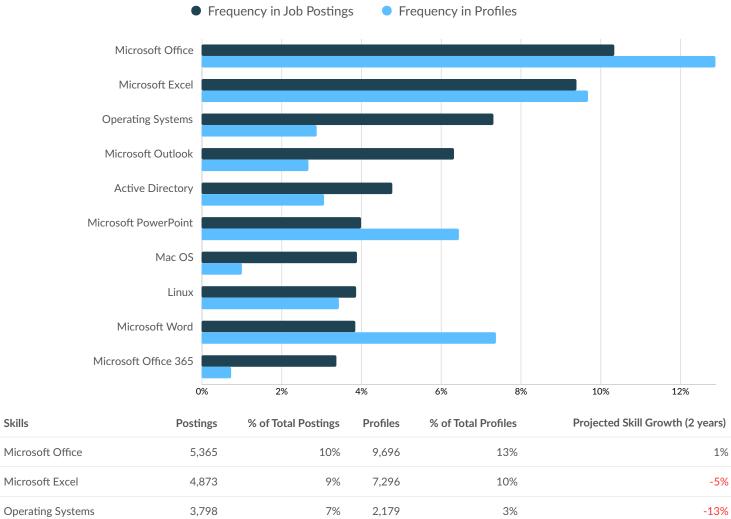
1%

4%

1%

-2%

### **Top Software Skills**



Operating Systems	3,798	7%	2,179	3%	-13%
Microsoft Outlook	3,282	6%	2,015	3%	-2%
Active Directory	2,475	5%	2,307	3%	-13%
Microsoft PowerPoint	2,069	4%	4,859	6%	-4%
Mac OS	2,022	4%	762	1%	10%
Linux	2,012	4%	2,585	3%	-13%
Microsoft Word	1,997	4%	5,547	7%	-13%
Microsoft Office 365	1,757	3%	566	1%	29%

Skills

# **Top Qualifications**

Qualification	Postings with Qualification
Valid Driver's License	10,856
CompTIA A+	1,321
HVAC Certification	626
EPA 608 Technician Certification	558
Microsoft Certified Professional	529
Automotive Service Excellence (ASE) Certification	487
Security Clearance	471
CompTIA Network+	435
Microsoft Certified Systems Engineer	407
Cisco Certified Network Associate	334

# Appendix A

# **Program Selection Details**

CIP Code	Program Name
47.01	Electrical/Electronics Maintenance and Repair Technologies/Technicians

# **Appendix B - Data Sources and Calculations**

### 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.

### **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 are also affected by county-level Emsi earnings by industry.

### **Lightcast Job Postings**

Job postings are collected from various sources and processed/enriched to provide information such as standardized company name, occupation, skills, and geography.

#### State Data Sources

This report uses state data from the following agencies: California Employment Development Department

		Spring	2023			Fall 20	022		
Course #	Title	Cap	Census	Actual EoT	Retention	Сар	Census	Actual EoT	Retention
ELEC 111	Intro to Electronics Fundmntls								
ELEC 112	Advanced Electronics Fund.					24	11	7	64%
ELEC 231	Basic Applied Electronic Math								
	Advanced Electronics Math					24	9	5	56%
ELEC 405	Transf & Rotating Machinery	24	2	2	100%	24	6	5	83%
	Fund. Electric Motor Control	24	12	12	100%				
ELEC 422	Intro Programmable Logic Contr								
ELEC 441	Sensors and Data Transmission Systems	24	6	6	100%	24	14	13	93%
ELEC 445	Industrial Data Communications Systems					24	3	3	100%
		Spring	2022			Fall 20	)21		
Course #	Title	Сар	Census	Actual EoT	Retention	Сар	Census	Actual EoT	Retention
ELEC 111	Intro to Electronics Fundmntls	24	23	13	57%	24	23	18	78%
ELEC 112	Advanced Electronics Fund.	24	9	8	89%	24	6	5	83%
ELEC 231	Basic Applied Electronic Math	24	20	9	45%	30	30	25	83%
ELEC 232	Advanced Electronics Math	24	10	9	90%	30	9	8	89%
ELEC 405	Transf & Rotating Machinery	24	10	9	90%	24	7	7	100%
ELEC 421	Fund. Electric Motor Control	24	13	13	100%				
ELEC 422	Intro Programmable Logic Contr								
ELEC 441	Sensors and Data Transmission Systems					24	20	19	95%
ELEC 445	Industrial Data Communications Systems					24	14	11	79%
		Spring	2021			Fall 20	020		
Course #	Title	Сар	Census	Actual EoT	Retention	Сар	Census	Actual EoT	Retention
ELEC 111	Intro to Electronics Fundmntls	25	23	21	91%	35	20	17	85%
ELEC 112	Advanced Electronics Fund.	25	13	10	77%	35	7	6	86%
ELEC 231	Basic Applied Electronic Math	25	27	22	81%	35	18	15	83%
ELEC 232	Advanced Electronics Math	25	12	8	67%		11	7	64%
ELEC 405	Transf & Rotating Machinery	25	10	9	90%	35	15	12	80%
ELEC 421	Fund. Electric Motor Control	25	12	11	92%	CANC	ELLED - LO	OW ENROLLN	/ENT
ELEC 422	Intro Programmable Logic Contr								
ELEC 441	Sensors and Data Transmission Systems							OW ENROLLN	
ELEC 445	Industrial Data Communications Systems							OW ENROLLN	/ENT
		Spring	2020			Fall 20	)19		
Course #	Title	Сар	Census	Actual EoT	Retention	Сар	Census	Actual EoT	Retention
ELEC 111	Intro to Electronics Fundmntls	25	18	14	78%			-	
_	Advanced Electronics Fund.	25	12	10	83%			OW ENROLLN	/ENT
	Basic Applied Electronic Math	25	22	16	73%				
	Advanced Electronics Math	25	10	7				OW ENROLLN	
	Transf & Rotating Machinery	CANCE	LLED - LO	W ENROLLM	ENT			OW ENROLLN	
	Fund. Electric Motor Control					35			
	Intro Programmable Logic Contr				ļ	35	9	9	100%
	Sensors and Data Transmission Systems	25	16	15					
ELEC 445	Industrial Data Communications Systems	25	3	3	100%				
		Spring				Fall 20	1		
Course #		Сар	Census	Actual EoT	Retention	Сар	Census	Actual EoT	Retention
ELEC 111	Intro to Electronics Fundmntls	25	12	8					
-	Advanced Electronics Fund.	25	21	16			1	OW ENROLLN	
-	Basic Applied Electronic Math	25	10	7					
	Advanced Electronics Math	35	21	17				OW ENROLLN	
	Transf & Rotating Machinery	25	19	19	100%			OW ENROLLN	
	Fund. Electric Motor Control				<u> </u>	24	21	21	100%
ELEC 422	Intro Programmable Logic Contr				<u> </u>				
	Sensors and Data Transmission Systems Industrial Data Communications Systems	24	13	12	92%				

Сар	Maximum Enrollment
Census	# enrolled at Census Date
Actual EoT	# enrolled at End-of-Term