

Program Market Demand

Architectural Technology/Technician

Emsi Q3 2018 Data Set

September 2018

College of San Mateo



3401 CSM Drive
San Mateo, California 94402
650.358.6880

Parameters

Programs

Code	Description
04.0901	Architectural Technology/Technician

Regions

Code	Description
6001	Alameda County, CA
6013	Contra Costa County, CA
6075	San Francisco County, CA
6081	San Mateo County, CA
6085	Santa Clara County, CA

Education Levels

Any

Completions Year

2015

Jobs Timeframe

2017 - 2024

Job Postings Timeframe

Sep 2016 - Aug 2018

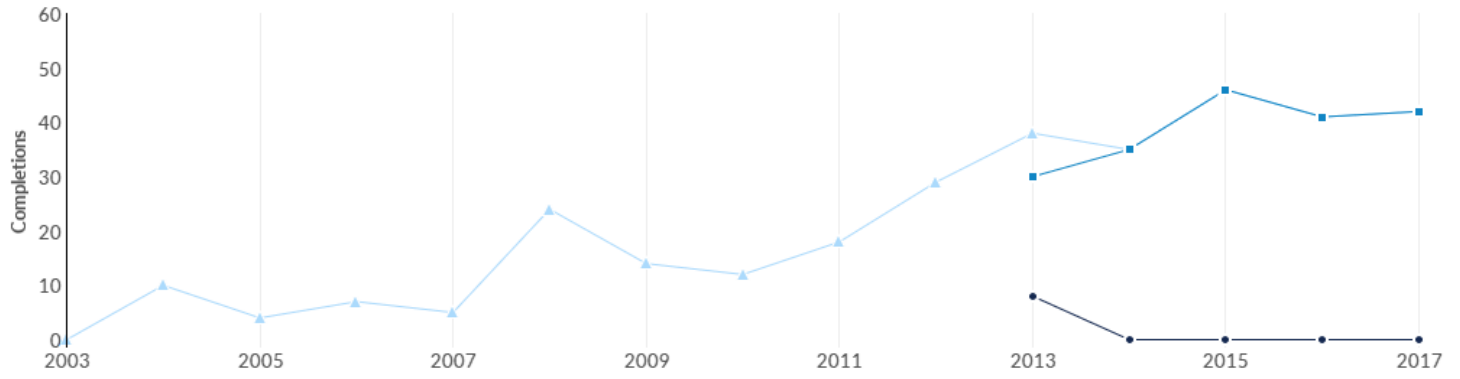
Program Overview



	Completions (2015)	% Completions	Institutions (2015)	% Institutions
● All Programs	46	100%	6	100%
● Distance Offered Programs	0	0%	0	0%
● Non-Distance Offered Programs	46	100%	6	100%

Institution	Completions (2015)	Growth % YOY (2015)	Market Share (2015)
Diablo Valley College	22	15.8%	47.8%
West Valley College	10	66.7%	21.7%
Chabot College	5	25.0%	10.9%
City College of San Francisco	5	400.0%	10.9%
College of San Mateo	2	-60.0%	4.3%
Laney College	2	Insf. Data	4.3%

Regional Trends



	2013 Completions	2015 Completions	% Change
● Distance Offered Programs	8	0	-100.0%
■ Non-Distance Offered Programs	30	46	+53.3%
▲ All Programs	38	46	+21.1%

Job Postings vs. Hires

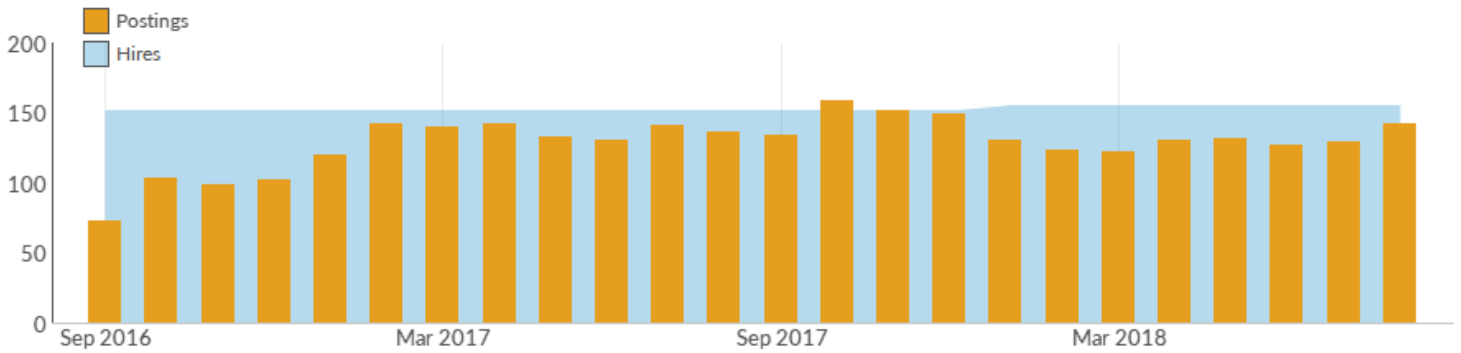
129

Avg. Monthly Postings (Sep 2016 - Aug 2018)

153

Avg. Monthly Hires (Sep 2016 - Aug 2018)

In an average month, there were 129 unique job postings for *Architectural and Civil Drafters*, and 153 actually hired. This means there was approximately 1 hire for *Architectural and Civil Drafters* for every 1 unique job posting.



Occupation	Avg Monthly Postings (Sep 2016 - Aug 2018)	Avg Monthly Hires (Sep 2016 - Aug 2018)
Architectural and Civil Drafters	129	153

Job Postings Summary

1,049

Unique Postings
4,693 Total Postings

4 : 1

Posting Intensity

Regional Average: 4 : 1

33 days

Median Posting Duration
Regional Average: 33 days

There were 4,693 total job postings for your selection from September 2016 to August 2018, of which 1,049 were unique. These numbers give us a Posting Intensity of 4-to-1, meaning that for every 4 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.

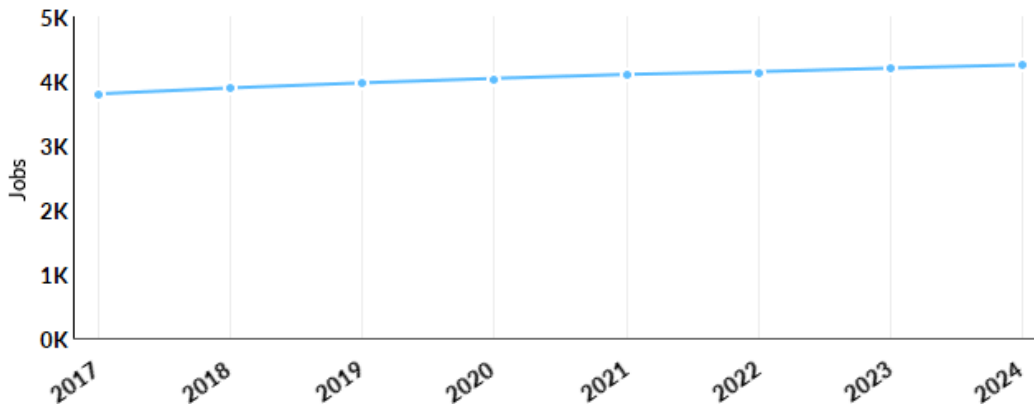
Target Occupations

<p>3,794</p> <p>Jobs (2017)</p> <p>57% above National average</p>	<p>+11.9%</p> <p>% Change (2017-2024)</p> <p>Nation: +7.2%</p>	<p>\$29.76/hr</p> <p>Median Hourly Earnings</p> <p>Nation: \$25.57/hr</p>	<p>403</p> <p>Annual Openings</p>
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Occupation	2017 Jobs	Annual Openings	Median Hourly Earnings	Growth (2017 - 2024)	Location Quotient (2017)
Architectural and Civil Drafters	3,794	403	\$29.76/hr	+11.91%	1.57

Growth for Architectural and Civil Drafters (17-3011)

<p>3,794</p> <p>2017 Jobs</p>	<p>4,246</p> <p>2024 Jobs</p>	<p>452</p> <p>Change (2017-2024)</p>	<p>11.9%</p> <p>% Change (2017-2024)</p>
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Percentile Earnings for Architectural and Civil Drafters (17-3011)

\$25.18/hr

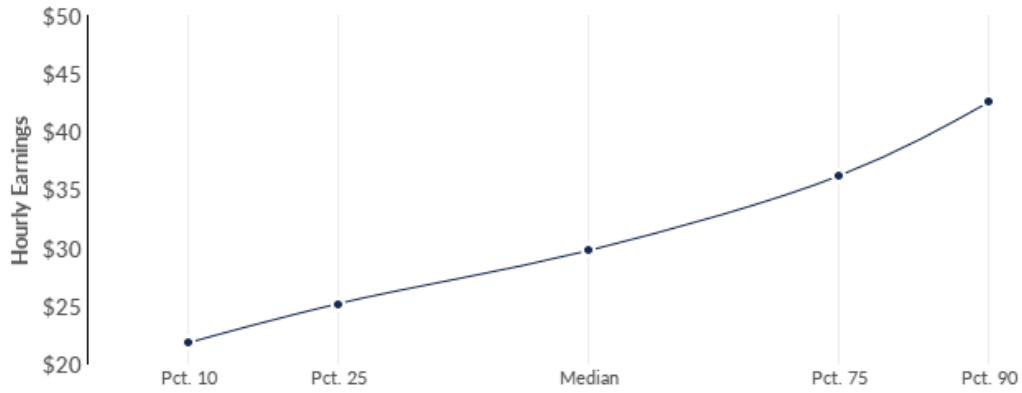
25th Percentile Earnings

\$29.76/hr

Median Earnings

\$36.19/hr

75th Percentile Earnings



Top Companies Posting

Company	Total/Unique (Sep 2016 - Aug 2018)	Posting Intensity	Median Posting Duration
Aerotek, Inc.	658 / 73	9 : 1	19 days
Gensler	575 / 48	12 : 1	72 days
Cybercoders, Inc.	181 / 37	5 : 1	23 days
Skidmore, Owings & Merrill LLP	28 / 17	2 : 1	29 days
Cupertino Electric, Inc.	42 / 16	3 : 1	29 days
AppleOne	23 / 11	2 : 1	17 days
Mashable	192 / 11	17 : 1	46 days
Design-Build Institute of America	23 / 10	2 : 1	219 days
RANDSTAD HOLDING nv	44 / 10	4 : 1	32 days
AIA East Bay A Chapter of The American Institute of Architects	9 / 9	1 : 1	349 days
Acco Engineered Systems, Inc.	39 / 9	4 : 1	79 days
Aecom	59 / 9	7 : 1	30 days
Hok Group, Inc	75 / 9	8 : 1	72 days
Jacobs Engineering Group Inc.	36 / 9	4 : 1	33 days
Sutro Architects	29 / 9	3 : 1	75 days
Technipower, Inc	23 / 9	3 : 1	27 days
Architect	9 / 8	1 : 1	91 days
Carollo Engineers, Inc.	22 / 8	3 : 1	59 days
Modis, Inc.	19 / 8	2 : 1	12 days
Apple Inc.	23 / 7	3 : 1	45 days
H G A Incorporated	12 / 7	2 : 1	47 days
Management Recruiters International, Inc.	46 / 7	7 : 1	52 days
Peak Technical Inc.	10 / 7	1 : 1	13 days
Penn Technical Staffing, Inc.	16 / 7	2 : 1	17 days

RIs Inc	16 / 7	2 : 1		53 days
Rose International, Inc.	20 / 7	3 : 1		22 days
Siemens AG	12 / 7	2 : 1		11 days
Techcon, Inc.	20 / 7	3 : 1		45 days
ACCENTURE, INC.	58 / 6	10 : 1		18 days
Appliance Pro, LLC	26 / 6	4 : 1		52 days
City of San Mateo	7 / 6	1 : 1		26 days
Complete Project Solutions Inc.	11 / 6	2 : 1		59 days
Fire Detection Unlimited Inc	15 / 6	3 : 1		62 days
Giacalone Design Services, Inc.	10 / 6	2 : 1		32 days
Advanced Employment Services, Inc	163 / 5	33 : 1		49 days
California Building Industry Association	12 / 5	2 : 1		158 days
Cordev Corporation	6 / 5	1 : 1		36 days
HI Etech Inc	154 / 5	31 : 1		49 days
K P W Structural Engineers, Inc	8 / 5	2 : 1		7 days
LPA, Inc.	8 / 5	2 : 1		6 days
Lam Research Corporation	8 / 5	2 : 1		89 days
Tesla Motors, Inc.	16 / 5	3 : 1		55 days
Apple Associates Inc	5 / 4	1 : 1		78 days
Astreya Partners, Inc.	9 / 4	2 : 1		32 days
Building Tomorrow's Talent, LLC	9 / 4	2 : 1		62 days
Cbre Group, Inc.	33 / 4	8 : 1		6 days
Eng. Mobile Systems Inc.	7 / 4	2 : 1		62 days
Flad Architects	19 / 4	5 : 1		39 days
Jones Lang Lasalle Incorporated	28 / 4	7 : 1		34 days
Oldcastle Inc.	36 / 4	9 : 1		69 days

Top Posted Job Titles

Job Title	Total/Unique (Sep 2016 - Aug 2018)	Posting Intensity	Median Posting Duration
Drafter	1,315 / 308	4 : 1	31 days
Architectural Designer	1,160 / 150	8 : 1	47 days
Design Engineer (Architecture and Engineering)	305 / 98	3 : 1	32 days
CAD Technician	440 / 94	5 : 1	40 days
Designer Drafter	94 / 46	2 : 1	23 days
Computer Aided Design (CAD) Designer	86 / 29	3 : 1	32 days
Architectural Assistant	40 / 26	2 : 1	30 days
Engineering Intern	88 / 18	5 : 1	43 days
CAD Engineer	45 / 17	3 : 1	16 days
Interior Designer	63 / 13	5 : 1	46 days
Drafting Designer	17 / 12	1 : 1	21 days
Draftsperson	16 / 11	1 : 1	16 days
Technical Designer	26 / 10	3 : 1	31 days
Adjunct Instructor	18 / 8	2 : 1	49 days
Computer Aided Design	27 / 8	3 : 1	44 days
Plumbing Foreman	214 / 8	27 : 1	69 days
Architect	12 / 7	2 : 1	31 days
Technical Instructor	15 / 7	2 : 1	29 days
Survey Party Chief	39 / 6	7 : 1	52 days
Architectural Technician	163 / 5	33 : 1	49 days
Architectural Technologist	11 / 5	2 : 1	47 days
Entry Level Electrical Engineer	21 / 5	4 : 1	32 days
Automotive Detailer	12 / 4	3 : 1	58 days
Process Development Scientist	10 / 4	3 : 1	75 days

Process Specialist	10 / 4	3 : 1		32 days
Software Engineer	11 / 4	3 : 1		12 days
Teacher Aide	57 / 4	14 : 1		126 days
Technical Architect	19 / 4	5 : 1		139 days
Civil Engineer	7 / 3	2 : 1		69 days
Construction Manager	4 / 3	1 : 1		15 days
Construction Supervisor	13 / 3	4 : 1		62 days
Field Technician (Architecture and Engineering)	14 / 3	5 : 1		38 days
HVAC Refrigeration Technician	6 / 3	2 : 1		3 days
Project Coordinator (Architecture and Engineering)	5 / 3	2 : 1		4 days
Project Engineer (Architecture and Engineering)	17 / 3	6 : 1		16 days
Structural Engineer	3 / 3	1 : 1		17 days
Visual Designer	5 / 3	2 : 1		36 days
Building Engineer	4 / 2	2 : 1		11 days
Construction Engineer	12 / 2	6 : 1		6 days
Data Center Technician	2 / 2	1 : 1		3 days
Designer	23 / 2	12 : 1		198 days
Educator	2 / 2	1 : 1		8 days
Engineering Assistant	4 / 2	2 : 1		31 days
Environmental Engineer	9 / 2	5 : 1		14 days
Graduate Assistant	6 / 2	3 : 1		39 days
Graphics Coordinator	3 / 2	2 : 1		66 days
Instructional Designer	13 / 2	7 : 1		31 days
Junior Designer	2 / 2	1 : 1		2 days
Landscape Designer	3 / 2	2 : 1		5 days

Operations Engineer (Architecture and Engineering)

2 / 2

1 : 1

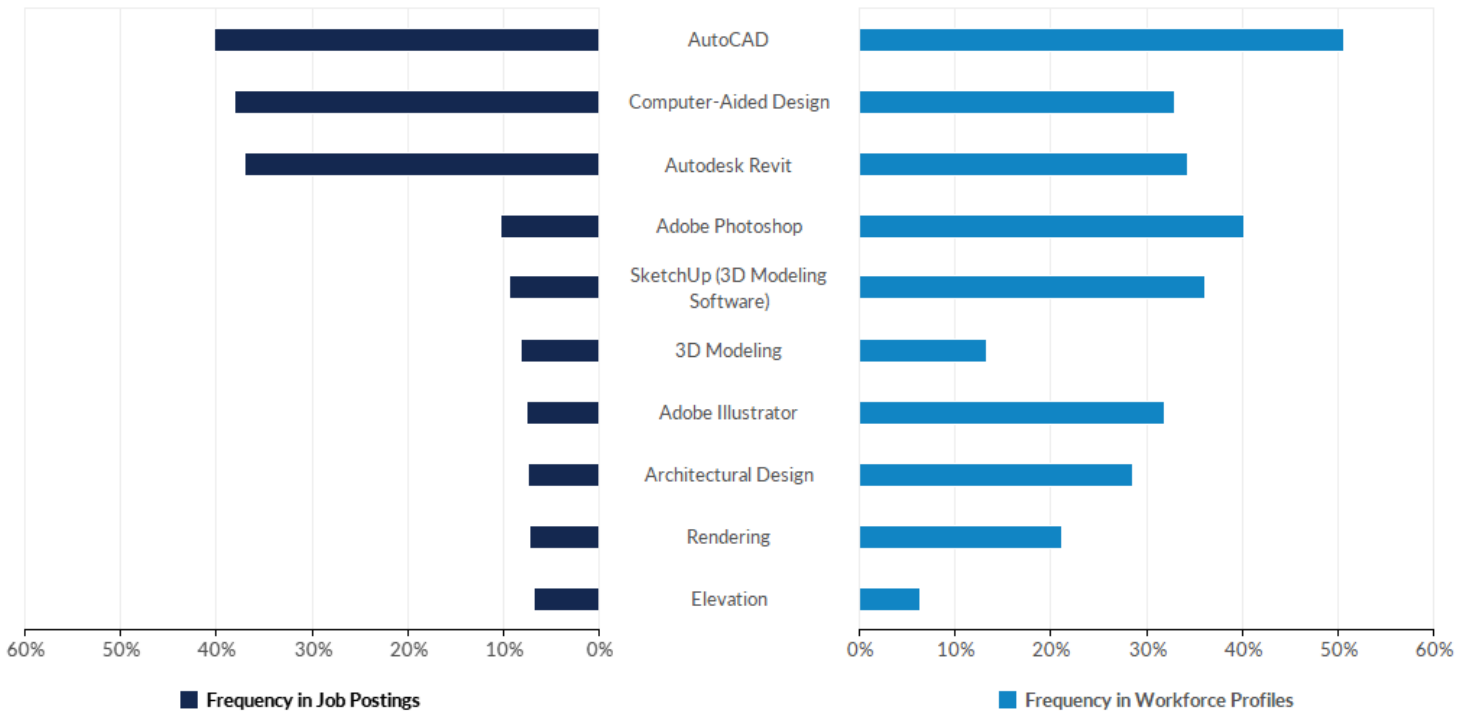


29 days

The following provides insight into the supply and demand of relevant skills by comparing the frequency of skills present in job postings against skills present in today's workforce. Along with Emsi's job posting analytics, this comparison leverages Emsi's dataset of more than 100M online resumés and profiles. All resumés and profiles used in these comparisons have been updated within the last three years.

*The skills associated with workforce profiles represent workers of all education and experience levels.

Top Hard Skills



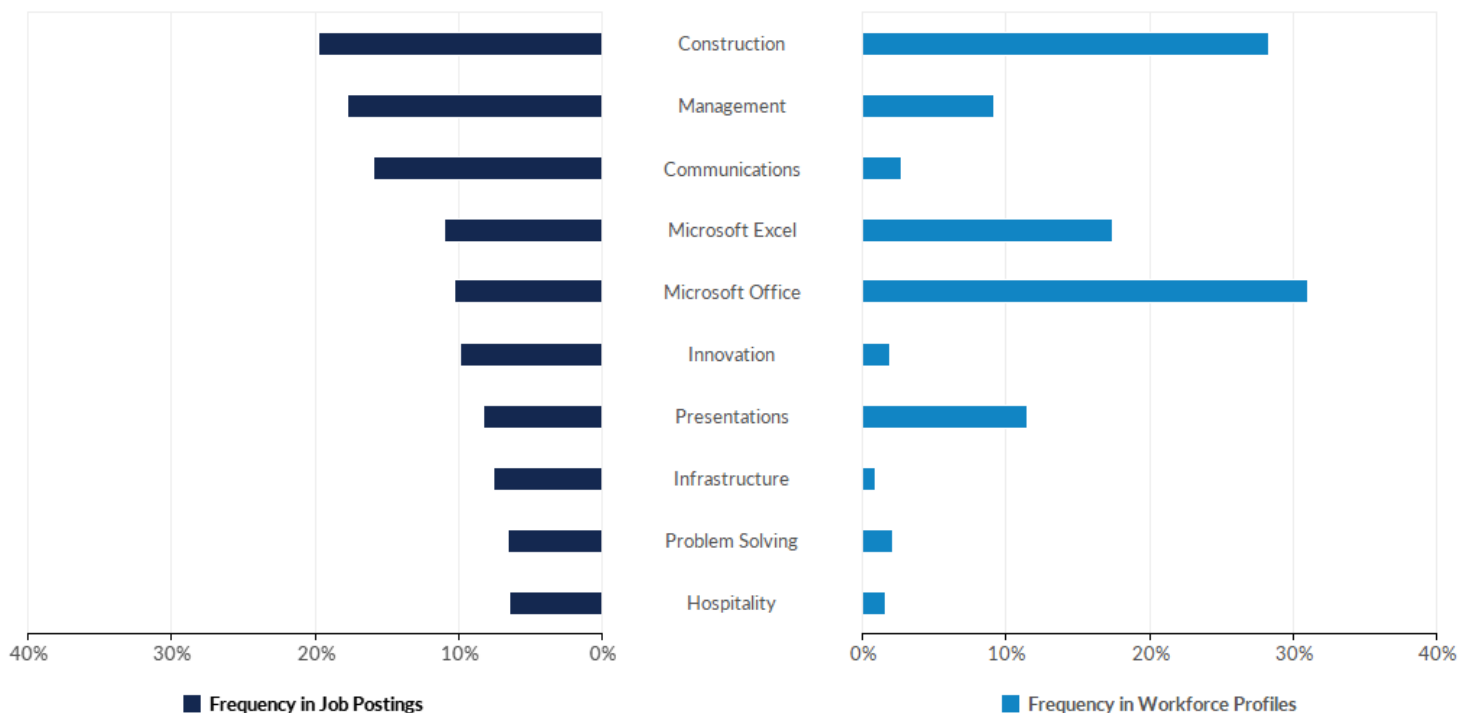
Top Hard Skills

Skill	Frequency in Postings	Postings with Skill / Total Postings (Sep 2016 - Aug 2018)	Frequency in Profiles	Profiles with Skill / Total Profiles (2016 - 2018)
AutoCAD	40%	422 / 1,049	51%	543 / 1,074
Computer-Aided Design	38%	399 / 1,049	33%	354 / 1,074
Autodesk Revit	37%	389 / 1,049	34%	368 / 1,074
Adobe Photoshop	10%	108 / 1,049	40%	431 / 1,074
SketchUp (3D Modeling Software)	9%	99 / 1,049	36%	388 / 1,074
3D Modeling	8%	85 / 1,049	13%	143 / 1,074
Adobe Illustrator	8%	80 / 1,049	32%	343 / 1,074

Architectural Design	7%	77 / 1,049	29%	307 / 1,074
Rendering	7%	76 / 1,049	21%	227 / 1,074
Elevation	7%	72 / 1,049	6%	68 / 1,074
Rhino	7%	69 / 1,049	15%	164 / 1,074
Adobe InDesign	5%	57 / 1,049	27%	285 / 1,074
Sketching	5%	57 / 1,049	20%	216 / 1,074
Architectural Drawing	5%	55 / 1,049	17%	182 / 1,074
Drawing	5%	54 / 1,049	0%	0 / 1,074
Adobe Creative Suite	5%	50 / 1,049	22%	237 / 1,074
Professional Services	5%	48 / 1,049	0%	0 / 1,074
HVAC	4%	44 / 1,049	2%	23 / 1,074
Graphic Design	4%	42 / 1,049	10%	110 / 1,074
Building Design	4%	41 / 1,049	1%	7 / 1,074
Aviation	4%	40 / 1,049	0%	2 / 1,074
Floor Planning	4%	40 / 1,049	5%	55 / 1,074
Plumbing	4%	39 / 1,049	2%	24 / 1,074
Urban Design	4%	37 / 1,049	8%	88 / 1,074
Autodesk 3DS Max (3D Graphics Software)	3%	36 / 1,049	10%	111 / 1,074
MicroStation	3%	35 / 1,049	3%	35 / 1,074
Submittals (Construction)	3%	33 / 1,049	15%	158 / 1,074
Alarm Devices	3%	30 / 1,049	0%	0 / 1,074
Fire Alarm Systems	3%	29 / 1,049	0%	0 / 1,074
Furnishing	3%	29 / 1,049	6%	67 / 1,074
Renovation	3%	29 / 1,049	9%	101 / 1,074
Space Planning	3%	29 / 1,049	9%	98 / 1,074
Engineering Design Process	3%	27 / 1,049	1%	7 / 1,074

Civil Engineering	2%	26 / 1,049	4%	38 / 1,074
Product Quality Assurance	2%	26 / 1,049	1%	9 / 1,074
SolidWorks (CAD)	2%	26 / 1,049	5%	58 / 1,074
Sustainable Design	2%	25 / 1,049	18%	197 / 1,074
Building Information Modeling	2%	24 / 1,049	8%	87 / 1,074
Telecommunications	2%	24 / 1,049	1%	10 / 1,074
Automation	2%	23 / 1,049	1%	6 / 1,074
Construction Management	2%	23 / 1,049	6%	66 / 1,074
Low Voltage	2%	22 / 1,049	0%	0 / 1,074
Structural Engineering	2%	22 / 1,049	2%	21 / 1,074
Microsoft Access	2%	20 / 1,049	2%	18 / 1,074
Geographic Information Systems	2%	19 / 1,049	2%	17 / 1,074
Surveying	2%	19 / 1,049	2%	17 / 1,074
Accounting	2%	18 / 1,049	1%	9 / 1,074
Civil Designer	2%	17 / 1,049	1%	6 / 1,074
Software Quality Assurance (SQA)	2%	17 / 1,049	0%	5 / 1,074
Computer Control Systems	2%	16 / 1,049	0%	2 / 1,074

Top Common Skills



Top Common Skills

Skill	Frequency in Postings	Postings with Skill / Total Postings (Sep 2016 - Aug 2018)	Frequency in Profiles	Profiles with Skill / Total Profiles (2016 - 2018)
Construction	20%	207 / 1,049	28%	304 / 1,074
Management	18%	186 / 1,049	9%	98 / 1,074
Communications	16%	167 / 1,049	3%	29 / 1,074
Microsoft Excel	11%	115 / 1,049	17%	187 / 1,074
Microsoft Office	10%	108 / 1,049	31%	333 / 1,074
Innovation	10%	104 / 1,049	2%	21 / 1,074
Presentations	8%	87 / 1,049	11%	123 / 1,074
Infrastructure	8%	79 / 1,049	1%	10 / 1,074
Problem Solving	7%	69 / 1,049	2%	23 / 1,074
Hospitality	6%	68 / 1,049	2%	17 / 1,074
Microsoft Outlook	6%	62 / 1,049	3%	28 / 1,074
Research	5%	55 / 1,049	18%	188 / 1,074

Written Communication	5%	50 / 1,049	0%	1 / 1,074
Verbal Communication Skills	5%	49 / 1,049	0%	0 / 1,074
Coordinating	5%	48 / 1,049	4%	40 / 1,074
Microsoft PowerPoint	4%	47 / 1,049	14%	151 / 1,074
Time Management	4%	45 / 1,049	2%	21 / 1,074
Operations	4%	44 / 1,049	4%	39 / 1,074
Leadership	4%	43 / 1,049	8%	85 / 1,074
Creativity	4%	37 / 1,049	0%	0 / 1,074
Interpersonal Skills	4%	37 / 1,049	0%	2 / 1,074
Project Management	3%	34 / 1,049	8%	89 / 1,074
Sales	3%	29 / 1,049	11%	113 / 1,074
Computer Literacy	2%	24 / 1,049	0%	2 / 1,074
Microsoft Word	2%	24 / 1,049	14%	149 / 1,074
Office Suite	2%	24 / 1,049	0%	1 / 1,074
Writing	2%	22 / 1,049	3%	35 / 1,074
Information Technology	2%	21 / 1,049	1%	11 / 1,074
Integration	2%	20 / 1,049	1%	13 / 1,074
Mentorship	2%	18 / 1,049	0%	5 / 1,074
Customer Service	2%	17 / 1,049	12%	125 / 1,074
Decision Making	1%	14 / 1,049	0%	3 / 1,074
Microsoft Windows	1%	14 / 1,049	2%	22 / 1,074
Portable Document Format	1%	10 / 1,049	0%	4 / 1,074
Microsoft Office 2000	1%	9 / 1,049	0%	0 / 1,074
Real Estates	1%	9 / 1,049	1%	6 / 1,074
Career Development	1%	8 / 1,049	0%	0 / 1,074
Mathematics	1%	8 / 1,049	2%	21 / 1,074

Business Acumen	1%	7 / 1,049	0%	0 / 1,074
Computer Sciences	1%	7 / 1,049	0%	2 / 1,074
Proposal (Business)	1%	7 / 1,049	1%	15 / 1,074
Word Processor	1%	7 / 1,049	0%	2 / 1,074
Critical Thinking	1%	6 / 1,049	0%	3 / 1,074
Collaborative Skills	0%	5 / 1,049	0%	0 / 1,074
Data Entry	0%	5 / 1,049	1%	10 / 1,074
Financial Services	0%	5 / 1,049	0%	0 / 1,074
Investigation	0%	5 / 1,049	0%	2 / 1,074
Listening Skills	0%	5 / 1,049	0%	0 / 1,074
Program Management	0%	5 / 1,049	1%	15 / 1,074
Spreadsheets	0%	5 / 1,049	0%	3 / 1,074

Top Qualifications

Qualification	Postings with Qualification
Professional Engineer	2
Advanced Life Support	1
Licensed Professional Engineer	1

Appendix A - 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.

Emsi Job Postings

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

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.

State Data Sources

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