

Understanding Labor Market Information (LMI) and Online Job Postings Metrics on the Community College Pipeline

November 2022

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Overview of Labor Market Information (LMI) and Online Job Postings Metrics in Community College Pipeline

Data for traditional Labor Market Information (LMI) and online job postings from Lightcast (formerly Emsi and Burning Glass) are included in the Community College dashboard through a MOU with the Chancellor’s Office. On the Summary and Detailed Data Views for Employment and Earnings, labor market information and online job postings for the microregion or macroregion or statewide and program or sector selected is available from files imported from the Lightcast 2022.3 data set.

The two types of information about regional employment are very different and are organized into two separate sections in the left navigation of the Detailed Data View: Labor Market Data and Online Job Postings. Labor Market Data is useful for getting an understanding of trends in employment and earnings over time. Information from online job postings helps to augment the traditional labor market information. As an example, annual openings for occupations mapped to a program is usually the best indicator of labor market demand for a program in a region. The number of online job postings for those same occupations in a region should not be used as an indicator of demand for a program in a region. However, there is useful information to be gained from considering the online job postings for the occupations mapped to the program in the region:

- Change in postings over time
- Top skills requested by regional employers
- Top qualifications requested by regional employers
- Top employers

In addition to understanding which employers in the region are posting online jobs, information from online job postings can help answer questions as to whether employers in the region are:

- more actively looking to fill positions mapped to a program or sector compared to the prior year
- seeking new or similar common or hard skills mapped to a program or sector compared to the prior year
- asking for new or similar qualifications mapped to a program or sector compared to the prior year

A crosswalk of TOP (Taxonomy of Programs) codes to SOC codes (Standard Occupational Codes) is necessary in order to display occupations requiring skills that students should acquire as part of the program or TOP code or sector selected. All other postsecondary educational institutions use CIP (Classification of Instruction Programs) codes instead of TOP codes. There is a national [2020 CIP to 2018 SOC crosswalk](#) from the [National Center of Education Statistics](#) and the Bureau of Labor Statistics. However, since California Community Colleges continue to report on TOP codes, it has been necessary to crosswalk TOP codes to CIP codes for reporting to IPEDS ([Integrated Postsecondary Education System](#)). The [CIP to TOP crosswalk](#) approved by the Academic Senate was the basis for the TOP-SOC crosswalk to be used for the LMI metrics on Community College Pipeline dashboard. The TOP-SOC crosswalk based on these other crosswalks can be found in the [CCP Metric Definition Dictionary](#).

All of these crosswalks entail many to many relationships, e.g., one TOP code rarely can be mapped to one CIP code or SOC code. Based on the sector, TOP06 or TOP04 selected, the number employed, annual replacements, annual openings, skills, qualifications and employers displayed will be for the SOC codes or occupations mapped to the selection. It is important to note that when a college, district, or microregion is selected, the data displayed will be for the microregion. When a macroregion or statewide is selected, the data displayed will correspond to the selected macroregion or statewide. In addition, one SOC code very rarely maps to one job title but many job titles with possibly different skill sets. For example, 31-9092 Medical Assistants lists these sample reported job titles: Certified Medical Assistant (CMA), Chiropractor Assistant, Clinical Medical Assistant, Doctor's Assistant, Health Assistant, Ophthalmic Assistant, Ophthalmological Assistant, Optometric Assistant, Outpatient Surgery Assistant, Registered Medical Assistant (RMA).

For more information on SOC codes, the following federal public resources are also available:

- [U.S. Bureau of Labor Statistics](#)
- [O*NET Online](#) sponsored by the U.S. Department of Labor
- [Educational attainment for workers 25 years and older by detailed occupation](#) by U.S. Bureau of Labor Statistics

For any questions about labor market information or to further explore labor market demand and supply information, please visit the Centers of Excellence for Labor Market Research (CoE) website and/or contact your regional CoE director at <http://www.coecc.net/>. They are the subject matter experts for labor market information for the California community college system.

Summary View: Employment and Earnings Labor Market and Online Job Postings Data

The **Employment Summary View** displays the following information for the microregion for college, district or microregion selection, macroregion or statewide for the sector or TOP04 or TOP06 selected:

- Most common Middle Skill occupations mapped to selections
- Careers pursued by students who transfer and earn a bachelor’s degree as applicable to selections
- Most common skills requested in job postings over a 365-day period mapped to selections

Statewide, the most common middle skills jobs for this program area are:

- Carpenters (47-2031)
- First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)
- Electricians (47-2111)
- Plumbers, Pipefitters, and Steamfitters (47-2152)
- First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)

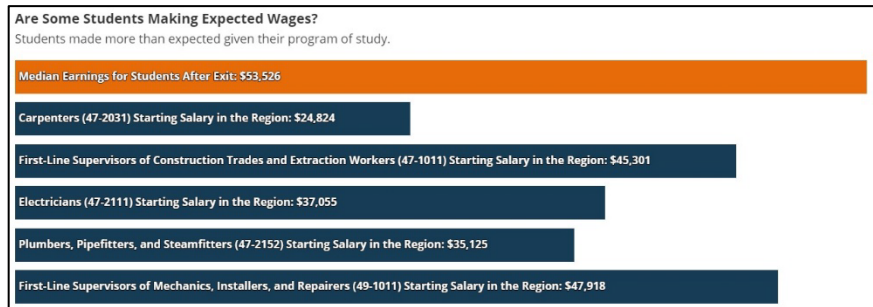
Statewide, students who transfer and earn a bachelor’s degree could pursue the following careers:

- Construction Managers (11-9021)
- Civil Engineers (17-2051)
- Engineers, All Other (17-2199)
- Cost Estimators (13-1051)
- Architects, Except Landscape and Naval (17-1011)

Statewide, the most common skills requested in job postings over a 365-day period are:

- Communications
- Management
- Construction
- Project Management
- Leadership

The **Earnings Summary View** displays “Are Some Students Making Expected Wages?” where Median Annual Earnings of Exiting Students is compared to the most common middle skill jobs for the locale and sector or program selected.



Detailed Data View: Labor Market Data

Traditional LMI Data Metrics:

- Employment:
 - Total Historical Regional Employment (2016 Jobs, 2021 Jobs, Change and % Change)
 - Total Projected Regional Employment (2021 Jobs, 2026 Jobs, Change and % Change)
 - Projected Regional Job Openings (Annual Replacement, Annual New Jobs, Annual Openings)
- Earnings:
 - Regional Entry-Level (10th Percentile) and Median Annual Salaries

Lightcast uses traditional labor market information (or LMI), which is data that is collected and published by public sources for standardized industries and occupations from many sources, e.g., the Bureau of Labor Statistics, The U.S. Census, and the Bureau of Economic Analysis. Traditional LMI is great for measuring the current and historical state of the labor market and getting a full picture of how jobs and wages have trended over time. For more information, please watch [this Lightcast YouTube](#) to explain the difference between traditional LMI and job postings.

The three charts under “Labor Market Data” display traditional LMI for the number of jobs or number employed in the top five occupations or SOC codes that are mapped to the sector, TOP04 or TOP06 program selection. These data are based on 2021 No. of Jobs for the Total Historical Employment and Total Projected Employment metrics and are based on 2021-2026 Annual Openings for the Projected Regional Job Openings metric. Occupations are organized and displayed by the Skills Level and Typical Entry-Level of Education for each SOC code. Typical Entry-Level of Education is assigned by the US

Bureau of Labor Statistics from data at a national level from the [American Consumer Survey \(ACS\)](#), which collects demographic and employment information from about 3 million households annually. For more information on how the US Bureau of Labor Statistics determines Educational Attainment and Typical Entry-Level Education, refer to their publication on [Employment Projections](#).

For each SOC code, the Skills Level (Higher Skill, Middle Skill, Below Middle Skill) is determined by the Typical Entry-Level Education and the educational attainment for workers 25 and older by SOC from the US Bureau of Labor Statistics. The education level most often needed to enter an occupation or SOC code is reported at the national level. So, alternative paths to employment may vary at the regional level. The Skills Level for each SOC code is determined as follows:

- If a SOC code requires a Bachelor’s degree or higher as the typical entry-level of education, then that SOC code is considered is Higher Skill
- If a SOC code requires an Associate degree or some college, no degree or a postsecondary non-degree award, then that SOC code is considered Middle Skill
- If a SOC code requires apprenticeship, HS diploma or equivalent, or on-the-job training for the typical entry-level of education, then it can be categorized as Middle Skill or Below Middle Skill
 - If 30% or more of workers 25 or older, who are currently employed in an occupation included in the SOC code, report having some college, no degree or higher educational level per [2018-19 Educational Attainment by the US Bureau Labor of Statistics](#), then that SOC code is considered Middle Skill
 - If lower than 30%, then that SOC code is considered Below Middle Skill

Total Historical Regional Employment

The total number of jobs or number of people employed in 2016 and in 2021; the change in number of jobs between 2016 and 2021; percentage growth or decline in the top five occupation associated with the sector or TOP04 or TOP06 selected. Change in number of jobs and the percentage growth or decline are calculated in term of 2021 Jobs. Occupations are grouped by skill level (higher, middle, below) and typical entry level of education as described above.

| Total Historical Regional Employment | | | | |
|---|-----------|-----------|----------------|-----------------|
| The total number of jobs for 2016 and 2021 and percentage growth or decline in the top 5 occupations for 2021 associated with the selected industry sector or TOP code in the locale selected | | | | |
| Statewide, Energy, Construction and Utilities, 2020-2021 | 2016 Jobs | 2021 Jobs | 2016-21 Change | 2016-21% Change |
| Statewide Jobs Total | 1,347,125 | 1,382,157 | 35,032 | 3% |
| Middle Skill: Apprenticeship | | | | |
| Carpenters (47-2031) | 168,692 | 165,698 | -2,994 | -2% |
| Electricians (47-2111) | 79,125 | 81,535 | 2,410 | 3% |
| Middle Skill: HS Diploma Or Equivalent | | | | |
| First-Line Supervisors of Construction Trades and Extraction Workers (47-1011) | 70,007 | 82,228 | 12,221 | 17% |
| Below Middle Skill: On-The-Job Training | | | | |
| Construction Laborers (47-2061) | 169,876 | 171,110 | 1,233 | 1% |
| Painters, Construction and Maintenance (47-2141) | 73,029 | 68,070 | -4,959 | -7% |

Total Projected Regional Employment

The total number of jobs or number of people employed in 2016 and in 2021 including the change in number of jobs between 2016 and 2021 and percentage growth or decline in the top five occupations, associated with the sector or TOP04 or TOP06 selected. The percentage growth or decline is calculated in term of 2021 Jobs. Occupations are grouped by skill level (higher, middle, below) and typical entry level of education as described above.

| Total Projected Regional Employment | | | | |
|---|-----------|-----------|----------------|-----------------|
| The total number of jobs for 2021 and 2026 and percentage growth or decline in the top 5 occupations for 2021 associated with the selected industry sector or TOP code in the locale selected | | | | |
| Statewide, Energy, Construction and Utilities, 2020-2021 | 2021 Jobs | 2026 Jobs | 2021-26 Change | 2021-26% Change |
| Statewide Jobs Total | 1,382,157 | 1,424,469 | 42,312 | 3% |
| Higher Skill: Bachelor's Degree Or Higher | | | | |
| Construction Managers (11-9021) | 71,725 | 77,545 | 5,821 | 8% |
| Middle Skill: Apprenticeship | | | | |
| Carpenters (47-2031) | 165,698 | 167,023 | 1,325 | 1% |
| Electricians (47-2111) | 81,535 | 89,145 | 7,610 | 9% |
| Middle Skill: HS Diploma Or Equivalent | | | | |
| First-Line Supervisors of Construction Trades and Extraction Workers (47-1011) | 82,228 | 84,103 | 1,874 | 2% |
| Below Middle Skill: On-The-Job Training | | | | |
| Construction Laborers (47-2061) | 171,110 | 177,789 | 6,679 | 4% |

Projected Regional Job Openings

The total number of annual replacement jobs, annual new jobs, and annual job openings for the 2021-2026 time period in occupations or SOC codes associated with the selected sector or TOP04 or TOP06 in the microregion where the college is located. Occupations are grouped by skill level (higher, middle, below) and typical entry level of education as described above.

Annual Replacements Jobs: estimates of workers permanently leaving an occupation necessitating replacement by new hires. For more information, see Emsi brief on [Job Openings Data](#).

Annual New Jobs: difference between 2026 jobs and 2021 jobs. When the change is negative, then annual new jobs is 0.

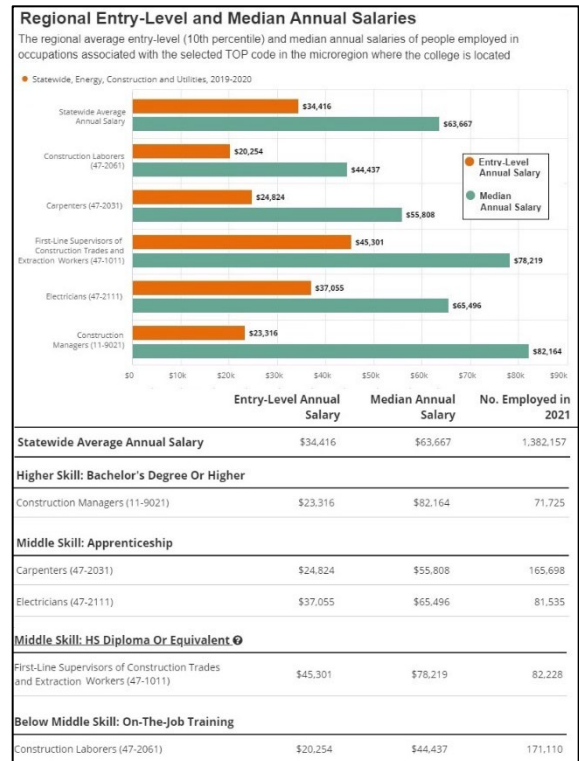
Annual Openings: $Openings = Growth + Replacements$. However, annual new jobs does not equal growth. Change in jobs can be negative while growth cannot. Growth is a much more complicated calculation for each individual count/SOC code/class of worker combination. For more information, see Emsi brief on [“Why Don’t Change and Replacements Sum to Openings?”](#)

| Projected Regional Job Openings | | | |
|---|-------------------------|-----------------|-----------------|
| Annual replacement jobs, average annual new jobs and average annual job openings for 2021-2026 time period in the top 5 occupations for annual openings associated with the selected industry sector or TOP code in the locale selected | | | |
| ● Statewide, Energy, Construction and Utilities, 2020-2021 | | | |
| Annual Projections for 2021-2026 | | | |
| | Annual Replacement Jobs | Annual New Jobs | Annual Openings |
| Statewide Totals | 127,768 | 123,846 | 139,603 |
| Middle Skill: Apprenticeship | | | |
| Carpenters (47-2031) | 15,332 | 5,214 | 15,877 |
| Electricians (47-2111) | 8,753 | 4,716 | 10,250 |
| Middle Skill: HS Diploma Or Equivalent | | | |
| First-Line Supervisors of Construction Trades and Extraction Workers (47-1011) | 7,754 | 12,504 | 8,516 |
| Below Middle Skill: On-The-Job Training | | | |
| Construction Laborers (47-2061) | 16,965 | 4,610 | 18,455 |
| Painters, Construction and Maintenance (47-2141) | 5,933 | 367 | 6,414 |

Regional Entry-Level and Median Annual Salaries

Depending on the locale selection, the regional or statewide entry-level and median annual salaries are displayed for the top five occupations or SOC codes as well as the weighted average of all SOC codes crosswalked to the sector or program selected. The entry-level salary is the 10th percentile meaning that 10% of workers earn salaries at or below those wages.

A table below summarizes the information in the chart displaying the top five SOC codes by skill level (higher, middle, below) and typical entry level of education (e.g., Middle Skill: Apprenticeship) as well as the statewide or regional weighted average annual salaries for all SOC codes mapped to program or sector selected. The number employed in 2021 is also provided for each of the top 5 SOC codes and all SOC codes mapped to the program or sector selected.



Detailed Data View: Online Postings

Online Job Postings Metrics:

- Hard Skills Requested in Online Postings (Latest 90 Days or Jul-Sept 2022)
- Hard Skills Requested in Online Postings (Latest 365 Days or Oct 2021-Sept 2022)
- Common Skills Requested in Online Postings (Latest 90 Days or Jul-Sept 2022)
- Common Skills Requested in Online Postings (Latest 365 Days or 2021-Sept 2022)
- Qualifications Requested in Online Postings (Latest 90 Days or Jul-Sept 2022)
- Qualifications Requested in Online Postings (Latest 365 Days or 2021-Sept 2022)
- Employers in Online Postings (Latest 90 Days or Jul-Sept 2022)
- Employers in Online Postings (Latest 365 Days or 2021-Sept 2022)

As stated above, traditional LMI is useful for getting an understanding of trends in employment and earnings over time. Information from online job postings helps to augment traditional LMI. For more information, please refer to the Lightcast video on [“What’s the Difference Between Traditional LMI and Job Postings?”](#)

According to the Lightcast resource, “Job postings are online advertisements for jobs, posted by companies trying to attract applicants...However, not all jobs are posted online, and in some cases, companies post far more positions than they intend to hire in an effort to cast a broad net for talent... One of the difficulties with incorporating job postings into traditional labor market analysis is the “wild west” nature of postings. Companies are free to post as many jobs as they’d like without being required to actually hire anyone.”

The eight charts displayed under “Online Job Postings” display hard and common skills, qualifications and employers requested in postings for the top ten occupations that are mapped to the sector, TOP04 or TOP06 program selection based on No. of Online Postings. There are two metrics for each. The first metric summarizes most commonly mentioned hard skills, common skills, qualifications, or employers posting over the latest 90-day period, and the second displays top skills, qualifications and employers over the latest 365-day period. Occupations are organized and displayed either by (1) Skills Level: Typical Entry-Level of Education from The US Bureau of Labor Statistics for each SOC code for qualifications and employers, or by (2) Typical Entry-Level of Education for each SOC code for hard and common skills. The education level most often needed to enter an occupation is reported at the national level. So, alternative paths to employment may vary at statewide or regional levels.

Underneath the tables displayed with the top five skills for the top ten occupations mapped to the sector or program selected, users can “View Detailed Table with Numeric Values” where postings are displayed for the prior and current 90- and 365-day periods including change and % change. Postings for Jul-Sept 2021 are compared against those for Jul-Sep 2022 for the 90-day period, and postings for Oct 2020 - Sept 2021 are compared against those for Oct 2021 - Sept 2022 for the 365-day period. Comparing current 90- or 365-day periods to prior 90- or 365-day periods allows users to get a sense of any significant changes for the program or sector selected to answer the following questions:

- Are employers requesting similar or new common or hard skills in their online job postings?
- Are employers asking for the same or any new qualifications?
- Are the same or new employers posting jobs online for mapped occupations?

Changes to skills or qualifications requested by regional employers in online job postings may be helpful information when reviewing Student Learning Outcomes or engaging with Advisory Committees.

Hard Skills Requested and Common Skills Requested in 90-day and 365-day Online Postings

The number of unduplicated online jobs postings for the top five hard or common skills requested for the top 10 occupations in the region associated with the selected program or sector. The SOC codes and associated skills listed will be grouped by Typical Entry-Level of Education. When microregion, college, or district is selected, the skills listed will be those requested for the top 10 SOC codes or occupations in the microregion.

Hard Skills: specific, learnable, measurable, often industry- or occupation-specific abilities related to a position. Examples: JavaScript might be a hard skill for a data analyst or CPR for a nurse.

Common Skills: can be self-taught and usually do not require that a certain level of education or credential has been completed. Examples: problem-solving or project management. The information on top common skills may be very similar across programs and sectors since they tend to be more general and can be similar across different occupations

For more detailed information, the detailed table with numeric values or with the number of postings and the percentage change, as shown on the right, is available as well.

Hard Skills Requested in Online Job Postings (90 days)

The number of unduplicated online job postings for top 5 hard skills in top 10 occupations in the region associated with the selected industry sector or TOP code in the locale selected over a 90-day period (Jul-Sept 2022). Hard skills are specific, learnable, measurable, often industry- or occupation-specific abilities related to a position. Example: JavaScript might be a hard skill for a data analyst or CPR for a nurse.

Statewide, Energy, Construction and Utilities, 2019-2020

| | Skill |
|--|-------------------------|
| Bachelor's Degree Or Higher | |
| <ul style="list-style-type: none"> Civil Engineers (17-2051) Construction Managers (11-9021) Cost Estimators (13-1051) Project Management Specialists and Business Operations Specialists, All Other (13-1198) | Construction |
| | Project Management |
| | Subcontracting |
| | Construction Management |
| | Marketing |
| Apprenticeship | |
| <ul style="list-style-type: none"> Carpenters (47-2031) Electricians (47-2111) | Carpentry |
| | Electrical Wiring |
| | Electrical Systems |
| | Construction |
| | Blueprinting |
| Postsecondary Non-Degree Award | |
| <ul style="list-style-type: none"> Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021) | HVAC |
| | Plumbing |
| | Ventilation |
| | Preventive Maintenance |
| | Hand Tools |

[View Detailed Table with Numeric Values](#)

| | Skill | No. of Online Job Postings Over 90-Day Period (Jul-Sept 2021) | No. of Online Job Postings Over 90-Day Period (Jul-Sept 2022) | % Change |
|--|-------------------------|---|---|----------|
| Bachelor's Degree Or Higher | | | | |
| <ul style="list-style-type: none"> Civil Engineers (17-2051) Construction Managers (11-9021) Cost Estimators (13-1051) Project Management Specialists and Business Operations Specialists, All Other (13-1198) | Construction | 6,958 | 7,943 | 14% |
| | Project Management | 5,641 | 7,933 | 41% |
| | Subcontracting | 4,344 | 4,901 | 13% |
| | Construction Management | 3,928 | 4,645 | 18% |
| | Marketing | 2,588 | 2,999 | 16% |
| Apprenticeship | | | | |
| <ul style="list-style-type: none"> Carpenters (47-2031) Electricians (47-2111) | Carpentry | 2,340 | 1,700 | -27% |
| | Electrical Wiring | 1,498 | 1,161 | -22% |
| | Electrical Systems | 1,313 | 1,172 | -11% |
| | Construction | 1,059 | 718 | -32% |
| | Blueprinting | 1,013 | 923 | -9% |
| Postsecondary Non-Degree Award | | | | |
| <ul style="list-style-type: none"> Heating, Air Conditioning, and Refrigeration and Mechanics Installers (49-9021) | HVAC | 4,961 | 3,976 | -20% |
| | Plumbing | 901 | 859 | -5% |
| | Ventilation | 825 | 667 | -19% |
| | Preventive Maintenance | 803 | 863 | 7% |
| | Hand Tools | 601 | 588 | -2% |

Qualifications Requested in 90-day and 365-day Online Postings

The number of unduplicated online jobs postings for the top five qualifications requested in top 5 (instead of top 10) occupations in the region associated with the selected program or sector. When microregion, college, or district is selected, the skills listed will be those requested by the 5 occupations in the microregion. The qualifications listed will be grouped by Skill Level and Typical Entry-Level of Education.

Qualifications: certifications decided on by a third-party entity (school, government, industry, etc) that acknowledges a body of skills and abilities.

For more detailed information, the detailed table with numeric values or with the number of postings and the percentage change, as shown on the right, is available as well.

The information on top qualifications will be most relevant to industries that rely on certifications; otherwise, the top qualifications will likely not be relevant to programs or sectors where certifications are not in-demand. Therefore, only the top 5 instead of the top 10 occupations are mapped for display of Qualifications from Online Job Postings. Unlike the skills or employer data, displaying qualifications for more SOC codes mapped to the program or sector selected would not necessarily provide useful additional information.

| Qualifications Requested in Online Job Postings (365 days) | |
|---|---|
| The number of unduplicated online job postings for top 5 qualifications in top 5 occupations in the region associated with the selected industry sector or TOP code in the locale selected over a 365-day period (Oct 2021-Sept 2022). In Lightcast data, the term qualifications refers to the certifications decided on by a third-party entity (school, government, industry, etc.) that acknowledges a body of skills and abilities | |
| Statewide, Energy, Construction and Utilities, 2020-2021 | Qualification |
| Higher Skill: Bachelor's Degree Or Higher | |
| <ul style="list-style-type: none"> Civil Engineers (17-2051) Construction Managers (11-9021) Project Management Specialists and Business Operations Specialists, All Other (13-1198) | Project Management Professional Certification |
| | Professional Engineer |
| | Licensed Professional Engineer |
| | Engineer in Training |
| | Master Of Business Administration (MBA) |
| Middle Skill: HS Diploma Or Equivalent | |
| <ul style="list-style-type: none"> First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011) | HVAC Certification |
| | Automotive Service Excellence (ASE) Certification |
| | EPA 608 Technician Certification |
| | Commercial Driver's License (CDL) |
| | Certified Pool & Spa Operator |
| Middle Skill: Postsecondary Non-Degree Award | |
| <ul style="list-style-type: none"> Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021) | EPA 608 Technician Certification |
| | EPA Universal Certification |
| | NATE Certification (North American Technician Excellence) |
| | HVAC Certification |
| | Automotive Service Excellence (ASE) Certification |

[View Detailed Table with Numeric Values](#)

| Qualification | No. of Online Job Postings Over 365-Day Period (Oct 2020-Sept 2021) | No. of Online Job Postings Over 365-Day Period (Oct 2021-Sept 2022) | % Change | |
|---|---|---|----------|------|
| Higher Skill: Bachelor's Degree Or Higher | | | | |
| <ul style="list-style-type: none"> Civil Engineers (17-2051) Construction Managers (11-9021) Project Management Specialists and Business Operations Specialists, All Other (13-1198) | Project Management Professional Certification | 5,897 | 8,467 | 44% |
| | Professional Engineer | 2,229 | 2,061 | -8% |
| | Licensed Professional Engineer | 1,821 | 1,889 | 4% |
| | Engineer in Training | 1,571 | 1,403 | -11% |
| | Master Of Business Administration (MBA) | 1,333 | 1,575 | 18% |
| Middle Skill: HS Diploma Or Equivalent | | | | |
| <ul style="list-style-type: none"> First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011) | HVAC Certification | 519 | 384 | -26% |
| | Automotive Service Excellence (ASE) Certification | 422 | 762 | 81% |
| | EPA 608 Technician Certification | 333 | 271 | -19% |
| | Commercial Driver's License (CDL) | 250 | 249 | 0% |
| | Certified Pool & Spa Operator | 212 | 338 | 59% |
| Middle Skill: Postsecondary Non-Degree Award | | | | |
| <ul style="list-style-type: none"> Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021) | EPA 608 Technician Certification | 2,914 | 2,327 | -20% |
| | EPA Universal Certification | 621 | 663 | 7% |
| | NATE Certification (North American Technician Excellence) | 449 | 340 | -24% |
| | HVAC Certification | 335 | 423 | 26% |
| | Automotive Service Excellence (ASE) Certification | 143 | 378 | 164% |

Employers in 90-day and 365-day Online Postings

The number of unduplicated online jobs postings by the top 10 employers for the top 10 occupations in the region associated with the selected program or sector. When microregion, college, or district is selected, the number of online job postings listed will be those requested by the 10 occupations in the microregion. The employers listed will be grouped by Skill Level and Typical Entry-Level of Education.

The information on top employers from online job postings may include third party recruiting or hiring firms, e.g. Kelly Services, Inc. Rather than the employers themselves. Nonetheless, this information can help understand the types of employers who are posting for positions in occupations crosswalked to the selected program area or industry sector.

| Employers in Online Job Postings (365 days) | | |
|--|-------------------------------|---|
| The number of unduplicated online job postings by top 10 employers for top 10 occupations associated with the selected industry sector or TOP code in the locale selected over a 365-day (Oct 2021-Sept 2022) period | | |
| ● Statewide, Energy, Construction and Utilities, 2020-2021 | Employer | No. of Online Job Postings Over 365-Day Period (Oct 2020-Sept 2021) |
| Higher Skill: Bachelor's Degree Or Higher | | |
| | Unclassified | 6,311 |
| | GPAC | 2,767 |
| | Jobot | 1,233 |
| | Anthem Blue Cross | 1,124 |
| <ul style="list-style-type: none"> • Cost Estimators (13-1051) • Engineers, All Other (17-2199) • Civil Engineers (17-2051) • Construction Managers (11-9021) • Project Management Specialists and Business Operations Specialists, All Other (13-1198) | CyberCoders | 927 |
| | Target | 764 |
| | Northrop Grumman | 448 |
| | University of California | 418 |
| | Randstad | 407 |
| | Security Industry Specialists | 401 |
| Middle Skill: Apprenticeship | | |
| | Unclassified | 3,508 |
| | Michaels | 369 |
| | Aerrotek | 240 |
| | PG&E | 228 |
| | PeopleReady | 209 |
| <ul style="list-style-type: none"> • Carpenters (47-2031) • Electricians (47-2111) | Tradesmen Internationa | 206 |
| | GPAC | 155 |
| | Sunrun | 138 |
| | Trillium | 126 |
| | Tesla | 113 |
| Middle Skill: HS Diploma Or Equivalent | | |
| | Unclassified | 3,938 |
| | Greystar | 488 |
| | GPAC | 297 |
| | Pep Boys | 195 |
| | Fpi Management | 190 |
| <ul style="list-style-type: none"> • First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011) | State of California | 188 |
| | Tesla | 157 |
| | Penske Automotive Group | 152 |
| | 24 Hour Fitness | 134 |
| | University of California | 122 |