SECTOR PROFILE

Energy, Construction & Utilities

JANUARY 2026

CENTER OF EXCELLENCE FOR LABOR MARKET RESEARCH BAY AREA

BACCC BAY AREA COMMUNITY COLLEGE CONSORTIUM

POWERED BY California Community Colleges

Introduction

To support the planning and development of career education programs and provide insights into various sector pathways, the Bay Region Center of Excellence (COE) has developed a series of sector profiles. These profiles highlight labor market trends and the postsecondary education and workforce implications within each sector in the Bay Region. They categorize jobs into three skill levels: below middle-skill, middle-skill, and above middle-skill jobs. Middle-skill occupations typically require more than a high school diploma, but less than a bachelor's degree except in cases where a bachelor's degree is required, but more than one-third of the workforce has less than a bachelor's degree. These occupations play a crucial role in the labor workforce and contribute to the economic vitality of the 12-county Bay Region, which includes Alameda County, Contra Costa County, Marin County, Monterey County, Napa County, San Benito County, San Francisco County, San Mateo County, Santa Clara County, Santa Cruz County, Solano County, and Sonoma County.

This energy, construction & utilities profile summarizes key findings on current and projected workforce demand, hourly wages for occupations within the sector by career pathway, and program information from community colleges in the region that offer training programs in energy, construction & utilities. This report is intended for use by decision-makers and practitioners to support funding and grant proposals, the development of key courses and pathways, and the alignment of programs between K-12, community colleges, and four-year institutions. Workforce professionals in the sector can also use the data to gain valuable insights into employment trends and educational preparation within this pathway.

What Pathway Makes Up the Energy, Construction & Utilities Sector?

This profile highlights the labor market for energy, construction & utilities, focusing on four key career pathways. The labor market data presented in this profile includes in-demand occupations within these pathways that are related to education and training programs offered at community colleges across the Bay Region.

The energy, construction & utilities sector spans occupations that focus on both traditional and renewable energy sources, and includes roles in architecture, engineering, construction trades, and energy efficiency technologies, which are essential for sustainable infrastructure and environmental management. The architecture, construction, and engineering pathway focuses on designing, planning, managing, and constructing buildings and infrastructure, and includes various roles such as construction laborers, architectural and engineering managers, and civil engineering technicians. The energy generation and engineering pathway includes technical and engineering roles in fossil fuel, nuclear, and renewable energy, including plant and system operators, nuclear power reactor operators, and geoscientists. The environmental and sustainability services pathway includes technical and scientific roles focused on environmental protection and sustainability, such as environmental science and protection technicians and environmental scientists and specialists. The utilities maintenance and operations pathway include occupations ranging from telecommunications line installers to water and wastewater treatment plant and system operators. Please note that this list does not include all occupations in the energy, construction & utilities sector.

ENERGY, CONSTRUCTION & UTILITIES CAREER PATHWAYS
Architecture, Construction, and Engineering
Energy Generation and Engineering
Environmental and Sustainability Services
Utilities Maintenance and Operations

Quick Facts About Energy, Construction & Utilities in the Bay Region

Quick facts provide data related to the energy, construction & utilities sector (see below), featuring labor market projections between 2023 and 2028 in the Bay Region, as well as community college program information for the program years 2021-22 to 2023-24. Enrolled students include all general admit students who were enrolled in at least one term of the selected year at a Bay Region community college.[1]

The energy, construction & utilities sector accounted for approximately 320,810 jobs in the Bay Region in 2023, and is projected to grow by 2% between 2023 and 2028. During this five-year period, the occupations specified in this report are expected to account for 30,270 average annual job openings, and an average of 83% of job openings in the pathway are replacement openings. Note that all numbers related to labor market data in this report are rounded to the nearest tenth.

Energy, construction & utilities programs were offered at 22 community colleges in the Bay Region (see Table 8 for the energy, construction & utilities programs included). An average of more than 11,059 students enrolled in energy, construction & utilities programs annually at a Bay Region community college during the program years 2021-22 to 2023-24, and an average of 973 students completed a degree or certificate each year. As for demographics, approximately 22% of students who enrolled between program years 2021-22 to 2023-24 were between 20 and 24 years old. Males were predominantly represented among students who enrolled in energy, construction & utilities programs (78%), as well as students who identify as white (30%) or Hispanic (42%).

Bay Region Quick Facts

320,810

Number of Jobs in Pathways, 2023

2%

5-year Pathway Job Growth, 2023-2028

30,270

5-year Avg. Annual Job Openings, 2023-2028

22

Community Colleges (CC) Offering Energy, Construction & Utilities Programs

11,059

Students Enrolled in CC Energy, Construction & Utilities Programs (2021-22 to 2023-24)

973

CC Degrees/Certificates Awarded on Average in Energy, Construction & Utilities (2021-22 to 2023-24)

[1] This term was updated in DataVista from "non-special admit students" used in previous reports. General admit students are defined as all students who enrolled as first-time in higher education general admit credit students in at least one primary term of the selected year with a minimal credit enrollment at the selected college who are tracked for one, two, three, four and six years from first term of enrollment. https://datavista.cccco.edu/metrics/126.

Industry Employment Demand

The energy, construction & utilities sector includes sub-sectors and industries classified under North American Industry Classification System (NAICS) codes 22, 23, 32, 51, 53, 54, and 56 based on staffing patterns (see Appendix A: Methodology for the six-digit NAICS codes used to define the sector). A two-digit NAICS code can represent multiple sub-sectors and industry groups within the broader sector. These codes are used to organize and categorize industries within the job market.

Table 1 shows that the number of industry jobs in the energy, construction & utilities sector is projected to decrease by less than 1% over the next several years (2023-2028). This data projects little to no change in the industry. In 2023, approximately 493,740 workers were employed in energy, construction & utilities related industries in the region, and this number is projected to decrease by 2,063 workers by 2028. It is important to note that while total industry employment in the sector is projected to decline slightly, this trend does not reflect reduced demand across all occupations in the sector (as shown in the following sections). More information is also provided in the beyond labor market and supply data section.

Table 1: Industry Demand for the Energy, Construction & Utilities Sector

2023 JOBS	2028 JOBS	JOB CHANGE	% CHANGE
493,740	491,677	-2,063	<1%

Source: Lightcast, Projected Number of Industry Jobs for Energy, Construction & Utilities by NAICS, 2023-2028 [2025.3].

Occupational Demand

To connect overall industry trends with specific roles, the following section examines occupational demand in more detail. When examining demand for the energy, construction & utilities career pathways, Table 2 summarizes the number of workers employed in this pathway in 2023 and the total projected openings between 2023 and 2028 in the Bay Region. The energy, construction & utilities career pathways employed 320,810 workers in 2023 and is projected to have 151,330 total openings across the five-year period.

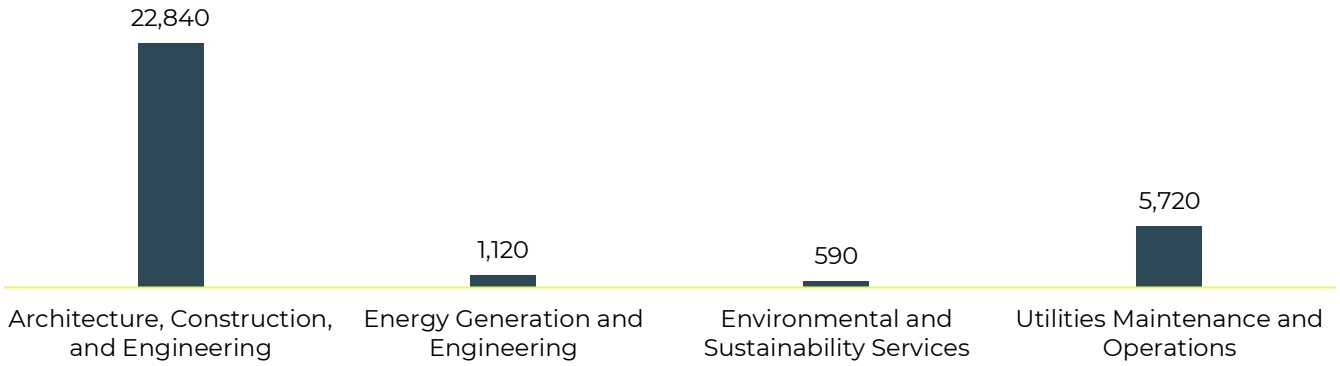
Table 2: Number of Jobs and Total Openings for Energy, Construction & Utilities Career Pathways (2023-2028)

PATHWAY	2023 JOBS	2023 - 2028 TOTAL OPENINGS*
Architecture, Construction, and Engineering	253,730	114,210
Energy Generation and Engineering	7,720	5,670
Environmental and Sustainability Services	4,490	2,960
Utilities Maintenance and Operations	54,870	28,490

Source: Lightcast, Number of Jobs and Total Openings, 2023-2028 [2025.3].
*2023-2028 total openings are new job openings and replacement job openings across the five-year period. Replacement openings are created as workers switch jobs, retire or leave for other reasons.

In terms of average annual openings, Figure 1 shows the projected average annual job openings for the energy, construction & utilities career pathways. More than 30,200 average annual job openings are projected for occupations in the energy, construction & utilities career pathways between 2023 and 2028, and over 22,800 average annual openings were for the architecture, construction, and engineering pathway.

Figure 1: Average Annual Job Openings for Energy, Construction & Utilities Career Pathways (2023-2028)



Source: Lightcast, Average Annual Job Openings, 2023-2028 [2025.3].

Occupations and Skill Levels by Energy, Construction & Utilities Career Pathways

When examining specific occupations within the energy, construction & utilities sector, Table 3 below presents data on employment and projected demand by occupation, grouped by career pathway and skill level. The architecture, construction, and engineering pathway is the largest, with a total of 57 occupations. While this pathway includes the greatest number of occupations, it is also projected to experience a slight decrease in demand of 3%, on average. Some individual occupations are projected to grow by more than 40%, while others are projected to decline by as much as 40%. In contrast, the energy generation and engineering pathway demonstrates the strongest growth, with projected demand increasing by more than 16%. These patterns show that demand remains strong for specific occupational pathways in the sector.

Please note that the figures in Table 3 are rounded to the nearest tenth, and totals represent the summed averages. On average, 83% of job openings in the pathway are replacement openings. Replacement openings occur when workers switch jobs, retire or leave for other reasons. Please refer to Appendix A: Methodology for more information on how the pathways were defined.

SKILL LEVEL LEGEND

• = Below Middle-Skill **• • = Middle-Skill** **• • • = Above Middle-Skill**

Table 3: Occupations and Projected Demand for Energy, Construction & Utilities (2023-2028)

Skill Level	Occupation	Avg. Annual Openings	2023 Jobs	5-Yr Change	5-Yr % Change	5-Yr Annual Replacement Jobs	Replacements as % of Openings
Architecture, Construction, and Engineering							
•	Carpet Installers	50	620	-60	-11%	40	88%
•	Floor Layers, Except Carpet, Wood, and Hard Tiles	130	1,750	-60	-3%	120	89%
•	Floor Sanders and Finishers	10	140	-80	-59%	10	91%
•	Tile and Stone Setters	160	2,240	-190	-8%	150	92%
•	Cement Masons and Concrete Finishers	460	6,170	-360	-6%	430	89%
•	Construction Laborers	2,580	28,430	200	1%	2,350	90%
•	Drywall and Ceiling Tile Installers	480	7,730	-1,190	-15%	460	95%
•	Tapers	60	990	-240	-24%	60	84%
•	Insulation Workers, Floor, Ceiling, and Wall	50	410	50	10%	40	77%
•	Painters, Construction and Maintenance	1,250	13,730	410	3%	1,090	85%

Skill Level	Occupation	Avg. Annual Openings	2023 Jobs	5-Yr Change	5-Yr % Change	5-Yr Annual Replacement Jobs	Replacements as % of Openings
•	Paperhangers	0	30	-10	-44%	0	90%
•	Pipelayers	50	640	-20	-4%	50	92%
•	Plasterers and Stucco Masons	110	1,690	-130	-7%	110	89%
•	Roofers	590	6,150	500	8%	470	81%
•	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	80	870	-140	-16%	80	99%
•	Helpers--Carpenters	120	910	50	5%	100	81%
•	Helpers--Electricians	100	740	-10	-1%	80	82%
•	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	50	480	-100	-20%	40	93%
•	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	90	840	-110	-13%	80	91%
•	Helpers--Roofers	50	300	60	20%	40	80%
•	Helpers, Construction Trades, All Other	90	920	-160	-17%	80	94%
•	Fence Erectors	90	920	0	0%	70	85%
•	Septic Tank Servicers and Sewer Pipe Cleaners	100	770	100	13%	70	76%
•	Miscellaneous Construction and Related Workers	100	780	90	12%	80	76%
•	Mechanical Door Repairers	90	720	80	11%	60	75%
•	Manufactured Building and Mobile Home Installers	0	40	-20	-31%	0	96%
•	Riggers	60	250	120	46%	30	62%
• •	Architectural and Civil Drafters	310	3,750	-70	-2%	300	90%
• •	Civil Engineering Technologists and Technicians	160	1,870	-50	-3%	150	91%
• •	Surveying and Mapping Technicians	140	1,240	-170	-14%	140	93%
• •	First-Line Supervisors of Construction Trades and Extraction Workers	1,740	19,440	790	4%	1,510	86%
• •	Boilermakers	10	90	-10	-4%	10	76%
• •	Brickmasons and Blockmasons	90	1,120	-30	-3%	80	88%
• •	Stonemasons	30	250	30	10%	20	61%
• •	Carpenters	2,570	32,190	-1,070	-3%	2,420	93%
• •	Terrazzo Workers and Finishers	0	0	0	-14%	0	95%

Skill Level	Occupation	Avg. Annual Openings	2023 Jobs	5-Yr Change	5-Yr % Change	5-Yr Annual Replacement Jobs	Replacements as % of Openings
• •	Paving, Surfacing, and Tamping Equipment Operators	100	590	180	31%	60	73%
• •	Pile Driver Operators	10	130	0	0%	10	79%
• •	Operating Engineers and Other Construction Equipment Operators	840	7,700	760	10%	680	81%
• •	Electricians	2,190	19,880	1,520	8%	1,780	83%
• •	Glaziers	190	1,840	10	1%	170	87%
• •	Insulation Workers, Mechanical	70	340	150	44%	40	61%
• •	Plumbers, Pipefitters, and Steamfitters	1,330	11,900	1,130	9%	1,070	84%
• •	Reinforcing Iron and Rebar Workers	30	470	-90	-18%	30	92%
• •	Sheet Metal Workers	230	2,650	-260	-10%	220	92%
• •	Structural Iron and Steel Workers	110	1,460	-270	-18%	100	91%
• •	Construction and Building Inspectors	540	4,350	270	6%	480	88%
• •	Elevator and Escalator Installers and Repairers	50	580	-60	-11%	40	88%
• •	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	780	8,880	-240	-3%	710	93%
• •	Cabinetmakers and Bench Carpenters	170	1,970	-330	-17%	160	96%
• •	Stationary Engineers and Boiler Operators	240	2,540	-340	-13%	230	94%
• • •	Construction Managers	1,270	14,460	540	4%	1,100	87%
• • •	Architectural and Engineering Managers	870	12,830	-500	-4%	790	86%
• • •	Architects, Except Landscape and Naval	340	5,620	-170	-3%	310	88%
• • •	Landscape Architects	100	1,220	-20	-2%	90	91%
• • •	Surveyors	80	1,110	-70	-7%	70	91%
• • •	Civil Engineers	1,250	13,990	1,640	12%	900	71%
	TOTAL	**22,840**	**253,720**	**2,050**	**-3%**	**19,860**	**86%**
Energy Generation and Engineering							
•	Derrick Operators, Oil and Gas	0	10	0	-37%	0	78%
•	Rotary Drill Operators, Oil and Gas	0	20	0	33%	0	51%
•	Service Unit Operators, Oil and Gas	40	370	-40	-12%	30	93%

Skill Level	Occupation	Avg. Annual Openings	2023 Jobs	5-Yr Change	5-Yr % Change	5-Yr Annual Replacement Jobs	Replacements as % of Openings
•	Excavating and Loading Machine and Dragline Operators, Surface Mining	20	180	10	5%	20	82%
•	Roustabouts, Oil and Gas	10	110	-20	-16%	10	77%
•	Petroleum Pump System Operators, Refinery Operators, and Gaugers	100	1,180	-250	-21%	100	79%
•	Plant and System Operators, All Other	50	290	60	22%	30	64%
•	Gas Compressor and Gas Pumping Station Operators	10	50	10	25%	10	73%
•	Wellhead Pumpers	0	40	-10	-4%	0	82%
• •	Geological Technicians, Except Hydrologic Technicians	110	530	170	33%	70	82%
• •	Hydrologic Technicians	40	270	30	13%	30	88%
• •	Nuclear Technicians	100	280	230	84%	50	66%
• •	Solar Photovoltaic Installers	310	1,770	570	33%	190	66%
• •	Wind Turbine Service Technicians	20	80	20	32%	10	66%
• •	Nuclear Power Reactor Operators	10	60	0	4%	10	88%
• •	Power Distributors and Dispatchers	10	130	-20	-13%	10	86%
• •	Power Plant Operators	40	420	-10	-3%	40	80%
• •	Gas Plant Operators	30	120	50	50%	10	56%
• • •	Mining and Geological Engineers, Including Mining Safety Engineers	10	120	-20	-15%	10	77%
• • •	Nuclear Engineers	100	240	360	153%	30	45%
• • •	Petroleum Engineers	30	380	0	-1%	20	81%
• • •	Geoscientists, Except Hydrologists and Geographers	80	1,080	-140	-13%	70	87%
	TOTAL	**1,120**	**7,730**	**1,000**	**16%**	**750**	**75%**
Environmental and Sustainability Services							
• •	Environmental Engineering Technologists and Technicians	40	390	0	0%	30	83%
• •	Environmental Science and Protection Technicians, Including Health	280	1,460	430	30%	200	73%
• • •	Environmental Scientists and Specialists, Including Health	270	2,640	80	3%	240	90%
	TOTAL	**590**	**4,490**	**510**	**11%**	**470**	**82%**
Utilities Maintenance and Operations							

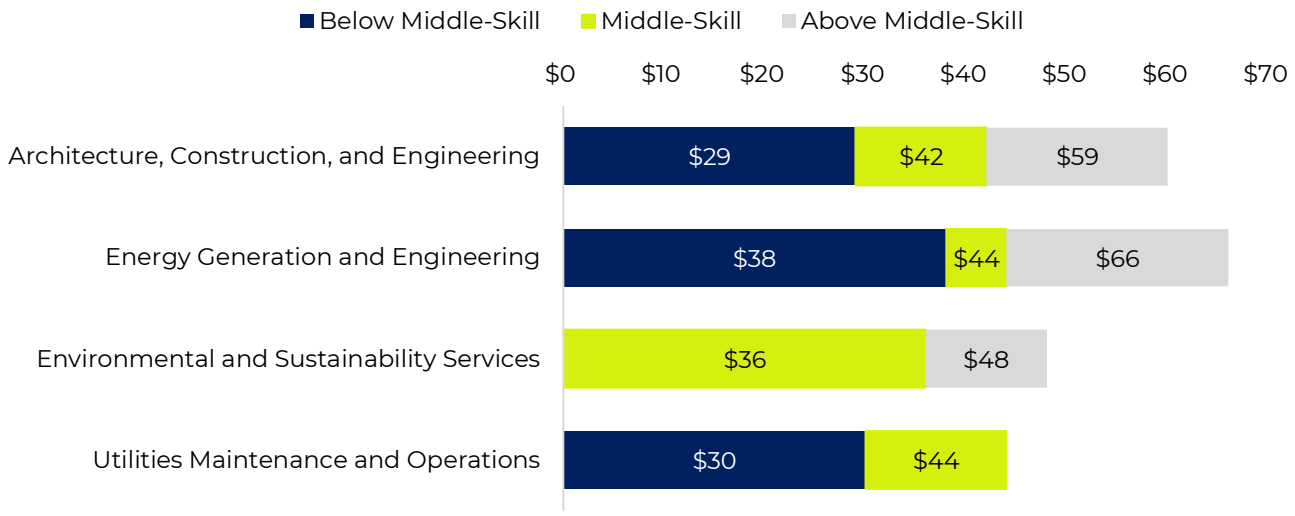
Skill Level	Occupation	Avg. Annual Openings	2023 Jobs	5-Yr Change	5-Yr % Change	5-Yr Annual Replacement Jobs	Replacements as % of Openings
•	Grounds Maintenance Workers, All Other	130	660	100	16%	100	83%
•	Meter Readers, Utilities	40	270	50	15%	20	70%
•	Highway Maintenance Workers	190	1,870	160	8%	160	82%
•	Maintenance and Repair Workers, General	3,340	32,380	1,530	5%	2,960	87%
•	Helpers--Installation, Maintenance, and Repair Workers	220	2,030	0	0%	200	91%
• •	Rail-Track Laying and Maintenance Equipment Operators	20	270	-90	-33%	10	82%
• •	Radio, Cellular, and Tower Equipment Installers and Repairers	30	250	0	-1%	20	84%
• •	Telecommunications Equipment Installers and Repairers, Except Line Installers	380	3,950	-220	-5%	360	89%
• •	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	30	330	-40	-12%	20	92%
• •	Electrical Power-Line Installers and Repairers	230	1,970	270	13%	160	77%
• •	Telecommunications Line Installers and Repairers	210	2,420	-250	-10%	200	91%
• •	Installation, Maintenance, and Repair Workers, All Other	650	6,250	20	0%	600	92%
• •	Water and Wastewater Treatment Plant and System Operators	250	2,220	160	7%	210	87%
	TOTAL	**5,720**	**54,870**	**1,690**	**0%**	**5,020**	**85%**
	ENERGY, CONSTRUCTION & UTILITIES TOTAL	**30,270**	**320,810**	**5,230**	**2%**	**26,120**	**83%**

Source: Lightcast, Projected Demand for Energy, Construction & Utilities Occupations, 2023-2028 [2025.3].

Occupational Wages by Energy, Construction & Utilities Pathway

In the Bay Region, the living wage is $46 per hour for one adult and one school-aged child, though it varies by subregion (see Table 12 in the Appendix for details). Figure 2 presents the average median hourly earnings for below middle-skill, middle-skill, and above middle-skill jobs by career pathway. Table 4 provides a summary of wages by the 25th percentile, median, and 75th percentile hourly earnings for each occupation. All earnings represent the median across the 12-counties in the Bay Region. The 25th percentile wage represents entry-level earnings, while the 75th percentile wage reflects the earnings of experienced workers.

Figure 2: Average Median Hourly Earnings by Energy, Construction & Utilities Career Pathways



Source: Lightcast, Median Hourly Wages by Energy, Construction & Utilities Career Pathways [2025.3].

Table 4: Hourly Earnings for Occupations by Energy, Construction & Utilities Career Pathways

SKILL LEVEL LEGEND

• = Below Middle-Skill **• • = Middle-Skill** **• • • = Above Middle-Skill**

Skill Level	Occupation	25th Pct. Hourly Earnings	Median Hourly Earnings	75th Pct. Hourly Earnings
Architecture, Construction, and Engineering				
•	Carpet Installers	$19	$25	$33
•	Floor Layers, Except Carpet, Wood, and Hard Tiles	$24	$32	$45
•	Floor Sanders and Finishers	$14	$21	$29
•	Tile and Stone Setters	$23	$28	$35

Skill Level	Occupation	25th Pct. Hourly Earnings	Median Hourly Earnings	75th Pct. Hourly Earnings
•	Cement Masons and Concrete Finishers	$27	$34	$46
•	Construction Laborers	$22	$29	$38
•	Drywall and Ceiling Tile Installers	$29	$37	$57
•	Tapers	$27	$33	$41
•	Insulation Workers, Floor, Ceiling, and Wall	$18	$26	$38
•	Painters, Construction and Maintenance	$23	$27	$35
•	Paperhangers	$12	$19	$31
•	Pipelayers	$28	$39	$50
•	Plasterers and Stucco Masons	$26	$33	$39
•	Roofers	$26	$32	$36
•	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	$24	$27	$30
•	Helpers--Carpenters	$22	$25	$29
•	Helpers--Electricians	$20	$24	$29
•	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	$21	$24	$28
•	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	$23	$26	$29
•	Helpers--Roofers	$22	$26	$28
•	Helpers, Construction Trades, All Other	$23	$27	$29
•	Fence Erectors	$22	$25	$33
•	Septic Tank Servicers and Sewer Pipe Cleaners	$24	$28	$35
•	Miscellaneous Construction and Related Workers	$26	$34	$47
•	Mechanical Door Repairers	$27	$30	$35
•	Manufactured Building and Mobile Home Installers	$22	$24	$30
•	Riggers	$31	$40	$47
• •	Architectural and Civil Drafters	$30	$36	$44
• •	Civil Engineering Technologists and Technicians	$35	$42	$51
• •	Surveying and Mapping Technicians	$27	$34	$45
• •	First-Line Supervisors of Construction Trades and Extraction Workers	$35	$47	$63
• •	Boilermakers	$57	$57	$63

Skill Level	Occupation	25th Pct. Hourly Earnings	Median Hourly Earnings	75th Pct. Hourly Earnings
• •	Brickmasons and Blockmasons	$24	$33	$44
• •	Stonemasons	$24	$30	$39
• •	Carpenters	$26	$35	$47
• •	Terrazzo Workers and Finishers	$18	$20	$24
• •	Paving, Surfacing, and Tamping Equipment Operators	$31	$41	$65
• •	Pile Driver Operators	$41	$53	$61
• •	Operating Engineers and Other Construction Equipment Operators	$34	$50	$59
• •	Electricians	$29	$39	$55
• •	Glaziers	$30	$37	$56
• •	Insulation Workers, Mechanical	$35	$56	$72
• •	Plumbers, Pipefitters, and Steamfitters	$27	$35	$47
• •	Reinforcing Iron and Rebar Workers	$24	$27	$39
• •	Sheet Metal Workers	$30	$45	$64
• •	Structural Iron and Steel Workers	$28	$39	$52
• •	Construction and Building Inspectors	$36	$54	$61
• •	Elevator and Escalator Installers and Repairers	$48	$72	$74
• •	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	$26	$34	$46
• •	Cabinetmakers and Bench Carpenters	$22	$25	$31
• •	Stationary Engineers and Boiler Operators	$35	$56	$58
• • •	Construction Managers	$32	$57	$78
• • •	Architectural and Engineering Managers	$74	$91	$109
• • •	Architects, Except Landscape and Naval	$37	$52	$75
• • •	Landscape Architects	$33	$46	$66
• • •	Surveyors	$38	$50	$64
• • •	Civil Engineers	$45	$56	$71
	TOTAL	**$26**	**$33**	**$44**
Energy Generation and Engineering				
•	Derrick Operators, Oil and Gas	$29	$32	$34

Skill Level	Occupation	25th Pct. Hourly Earnings	Median Hourly Earnings	75th Pct. Hourly Earnings
•	Rotary Drill Operators, Oil and Gas	$30	$50	$54
•	Service Unit Operators, Oil and Gas	$28	$33	$41
•	Excavating and Loading Machine and Dragline Operators, Surface Mining	$30	$44	$60
•	Roustabouts, Oil and Gas	$22	$25	$27
•	Petroleum Pump System Operators, Refinery Operators, and Gaugers	$50	$56	$61
•	Plant and System Operators, All Other	$30	$38	$44
•	Gas Compressor and Gas Pumping Station Operators	$30	$32	$51
•	Wellhead Pumpers	$24	$28	$33
••	Geological Technicians, Except Hydrologic Technicians	$22	$27	$34
••	Hydrologic Technicians	$21	$28	$37
••	Nuclear Technicians	$29	$40	$46
••	Solar Photovoltaic Installers	$28	$32	$37
••	Wind Turbine Service Technicians	$28	$36	$42
••	Nuclear Power Reactor Operators	$45	$54	$61
••	Power Distributors and Dispatchers	$54	$61	$81
••	Power Plant Operators	$43	$51	$61
••	Gas Plant Operators	$56	$65	$70
•••	Mining and Geological Engineers, Including Mining Safety Engineers	$44	$71	$87
•••	Nuclear Engineers	$59	$69	$83
•••	Petroleum Engineers	$46	$68	$96
•••	Geoscientists, Except Hydrologists and Geographers	$44	$55	$70
	TOTAL	**$30**	**$39**	**$51**
Environmental and Sustainability Services				
••	Environmental Engineering Technologists and Technicians	$36	$42	$52
••	Environmental Science and Protection Technicians, Including Health	$24	$30	$41
•••	Environmental Scientists and Specialists, Including Health	$37	$48	$62
	TOTAL	**$34**	**$41**	**$52**
Utilities Maintenance and Operations				
•	Grounds Maintenance Workers, All Other	$20	$23	$28
•	Meter Readers, Utilities	$38	$42	$45

Skill Level	Occupation	25th Pct. Hourly Earnings	Median Hourly Earnings	75th Pct. Hourly Earnings
•	Highway Maintenance Workers	$26	$33	$38
•	Maintenance and Repair Workers, General	$23	$28	$36
•	Helpers--Installation, Maintenance, and Repair Workers	$19	$22	$26
• •	Rail-Track Laying and Maintenance Equipment Operators	$29	$34	$40
• •	Radio, Cellular, and Tower Equipment Installers and Repairers	$30	$41	$48
• •	Telecommunications Equipment Installers and Repairers, Except Line Installers	$32	$37	$47
• •	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	$42	$55	$69
• •	Electrical Power-Line Installers and Repairers	$42	$59	$73
• •	Telecommunications Line Installers and Repairers	$35	$47	$49
• •	Installation, Maintenance, and Repair Workers, All Other	$21	$25	$32
• •	Water and Wastewater Treatment Plant and System Operators	$41	$50	$57
	TOTAL	**$29**	**$36**	**$44**
	ENERGY, CONSTRUCTION & UTILITIES TOTAL	**$30**	**$37**	**$48**

Source: Lightcast, 25th pct., Median, and 75th pct. Hourly Earnings for Energy, Construction & Utilities Occupations [2025.3].

Job Postings for Energy, Construction & Utilities Occupations

Job postings represent the number of online jobs advertised in the Bay Region for occupations in the energy, construction & utilities pathway specified in this report. Unique online job postings are de-duplicated based on job title, employer, and region. Across occupations in the energy, construction & utilities pathway, there were 38,325 unique online job postings in the Bay Region from January 2024 to December 2024 (see Table 5). Table 6 highlights the top 10 skills sought by employers, categorized into specialized, soft, and technical skills.

Table 5: Unique Online Job Postings for Energy, Construction & Utilities Occupations in the Bay Region, 2024

Unique Online Job Postings in the Bay Region
38,325

Table 6: Top Skills for Energy, Construction & Utilities Occupations

Specialized Skills	Soft Skills	Technical Skills
Construction	Communication	Microsoft Office
Project Management	Management	Microsoft Excel
Plumbing	Operations	Microsoft Outlook
HVAC	Customer Service	AutoCAD
Carpentry	Leadership	Microsoft PowerPoint
Painting	Problem Solving	Microsoft Word
Construction Management	Troubleshooting	Autodesk Revit
Power Tool Operation	Detail Oriented	R (Programming Language)
Hand Tools	Planning	Spreadsheets
Preventive Maintenance	Lifting Ability	SketchUp (3D Modeling Software)

Table 7 lists the top employers in the energy, construction & utilities sector in the Bay Region, which include employers in technology, utilities and energy, real estate and property management, and landscaping and facility services.

Table 7: Employers for Energy, Construction & Utilities Occupations

Top Employers

- Apple
- PG&E
- Energy Jobline
- CBRE
- Tesla
- State of California
- Meta
- FPI Management
- Jensen Landscape Services
- Jones Lang LaSalle (JLL)

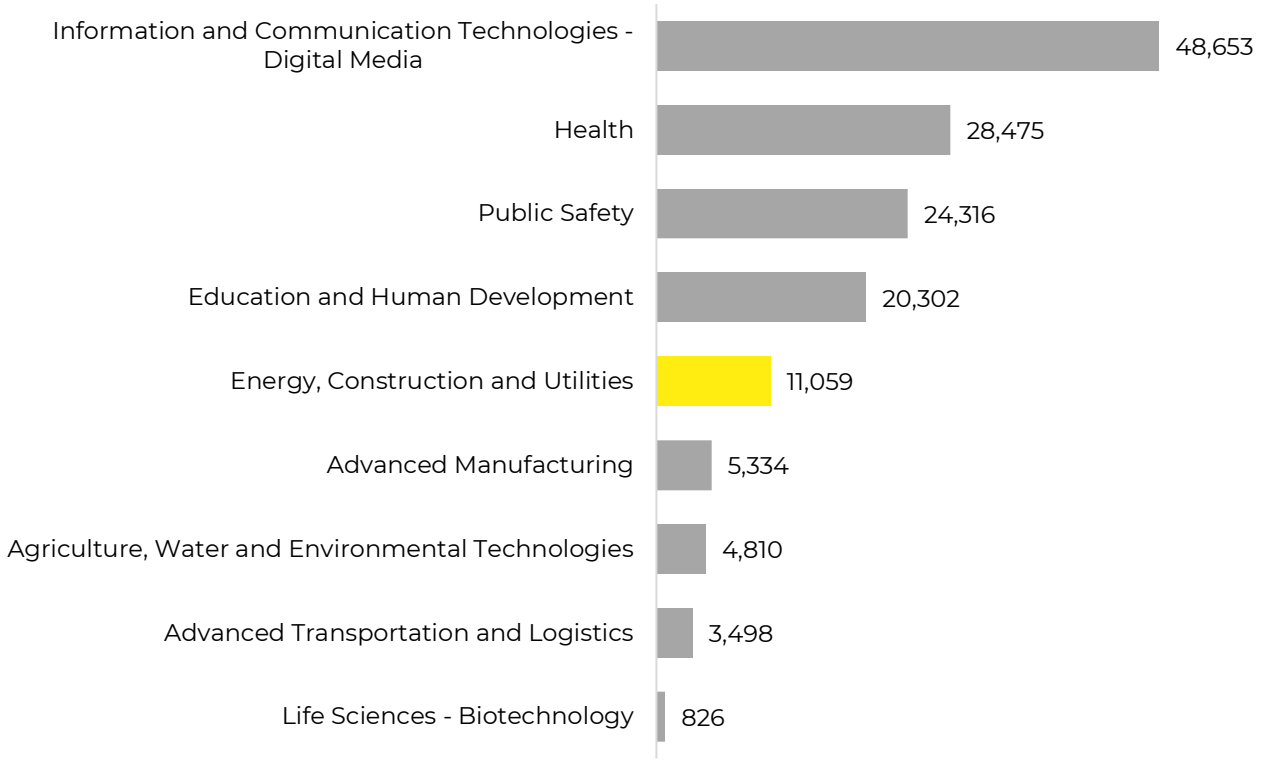
Source: Lightcast, Job Posting Analytics, January 2024-December 2024 [2025.3].

Energy, Construction & Utilities Community College Programs

California community colleges offer a variety of programs in energy, construction & utilities. Colleges combine classroom instruction on campus, online, or through external work experiences. Of the 28 community colleges in the Bay Region, 22 offer a program related to energy, construction & utilities. These community colleges include Cabrillo College, Chabot College, De Anza College, Diablo Valley College, Evergreen Valley College, Foothill College, Gavilan College, Hartnell College, Laney College, Las Positas College, Los Medanos College, Marin College, Mission College, Napa Valley College, Ohlone College, San Francisco City College, San Jose City College, San Mateo College, Santa Rosa College, Skyline College, Solano College, and West Valley College.

Figure 3 shows the number of students enrolled by each of the Bay Region's nine sectors. These sectors refer to the priority sectors identified by the California Community Colleges Chancellor's Office. During program years 2021-22 to 2023-24, an average of more than 11,059 students enrolled in energy, construction & utilities programs each year. For more information about the selection of programs and data sources for student outcomes see the Appendix A: Methodology.

Figure 3: Students Enrolled* by Sector (3-YR Average, 2021-22 to 2023-24)



Source: DataVista. Program Years 2021-22 to 2023-24, Bay Region Community Colleges.
*All students who were enrolled as a general admit student in at least one term of the selected year.

Eighteen (18) Taxonomy of Program (TOP) codes related to energy, construction & utilities are presented in Table 8, and these TOP codes also have active or approved programs prior to October 2024 in Bay Region community colleges. This is based on information reported to the California Community Colleges Chancellor's Office Curriculum Inventory (COCI).

Table 8: Energy, Construction & Utilities Programs at Community Colleges in the Bay Region

TOP6	TOP6 Program Title	# Colleges w/Programs
020100	Architecture and Architectural Technology	7
093440	Electrical Systems and Power Transmission	1
093500	Electro-Mechanical Technology	3
094600	Environmental Control Technology	6
094610	Energy Systems Technology	6
095200	Construction Crafts Technology	7
095210	Carpentry	2
095220	Electrical	5
095230	Plumbing, Pipefitting and Steamfitting	4
095250	Mill and Cabinet Work	1
095290	Roofing	2
095300	Drafting Technology	8
095310	Architectural Drafting	3
095320	Civil Drafting	1
095640	Sheet Metal and Structural Metal	2
095700	Civil and Construction Management Technology	7
095720	Construction Inspection	3
095800	Water and Wastewater Technology	4

Source: California Community Colleges Chancellor's Office Curriculum Inventory (COCI). This list includes the programs under the TOP code that were currently active or approved in Bay Region community colleges prior to October 2024.

Tables 9 and 10 summarize educational supply by analyzing the number of certificates and degrees awarded in related TOP and Classification of Instructional Programs (CIP) codes, respectively. According to TOP data, an average of 973 awards were conferred at Bay Region community college between program years 2021-22 and 2023-24 (Table 9). The average number of awards in programs may include students who earned multiple degrees, certificates, or awards.

Table 9: Total Awards at Community Colleges in the Bay Region (2021-22 to 2023-24)

TOP6	TOP6 Title	Certificate	Associate Degree/ Associate for Transfer	Noncredit Award	Total Awards
020100	Architecture and Architectural Technology	45	60	0	105
093440	Electrical Systems and Power Transmission	4	0	0	4
093500	Electro-Mechanical Technology	6	1	0	7
094600	Environmental Control Technology	88	17	0	105
094610	Energy Systems Technology	42	8	0	50
095200	Construction Crafts Technology	55	11	12	78
095210	Carpentry	12	6	0	18
095220	Electrical	234	5	0	239
095230	Plumbing, Pipefitting and Steamfitting	52	3	0	55
095250	Mill and Cabinet Work	4	4	0	8
095300	Drafting Technology	24	10	0	34
095310	Architectural Drafting	9	0	0	9
095320	Civil Drafting	2	1	0	3
095640	Sheet Metal and Structural Metal	63	2	0	65
095700	Civil and Construction Management Technology	59	44	4	107
095720	Construction Inspection	20	5	0	25
095800	Water and Wastewater Technology	40	21	0	61
	Total Awards	**758**	**198**	**16**	**973**

Source: CCCCO Data Mart. Program Years 2021-22 to 2023-24 Annual Awards, by TOP6 Code, Bay Region Community Colleges.

According to CIP data (Table 10), non-community college institutions in the Bay Region conferred an average of 954 awards each year between program years 2020-21 and 2022-23. The total number of awards for a given TOP or CIP code is calculated as a three-year average and summed across award types. Please note that these figures were not rounded.

Table 10: Awards* for Non-Community College Programs in the Bay Region (2020-21 to 2022-23)

CIP - CIP Program Title	Certificate	Associate Degree	Bachelor's Degree	Total Awards
04.0401 - Environmental Design/Architecture	0	0	23	23
15.1301 - Drafting and Design Technology/Technician, General	0	12	42	54
15.1302 - CAD/CADD Drafting and/or Design Technology/Technician	0	2	20	22
15.1303 - Architectural Drafting and Architectural CAD/CADD	0	0	23	23
46.0302 - Electrician	468	0	0	468
46.0415 - Building Construction Technology/Technician	50	0	0	50
47.0201 - Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	174	0	0	174
50.0404 - Industrial and Product Design	0	0	96	96
52.2001 - Construction Management, General	0	0	44	44
Total Awards	**692**	**14**	**248**	**954**

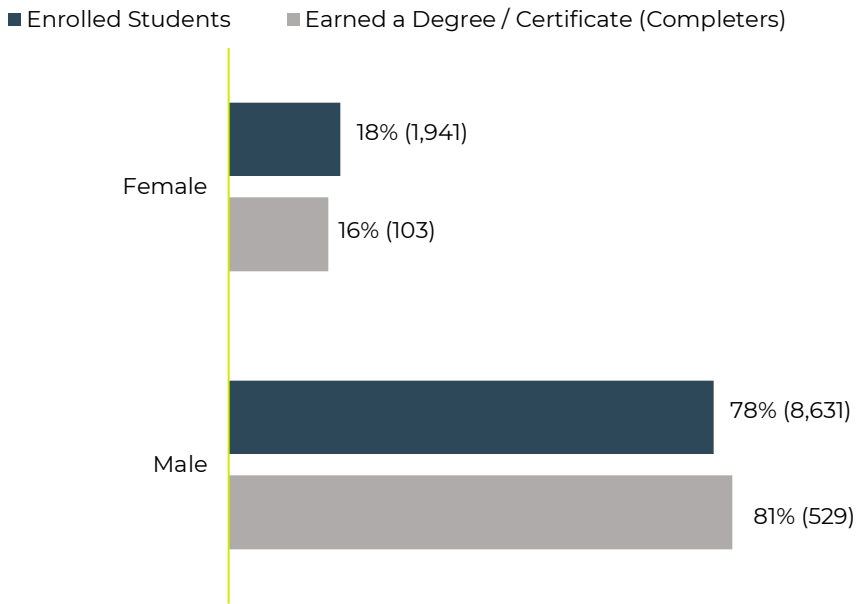
*Total awards do not include degrees higher than a bachelor's degree.
Source: Integrated Postsecondary Education Data System (IPEDS). Program Years 2020-21 to 2022-23 Annual Awards, by CIP Code, Bay Region Non-Community College Institutions.

Demographic Profile of Students in Community College Energy, Construction & Utilities Programs

This sector profile also summarizes the demographics of community college students who enroll in and complete a degree or certificate in energy, construction & utilities programs. Figures 4 through 6 present data on students by gender, race/ethnicity, and age. Enrolled students include all general admit students[2] who were enrolled in at least one term of the selected year at a Bay Region community college. In terms of earned a degree or certificate attainment, it represents the number of students who earned one or more of the following: Chancellor's Office approved certificate, associate degree, or non-credit awards.

On average, female students comprised 18% of enrollees and 16% of award earners, compared to 78% and 81% of male students, respectively. Students who identified as white (30%) and Hispanic (42%) represented the two largest racial/ethnic groups among enrolled students, and were also the largest groups that earned degrees (30% and 41%, respectively). Students aged 20 to 24 were the most represented age group among those who enrolled (22%) and earned degrees (19%). Students aged 35 to 39 were the least represented age group among those who enrolled (11%). The figures below provide greater detail on the demographic profiles of students who enrolled in and completed energy, construction & utilities programs in the Bay Region.

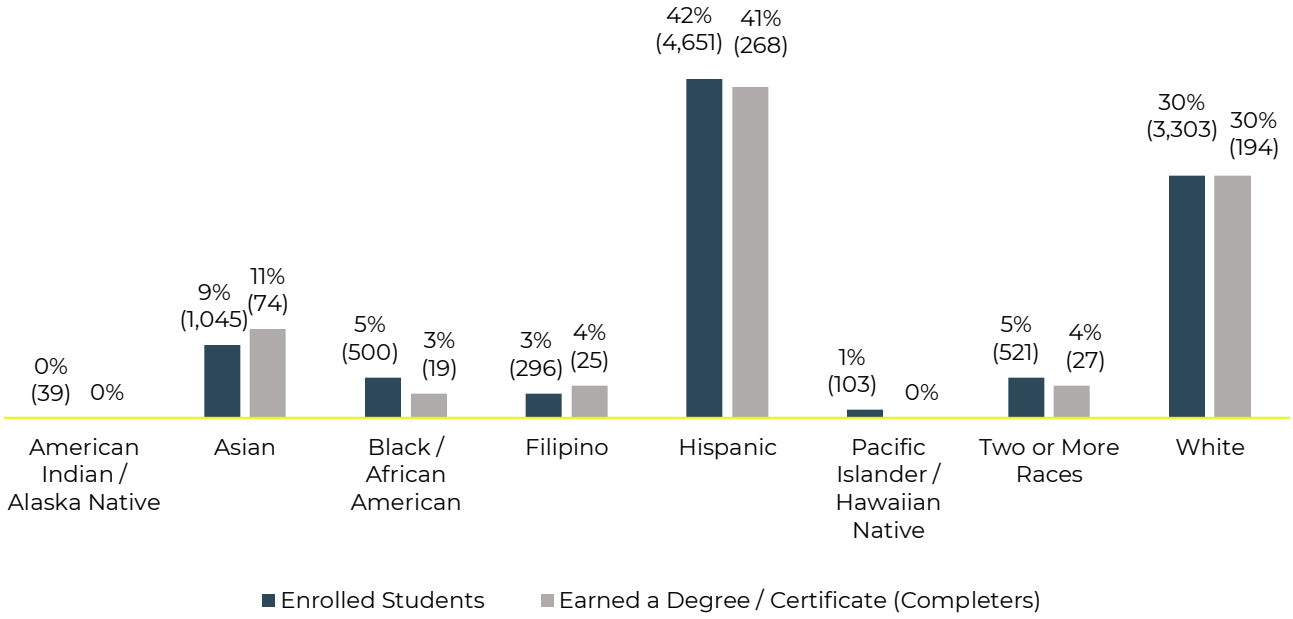
Figure 4: Gender of Students in Energy, Construction & Utilities Programs in the Bay Region (2021-22 to 2023-24)



Note: May not total 100 percent due to non-respondent/non-binary.
Source: DataVista. Program Years 2021-22 to 2023-24 Programs, Bay Region Community Colleges.

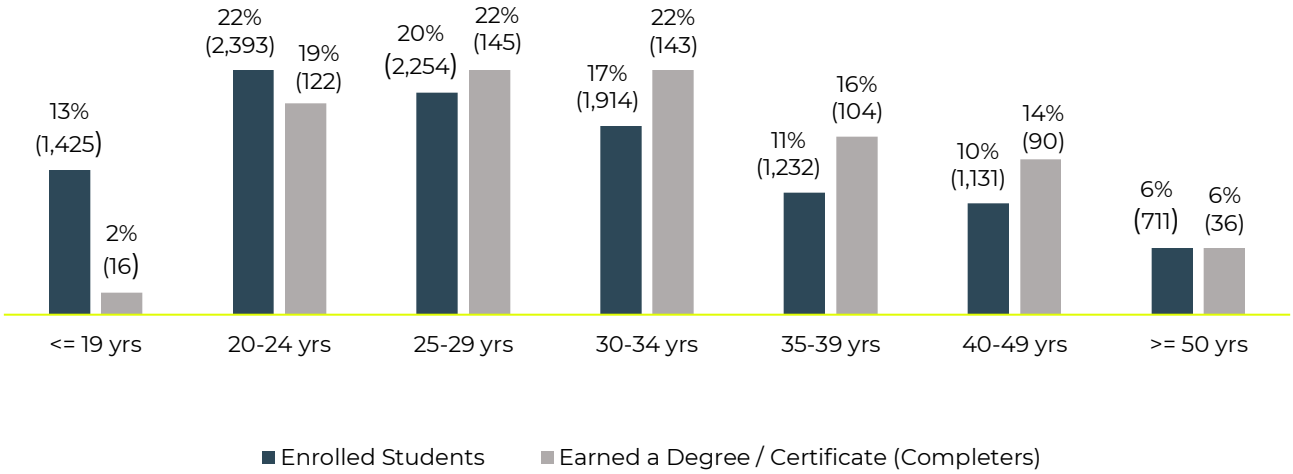
[2] This term was updated in DataVista from "non-special admit students" used in previous reports. General admit students are defined as all students who enrolled as first-time in higher education general admit credit students in at least one primary term of the selected year with a minimal credit enrollment at the selected college who are tracked for one, two, three, four and six years from first term of enrollment. https://datavista.cccco.edu/metrics/126.

Figure 5: Race/Ethnicity of Students in Energy, Construction & Utilities Programs in the Bay Region (2021-22 to 2023-24)



Note: May not total 100 percent due to non-respondent/unknown/masked values.
Source: DataVista. Program Years 2021-22 to 2023-24 Programs, Bay Region Community Colleges.

Figure 6: Ages of Students in Energy, Construction & Utilities Programs in the Bay Region (2021-22 to 2023-24)



Note: May not total 100 percent due to non-respondent/unknown/masked values.
Source: DataVista. Program Years 2021-22 to 2023-24 Programs, Bay Region Community Colleges.

Beyond Labor Market and Supply Data: Insights and Ideas to Inspire Action

Over the past few years, employment trends in the Bay Region's energy, construction, and utilities sector have shown a complex shift. While industry level data suggests a slight contraction, occupational demand continues to show a modest increase. This divergence is explained by the fundamental difference in how labor is measured: industry data tracks the types of goods or services produced, while occupational data tracks the specific work individuals perform. As businesses modernize and adopt more efficient technologies, overall industry headcount may decline even as the demand for specialized, high-skill roles continues to grow. These metrics distinguish where people work from what they do, demonstrating how a sector can experience significant internal growth despite a slight reduction in its total industrial footprint.

In this sector report, occupational data reveals that demand trends vary significantly across four key pathways. Within the energy generation and engineering pathway, demand reflects a broader transition to the regional energy system. Several occupations tied to traditional oil and gas extractions are projected to decline or slow as efficiency improvements and reduced investment lower labor needs in older fossil operations.[3] We can see this shift clearly in the data: while traditional roles are declining, there is a 33% increase in solar photovoltaic installers and 84% increase in nuclear technicians. National energy analyses support this shift, indicating that long-term capital is moving away from conventional infrastructure toward electricity based systems, contributing to reduced workforce demand in these roles.[4] For this reason, the fluctuations in this pathway should be viewed as a strategic pivot toward clean energy systems.

Closely linked to these energy shifts, the environmental and sustainability services pathway is demonstrating a clear upward trajectory. As environmental monitoring, reporting, and compliance become foundational to infrastructure projects, these roles have moved from the periphery to the center of labor the labor market. The World Economic Forum's Future of Jobs Report 2025 confirms that climate mitigation and sustainability related work are among the fastest growing areas of labor demand globally.[5] This growth reflects a localized commitment to environmental accountability and the adoption of sustainable practices across regional infrastructure efforts.

The utilities maintenance and operations pathway presents a more neutral outlook, as internal shifts within the pathway offset one another. For example, demand for telecommunications installers, particularly those focused on traditional wired infrastructure, has declined as network upgrades reach completion and newer technologies require less manual intervention.[6] However, this is balanced by steady demand for ground maintenance and landscaping services, which remains

[3] "Employment Projections: Energy-Related Occupations," U.S. Bureau of Labor Statistics, August 2025, accessed January 2026, https://www.bls.gov/news.release/pdf/ecopro.pdf.
[4] "Short-Term Energy Outlook", U.S Energy Information Administration (EIA), December 2025, accessed January 2026, https://www.eia.gov/outlooks/steo/.
[5] World Economic Forum. The Future of Jobs Report, January 2025, accessed January 2026, https://reports.weforum.org/docs/WEF_Future_of_Jobs_Report_2025.pdf.
[6] "Telecommunications Technicians," Cabling Installation and Maintenance, December 2024, accessed January 2026, https://www.cablinginstall.com/design-install/article/55251076/bls-telecommunications-technicians-pay-rose-3-last-year-10-year-outlooks-predicts-job-loss.

necessary across residential and commercial settings.[7] These tradeoffs within the pathway explain why there is no growth over the projected five-year period, despite activities within the occupational pathway.

Meanwhile, the architecture, construction, and engineering pathway has experienced a slight decline, reflecting a broader period of caution in construction labor demand. In 2025, Construction Dive reported that the job opening rate for construction occupations hit a 10-year low with over a 40% drop in openings in a single year.[8] Contractors attribute this period to fluctuation in construction spending and the fact that many companies now have stable staffing levels and are hiring less. In addition, the National Center for Construction Education and Research reports that construction companies are prioritizing artificial intelligence (AI) with over 44% of companies planning to increase their investments in AI.[9] Rather than replacing workers, these technologies serve as assistants that improve training through simulators, helping to efficiently develop the skilled workforce still needed across the industry.

Despite these localized shifts, 2025 industry outlook reports maintain a positive long-term view for the energy, construction, and utilities sector. National trends show a resilient economic outlook with utility demand rising due to electrification and the rapid expansion of data centers.[10] Research from the Public Policy Institute of California highlights that the state's transition toward cleaner energy is not necessarily shrinking the workforce, but is instead redistributing it. As traditional roles see slower growth, new opportunities in renewable energy, system modernization, and infrastructure maintenance are expanding.[11] Furthermore, the expansion of AI infrastructure and large scale data centers has created an urgent need for grid capacity and transmission upgrades.[12,13]

As AI adoption accelerates, reports claim companies are investing billions in cloud computing, data centers, and supporting energy infrastructure over the coming decade. This scale of investment is reinforcing long-term demand for electrical work, engineering, and specialized construction.[14,15] As noted by Deloitte's 2025 power and utilities outlook, firms are prioritizing operational resilience and system modernization, which reinforces long-term demand for electrical work, engineering, and specialized construction. Ultimately these dynamics suggest that the sector is undergoing a profound transformation where labor is becoming more concentrated in high-tech infrastructure and system reliability.

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[7] "Career Explorer: Grounds Maintenance Worker," Career Explorer, accessed January 2026, https://www.careerexplorer.com/careers/grounds-maintenance-worker/.
[8] "Construction Job Opening Rate Hits Near-10-year Low," Construction Dive, October 2025, accessed January 2026, https://www.constructiondive.com/news/job-opening-rate-construction-low-economy-labor/761582/.
[9] "Construction Industry Trends 2025," National Center for Construction Education and Research (NCCER), January 2025, accessed January 2026, https://www.nccer.org/newsroom/construction-industry-trends-for-2025/.
[10] "2026 Power And Utilities Industry Outlook," Deloitte Insights, October 2025, accessed January 2026, https://www.deloitte.com/us/en/insights/industry/power-and-utilities/power-and-utilities-industry-outlook.html.
[11] Needs and Opportunities," Public Policy Institute, August 2025, accessed January 2026, https://www.ppic.org/publication/californias-energy-workforce-needs-and-opportunities.
[12] "AI's Power Binge," McKinsey & Company, November 2024, accessed January 2026, https://www.mckinsey.com/featured-insights/week-in-charts/ais-power-binge.
[13] "What We Know About Energy Use At U.S Data Centers Amid AI Boom," Pew Research Center, October 2025, accessed January 2026, https://www.pewresearch.org/short-reads/2025/10/24/what-we-know-about-energy-use-at-us-data-centers-amid-the-ai-boom.
[14] "Energy and AI," IEA, April 2025, accessed January 2026, https://www.iea.org/reports/energy-and-ai.
[15] "What We Know About Energy Use at U.S Data Centers Amid the AI Boom". Pew Research Center, October 2025, accessed January 2026, https://www.pewresearch.org/short-reads/2025/10/24/what-we-know-about-energy-use-at-us-data-centers-amid-the-ai-boom/.

Appendix A: Methodology

The Bay Region COE selected the occupations in this profile by examining job descriptions and skills listed in O*Net. Labor market and job postings data was sourced from Lightcast [data 2025.3]. Online job postings included all unique job postings from January 2024 to December 2024 in the 12-county Bay Region for occupations in the energy, construction & utilities pathways specified in this report.

In addition, to evaluate industry data, the energy, construction & utilities sector included industries classified under North American Industry Classification System (NAICS) six-digit codes in Table 11. The COE selected these NAICS codes using inverse staffing patterns to determine the industries in which the occupations in this report were employed, and included industries related to energy, construction & utilities (see Table 11).

Table 11: NAICS codes for the Energy, Construction & Utilities Sector

NAICS	Description
221210	Natural Gas Distribution
236115	New Single-Family Housing Construction (except For-Sale Builders)
236116	New Multifamily Housing Construction (except For-Sale Builders)
236117	New Housing For-Sale Builders
236118	Residential Remodelers
236210	Industrial Building Construction
236220	Commercial and Institutional Building Construction
237110	Water and Sewer Line and Related Structures Construction
237120	Oil and Gas Pipeline and Related Structures Construction
237130	Power and Communication Line and Related Structures Construction
237310	Highway, Street, and Bridge Construction
237990	Other Heavy and Civil Engineering Construction
238110	Poured Concrete Foundation and Structure Contractors
238120	Structural Steel and Precast Concrete Contractors
238130	Framing Contractors
238140	Masonry Contractors
238150	Glass and Glazing Contractors
238160	Roofing Contractors
238170	Siding Contractors
238190	Other Foundation, Structure, and Building Exterior Contractors
238210	Electrical Contractors and Other Wiring Installation Contractors
238220	Plumbing, Heating, and Air-Conditioning Contractors

NAICS	Description
238290	Other Building Equipment Contractors
238310	Drywall and Insulation Contractors
238320	Painting and Wall Covering Contractors
238330	Flooring Contractors
238340	Tile and Terrazzo Contractors
238350	Finish Carpentry Contractors
238390	Other Building Finishing Contractors
238910	Site Preparation Contractors
238990	All Other Specialty Trade Contractors
324110	Petroleum Refineries
517810	All Other Telecommunications
531110	Lessors of Residential Buildings and Dwellings
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)
531210	Offices of Real Estate Agents and Brokers
541310	Architectural Services
541320	Landscape Architectural Services
541330	Engineering Services
541350	Building Inspection Services
541370	Surveying and Mapping (except Geophysical) Services
541611	Administrative Management and General Management Consulting Services
561720	Janitorial Services
561730	Landscaping Services
562910	Remediation Services

The Bay Region COE selected energy, construction & utilities programs based on DataVista's Mapping of Taxonomy of Program (TOP) Codes to Sectors.[16] To evaluate active or approved programs in Bay Region community colleges we examined data reported to the California Community Colleges Chancellor's Office Curriculum Inventory (COCI). This report included active or approved programs prior to October 2024. Educational supply data was retrieved from Data Mart for TOP data and Integrated Postsecondary Education Data System (IPEDS) for CIP data. The total number of degrees awarded for a given TOP or CIP code was calculated as a three-year average.

[16] https://datavista.cccco.edu/resources/16.

Definitions

Average Annual Job Openings: In Lightcast, average annual job openings refer to the estimated number of job openings in a given occupation or group of occupations within a specific geographic area during the course of a year. When calculating this metric for more than a year, the average across those years is determined by adding the annual job openings over the period and dividing the total by the number of years (e.g., for a five-year period, this means adding the total openings across those five years and dividing that number by 5).

This metric is calculated based on:

- New Growth: Openings that arise due to the creation of new jobs as a result of industry or economic growth.
- Replacement Needs: Openings that occur because of workers leaving the occupation (e.g., due to retirement, career changes, or other factors).

Together, these components provide a comprehensive view of the total demand for workers in a specific role or field each year.

Average Annual Replacement Jobs: Average annual projected number of replacement job openings during 2023-2028.

CIP code: The Classification of Instructional Programs (CIP) is a taxonomic coding scheme, developed by the U.S. Department of Education's National Center for Education Statistics (NCES), used to classify and categorize academic programs for federal surveys and reporting of institutional data. Program data from CIP codes comes from the Integrated Postsecondary Education Data System (IPEDS). CIP codes are used to facilitate the alignment of similar programs offered by 2- and 4-year postsecondary institutions with the needs of the labor market.

Living wage: The living wage is the hourly rate that an individual in a household must earn to support themselves and/or their family, working full-time, or 2,080 hours per year. In the Bay Region the living wage is calculated as $46 per hour for one adult and school-aged child using the average median wages across the 12 counties in the Bay Region (Table 12).[17]

Table 12. Living Wage for an Adult + School-Aged Child by County

County	Living Wage	County	Living Wage
Alameda County	$46	San Francisco County	$50
Contra Costa County	$46	San Mateo County	$57
Marin County	$55	Santa Clara County	$51
Monterey County	$44	Santa Cruz County	$59
Napa County	$44	Solano County	$39
San Benito County	$42	Sonoma County	$42

[17] "Self-Sufficiency Standard," Center for Women's Welfare, University of Washington, 2023, accessed May 9, 2025, https://selfsufficiencystandard.org/California.

NAICS codes: North American Industry Classification System (NAICS) codes are used to organize and categorize industries within the job market for this sector. A single two-digit NAICS code can represent multiple sub-sectors and industry groups within the broader sector.

Replacements as Percent of Openings: Percent of replacements of all job openings during 2023-2028.

Skill Level: Occupations are categorized into three skill levels: below middle-skill, middle-skill, and above middle-skill jobs. Classification is based on the typical entry-level education below.

Table 13. Skill Level Definition

Skill Level	Entry-Level Education
Below Middle-Skill	No formal education required
	High school diploma
Middle-Skill	Some college, no award
	Postsecondary certificate (non-degree award)
	Associate degree
	Bachelor's degree (selected occupations where ~33% or greater of positions are held by workers with less than a bachelor's degree)
Above Middle-Skill	Bachelor's degree (All other occupations not identified as middle-skill)
	Advanced degree

TOP code: The Taxonomy of Programs (TOP) is a system of codes used by the California Community College Chancellor's Office to compare differently named academic programs with similar outcomes across community colleges. Programs and courses offered by Community Colleges are assigned a TOP code to identify similar programs and their alignment with the labor market.

Unique Job Postings: Lightcast's deduplication process involves identifying duplicate job postings and counting them as a unique posting. The unique job posting count is the number of postings after the deduplication process has taken place. For example, multiple postings could list the same job, from the same company, and in the same region, and these multiple postings would be reduced to one unique job posting.

Sources

California Community Colleges Chancellor's Office Curriculum Inventory (COCI)
Chancellor's Office Management Information Systems (MIS) Data Mart
DataVista
Integrated Postsecondary Education Data System (IPEDS)
Lightcast
O*Net Online

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