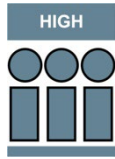


Environmental Health and Safety Occupations

Labor Market Analysis: San Diego County

September 2026

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL(S) OF EDUCATION
 Proceed with Caution	 	 	☐ Doctorate Degree ☐ Master's Degree ☒ Bachelor's Degree ☒ Associate degree ☐ Some College or Certificate ☒ HS Diploma or Equivalent ☐ Less Than a HS Diploma ☐ Apprenticeship
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	
 	HIGH 	HIGH 	

The San Diego & Imperial Center of Excellence (COE) developed this brief to assist the region's community colleges with strategic planning and program development. *Environmental Health and Safety Occupations* include "Environmental Engineering Technologists and Technicians," "Environmental Science and Protection Technicians, Including Health," "Hazardous Materials Removal Workers," "Occupational Health and Safety Specialists," and "Occupational Health and Safety Technicians." According to available data, *Environmental Health and Safety Occupations* in San Diego County have a labor market demand of 373 annual job openings (while average demand for a single occupation in San Diego County is 289 annual job openings), and 12 institutions supply an estimated 337 awards for these occupations. On average, entry-level wages are below the living wage. This brief recommends proceeding with caution when developing a new program and supports a program modification because 1) there is a supply gap; and 2) a high number of annual job openings exists for these occupations. However, average entry-level wages are below the living wage, and typical entry-level education ranges from a high school diploma to a bachelor's degree.

Introduction

This report provides labor market information in San Diego County for the following occupational codes in the Standard Occupational Classification (SOC) system:¹

- **Environmental Engineering Technologists and Technicians** (SOC 17-3025): Apply theory and principles of environmental engineering to modify, test, and operate equipment and devices used in preventing, controlling, and remediating environmental problems, including waste treatment and site remediation.
- **Environmental Science and Protection Technicians, Including Health** (SOC 19-4042): Perform laboratory and field tests to monitor the environment and investigate sources of pollution, including those that affect public health, under the direction of an environmental scientist, engineer, or other specialist.
- **Hazardous Materials Removal Workers** (SOC 47-4041): Identify, remove, pack, transport, or dispose of hazardous materials, including asbestos, lead-based paint, radioactive materials, and contaminated soil.
- **Occupational Health and Safety Specialists** (SOC 19-5011): Review, evaluate, and analyze work environments and design programs and procedures to control, eliminate, and prevent disease or injury caused by workplace hazards.
- **Occupational Health and Safety Technicians** (SOC 19-5012): Collect data on work environments and help implement programs designed to limit chemical, physical, biological, and ergonomic risks to workers.

For the purpose of this report, these occupations are referred to as *Environmental Health and Safety Occupations*.

¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for collecting, calculating, and disseminating data. [bls.gov/soc](https://www.bls.gov/soc)

Projected Occupational Demand

Between 2025 and 2030, businesses in San Diego County will need to hire 373 employees annually to fill new jobs and backfill positions made vacant through turnover and retirement (Exhibit 1). Occupational Health and Safety Specialists account for the largest share of demand, with 146 annual openings. Overall employment is projected to increase by 128 jobs, or four percent, during the five-year period.

Exhibit 1: Employment Change and Occupational Demand for *Environmental Health and Safety Occupations* in San Diego County (2025-2030)²

Occupational Title	2025 Jobs	2030 Jobs	2025-2030 Net Jobs Change	2025-2030 % Jobs Change	Annual Job Openings (Demand)
Occupational Health and Safety Specialists	1,361	1,449	88	6%	146
Environmental Science and Protection Technicians, Including Health	857	848	-10	-1%	113
Hazardous Materials Removal Workers	731	762	31	4%	76
Occupational Health and Safety Technicians	248	264	15	6%	26
Environmental Engineering Technologists and Technicians	123	126	3	3%	11
Total	3,321	3,449	128	4%	373

² Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

Earnings

According to traditional³ labor market information (LMI), entry-level hourly earnings for *Environmental Health and Safety Occupations* range from \$18.09 to \$37.95 (Exhibit 2).

Exhibit 2: Hourly Earnings for *Environmental Health and Safety Occupations* in San Diego County⁴

Occupational Title	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Occupational Health and Safety Specialists	\$37.95	\$46.74	\$58.73
Occupational Health and Safety Technicians	\$23.99	\$28.73	\$38.31
Hazardous Materials Removal Workers	\$22.20	\$25.31	\$29.75
Environmental Engineering Technologists and Technicians	\$19.46	\$25.55	\$36.76
Environmental Science and Protection Technicians, Including Health	\$18.09	\$23.89	\$36.08

On average, entry-level hourly earnings for *Environmental Health and Safety Occupations* are \$24.34—or approximately \$50,621 annually salary⁵; this is below the living wage of \$26.01 per hour for a single adult in San Diego County (Exhibit 3).⁶

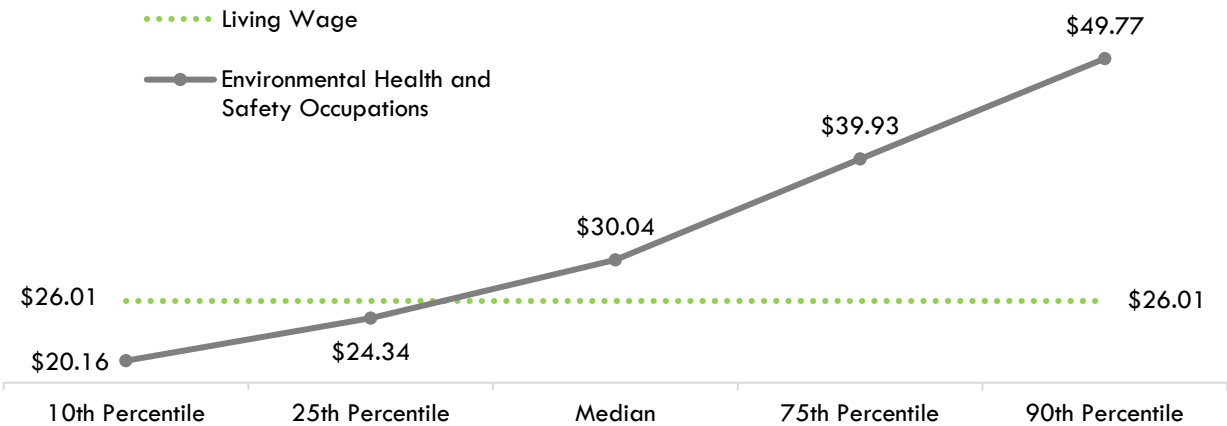
³ Traditional LMI is generally historical data captured by the U.S. Bureau of Labor Statistics (BLS) or the California Employment Development Department (EDD). It does not account for recent technological, economic, or legislative changes that may affect labor market demand and wages.

⁴ Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

⁵ Annualized salaries assume a full-time position with 2,080 work hours. Multiplying the hourly wage by 2,080 yields the annual salary.

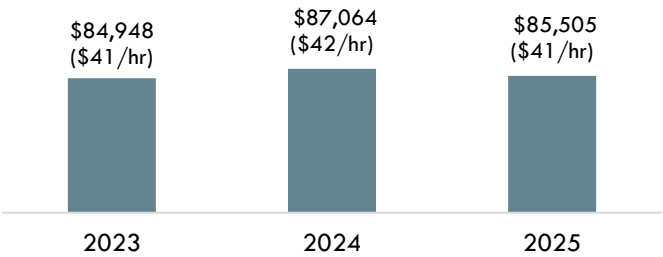
⁶ Center for Women's Welfare, University of Washington. The Self-Sufficiency Standard for California 2024. selfsufficiencystandard.org/california

Exhibit 3: Average Hourly Earnings⁷ for Environmental Health and Safety Occupations in San Diego County ⁸



In online job postings, employers also advertised between \$41 and \$42 per hour between January 1, 2023 and December 31, 2025 for *Environmental Health and Safety Occupations* in San Diego County (Exhibit 4).⁹ This suggests that employer-advertised wages in online job postings were above the entry-level wages reported in traditional labor market information and fluctuated over the period analyzed.

Exhibit 4: Entry-Level Advertised Salaries in Online Job Postings for Environmental Health and Safety Occupations in San Diego County (2023-2025)



⁷ 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

⁸ The 10th and 25th percentiles may be considered entry-level wages; the 75th and 90th percentiles may be considered experienced wages.

⁹ Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

Expected Level of Education

According to traditional LMI reported to the California Employment Development Department and U.S. Bureau of Labor Statistics, *Environmental Health and Safety Occupations* typically require either a [high school diploma or equivalent](#), an [associate degree](#), or a [bachelor's degree](#) for entry-level employment (Exhibit 5).¹⁰

Exhibit 5: National Educational Attainment for *Environmental Health and Safety Occupations*¹¹

Occupational Title	Typical Entry-Level Education
Occupational Health and Safety Specialists	Bachelor's degree
Environmental Engineering Technologists and Technicians	Associate degree
Environmental Science and Protection Technicians, Including Health	Associate degree
Hazardous Materials Removal Workers	High school diploma or equivalent
Occupational Health and Safety Technicians	High school diploma or equivalent

¹⁰ Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

¹¹ Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

Similarly, a [bachelor's degree](#) was the most requested listed educational requirement in online job postings for *Environmental Health and Safety Occupations* in San Diego County between January 1, 2023 and December 31, 2025. Employers also requested the certifications shown in Exhibit 6, including Certified Safety Professional, cardiopulmonary resuscitation, first aid, and Occupational Safety and Health Administration qualifications.

Exhibit 6: Top Certifications for *Environmental Health and Safety Occupations* in San Diego County in Online Job Postings (2023-2025)¹²

- | | |
|---|---|
| 1. Certified Safety Professional | 6. Certified Industrial Hygienist (CIH) |
| 2. Cardiopulmonary Resuscitation (CPR) Certification | 7. Automated External Defibrillator (AED) Certification |
| 3. First Aid Certification | 8. Security Clearance |
| 4. 30-Hour Occupational Safety and Health Administration (OSHA) General Industry Card | 9. Basic Life Support (BLS) Certification |
| 5. Construction Health and Safety Technician | 10. Occupational Hygiene and Safety Technician (OHST) |

¹² Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes. There are **four** TOP codes and **eight** CIP codes related to *Environmental Health and Safety Occupations* (Exhibit 7).

Exhibit 7: Related TOP and CIP Codes for *Environmental Health and Safety Occupations*¹³

TOP or CIP Code	TOP or CIP Program Title
TOP 0301.00	Environmental Science
TOP 0302.00	Environmental Studies
TOP 0303.00	Environmental Technology
TOP 0956.70	Industrial and Occupational Safety and Health
CIP 03.0103	Environmental Studies
CIP 03.0104	Environmental Science
CIP 15.0507	Environmental/Environmental Engineering Technology/Technician
CIP 15.0508	Hazardous Materials Management and Waste Technology/Technician
CIP 15.0701	Occupational Safety and Health Technology/Technician
CIP 15.0703	Industrial Safety Technology/Technician
CIP 15.0704	Hazardous Materials Information Systems Technology/Technician
CIP 15.0705	Process Safety Technology/Technician

¹³ California Community Colleges Chancellor's Office TOP-CIP crosswalk and confirmed program-code selection for this analysis.

According to TOP data, six community colleges supply the region with awards for these occupations: Cuyamaca College, MiraCosta College, Palomar College, San Diego City College, San Diego Mesa College, and Southwestern College. According to CIP data, six non-community-college institutions supply the region with awards: California State University-San Marcos, Point Loma Nazarene University, San Diego State University, The University of Arizona Global Campus, University of California-San Diego, and University of San Diego. Combined, the 12 institutions confer an average of 337 awards annually (Exhibit 8). Displayed subgroup totals may differ by one due to rounding.

**Exhibit 8: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions
(Program Year 2022-23 Through Program Year 2024-25 Average)¹⁴**

TOP or CIP Code	TOP or CIP Program Title	3-Year Annual Average Community College Awards (2022-23 to 2024-25)	Other Institutions 3-Year Average Awards (2022-23 to 2024-25)	Total Average Supply (2022-23 to 2024-25)
0302.00	Environmental Studies	17	0	17
	MiraCosta	3	0	
	• Certificate 30 < 60 units	3	0	
	Palomar	6	0	
	• Certificate 16 < 30 units	6	0	
	San Diego City	3	0	
	• Associate degree	3	0	
	San Diego Mesa	6	0	
	• Associate degree	6	0	
0303.00	Environmental Technology	23	0	23
	Cuyamaca	18	0	
	• Associate degree	12	0	
	• Certificate 30 < 60 units	4	0	
	• Certificate 16 < 30 units	2	0	
	San Diego City	1	0	
	• Certificate 16 < 30 units	1	0	
	Southwestern	4	0	

¹⁴ California Community Colleges Chancellor's Office Data Mart, program years 2022-23 through 2024-25; National Center for Education Statistics, Integrated Postsecondary Education Data System completions, academic years 2022-23 through 2024-25. Community-college awards were counted by TOP code and excluded from CIP totals to prevent double counting. Averages and components are rounded; displayed rows may not sum exactly to program totals.

TOP or CIP Code	TOP or CIP Program Title	3-Year Annual Average Community College Awards (2022-23 to 2024-25)	Other Institutions 3-Year Average Awards (2022-23 to 2024-25)	Total Average Supply (2022-23 to 2024-25)
0956.70	Industrial and Occupational Safety and Health	16	0	16
	Cuyamaca	11	0	
	• Associate degree	5	0	
	• Certificate 30 < 60 units	1	0	
	• Certificate 16 < 30 units	4	0	
	Southwestern	5	0	
	• Associate degree	3	0	
	• Certificate 16 < 30 units	2	0	
03.0103	Environmental Studies	0	195	195
	California State University-San Marcos	0	43	
	• Bachelor's degree	0	43	
	Point Loma Nazarene University	0	7	
	• Bachelor's degree	0	7	
	San Diego State University	0	64	
	• Bachelor's degree	0	64	
	The University of Arizona Global Campus	0	8	
	• Bachelor's degree	0	8	
	University of California-San Diego	0	73	
	• Bachelor's degree	0	73	
03.0104	Environmental Science	0	86	86
	Point Loma Nazarene University	0	4	
	• Bachelor's degree	0	4	
	San Diego State University	0	39	
	• Bachelor's degree	0	39	
	University of San Diego	0	43	
	• Bachelor's degree and master's degree	0	43	
	Total	56	281	337

Demand vs. Supply

Comparing labor demand with labor supply¹⁵ suggests that there is a supply gap for these occupations in San Diego County, with 373 annual openings and 337 average annual awards. Comparatively, there are 4,240 annual openings in California and 3,710 annual awards, suggesting a statewide supply gap (Exhibit 9).¹⁶

Exhibit 9: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

	Demand (Annual Openings)	Supply (Average Annual Awards)	Supply Gap or Oversupply
San Diego	373	337	36
California	4,240	3,710	530

Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

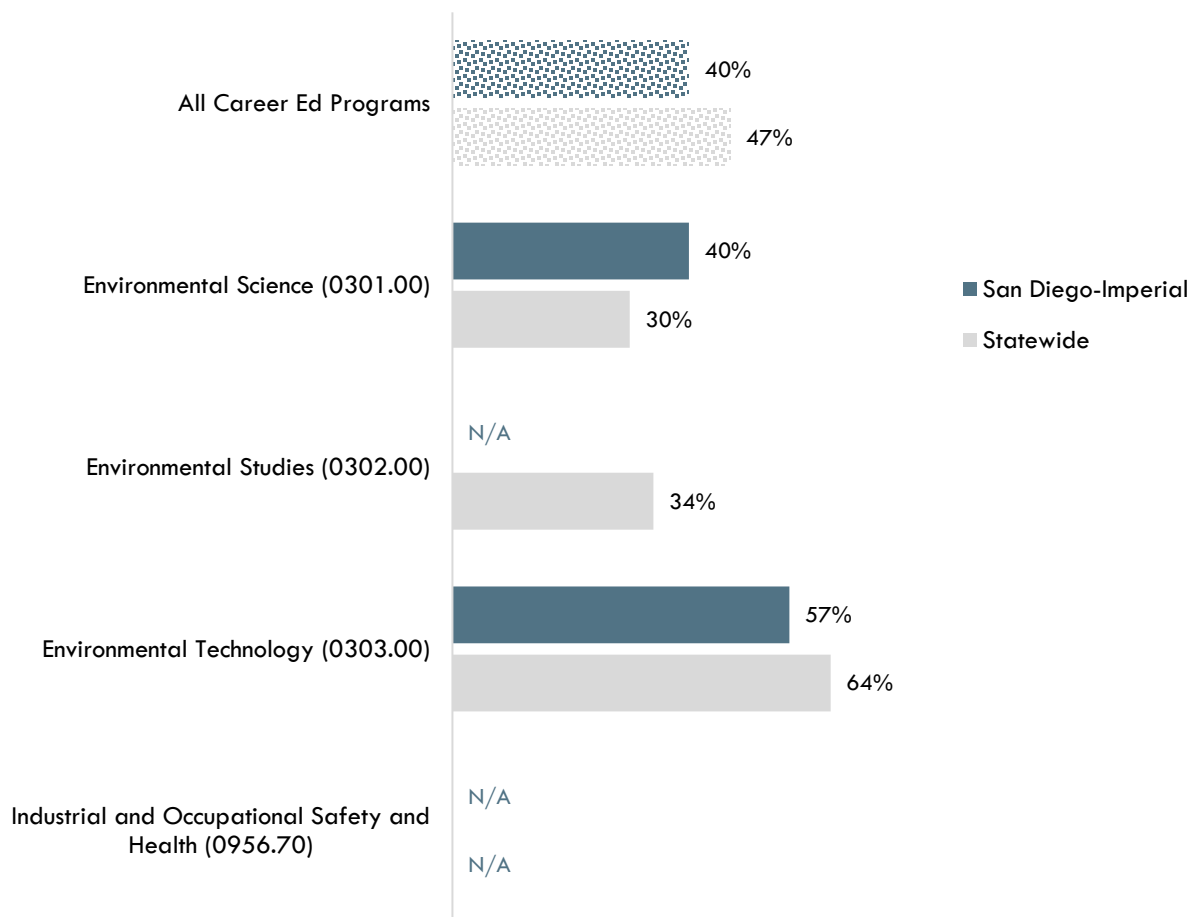
¹⁵ Labor supply can be found from two different sources: Lightcast or the California Community Colleges Chancellor's Office MIS Data Mart. Lightcast uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

¹⁶ Supply and Demand," Centers of Excellence Student Outcomes, coeccc.net/our-resources.

Student Outcomes and Regional Comparisons

According to the California Community Colleges DataVista, available San Diego-Imperial outcomes show that 40% to 57% of students earned a living wage after completing a related program, compared with 30% to 64% statewide. The comparable rates for all Career Education programs were 40% in the region and 47% statewide (Exhibit 10).¹⁷

Exhibit 10: Percentage of Students Who Earned a Living Wage by Program, PY2023-24¹⁸



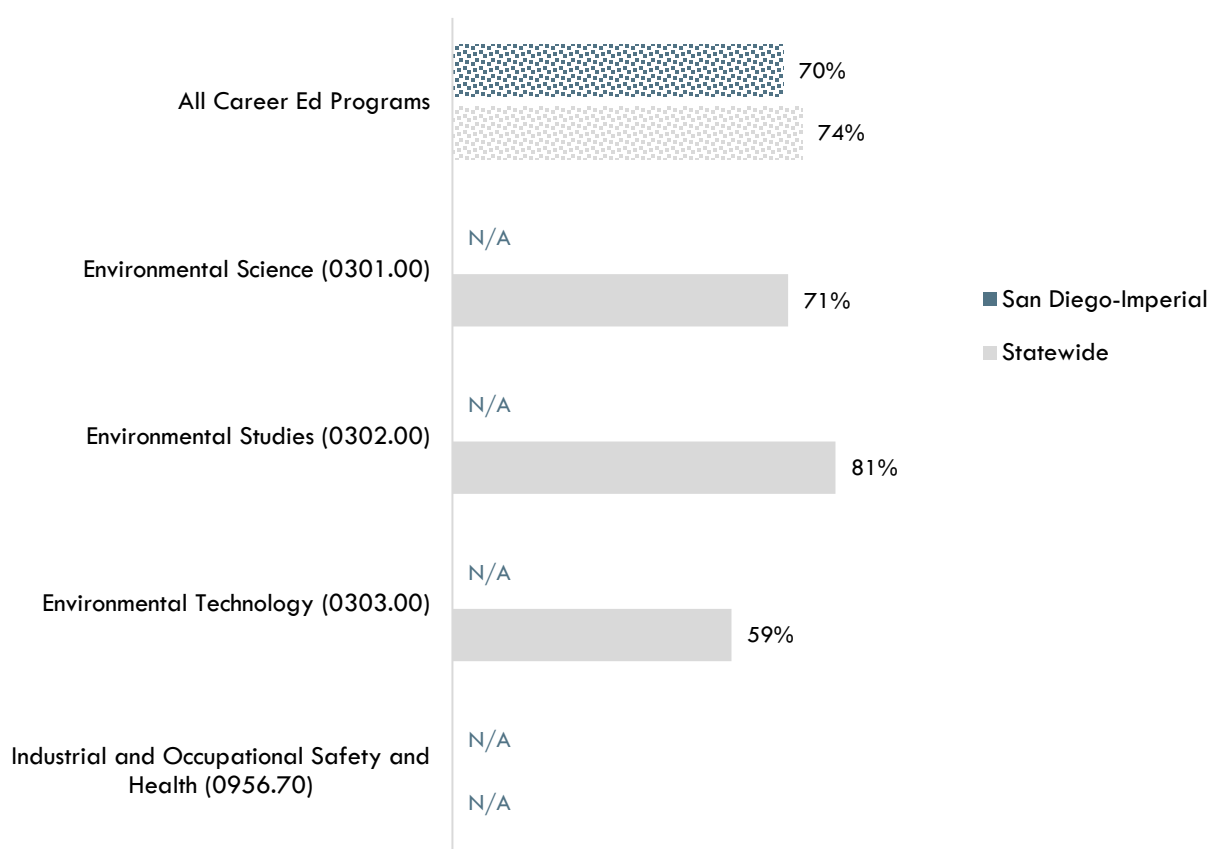
"N/A" indicates insufficient data.

¹⁷ DataVista, California Community Colleges, datavista.cccco.edu/.

¹⁸ Most recent year with available data is Program Year 2023-24. Among completers and skills builders who exited, the percentage of students who attained a living wage.

According to DataVista, program-specific outcomes for employment in a job closely related to the field of study were insufficient for the related programs shown in the San Diego-Imperial region. Statewide, available outcomes ranged from 59% to 81%. The comparable rates for all Career Education programs were 70% in the region and 74% statewide (Exhibit 11).¹⁹

Exhibit 11: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2022-23²⁰



"N/A" indicates insufficient data.

¹⁹ DataVista, California Community Colleges, datavista.cccco.edu/.

²⁰ Most recent year with available data is Program Year 2022-23. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

Employers

Between January 1, 2023 and December 31, 2025, the top employers in San Diego County for *Environmental Health and Safety Occupations* included [County of San Diego](#), [Transdev](#), [State of California](#), [University of California](#), and [City of San Diego](#), based on online job postings (Exhibit 12).

Exhibit 12: Top Employers for *Environmental Health and Safety Occupations* in San Diego County²¹

Top Employers	
• County of San Diego • Transdev • State of California • University of California • City of San Diego	• Clean Harbors • General Dynamics • Amazon • Siemens • Sodexo

Skills

Exhibit 13 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2023 and December 31, 2025.

Exhibit 13: Top Skills for *Environmental Health and Safety Occupations* in San Diego County²²

Specialized Skills	Soft Skills	Software Skills
• Occupational Safety and Health Administration • Environment Health and Safety • Occupational Safety and Health • Auditing • Safety Training • Project Management • Risk Analysis • Construction • Risk Management • Emergency Response	• Communication • Management • Operations • Investigation • Leadership • Detail Oriented • Planning • Interpersonal Communications • Coordinating • Customer Service	• Microsoft Office • Microsoft Excel • Microsoft PowerPoint

²¹ Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

²² Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025. Skills must populate in at least 10% of job postings to be listed.

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All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the California Community Colleges Centers of Excellence (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.