



Labor Market Analysis for Program Modification IT Customer Support Apprentice Occupations Cabrillo College

Prepared by Bay Regions Center of Excellence for Labor Market Research

October 2024

Recommendation

Based on all available data, there appears to be an “undersupply” of IT Customer Support Apprentice Certificate workers compared to the demand for this cluster of occupations in the Bay Region and in the SC-Monterey sub-region (Monterey, San Benito, Santa Cruz counties). There is a projected annual gap of about 1,731 students in the Bay Region and 29 students in the SC-Monterey Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 0708.20 - Computer Support programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Cabrillo College and in the region.

This report profiles IT Customer Support Apprentice Occupations in the 12 county Bay region and in the SC-Monterey sub-region for program modification at Cabrillo College.

- Computer User Support Specialists (15-1232):** Provide technical assistance to computer users. Answer questions or resolve computer problems for clients in person, via telephone, or electronically. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.
 Entry-Level Educational Requirement: Some college, no degree
 Training Requirement: None
 Percentage of Community College Award Holders or Some Postsecondary Coursework: 39%

Occupational Demand

Table 1. Employment Outlook for IT Customer Support Apprentice Occupations in Bay Region

Occupation	2023 Jobs	2028 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Computer User Support Specialists	18,675	21,083	2,408	13%	8,978	1,796	\$29	\$38
Total	18,675	21,083	2,408	13%	8,978	1,796	\$29	\$38

Source: Lightcast 2024.3

Bay Region includes: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Occupation	2023 Jobs	2028 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
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Table 2. Employment Outlook for IT Customer Support Apprentice Occupations in SC-Monterey Sub-Region

Occupation	2023 Jobs	2028 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Computer User Support Specialists	611	635	24	4%	231	46	\$27	\$33
Total	611	635	24	4%	231	46	\$27	\$33

Source: Lightcast 2024.3

SC-Monterey Sub-Region includes: Monterey, San Benito, Santa Cruz Counties

Job Postings in Bay Region and SC-Monterey Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (Oct. 2023 - Sep. 2024)

Occupation	Bay Region	SC-Monterey
Computer User Support Specialists	6,128	283

Source: Lightcast

Table 4a. Top Job Titles for IT Customer Support Apprentice Occupations for latest 12 months (Oct. 2023 - Sep. 2024) Bay Region

Title	Bay	Title	Bay
Desktop Support Technicians	303	Genius Administrators	71
IT Specialists	245	Help Desk Analysts	69
Technical Support Engineers	206	Computer Technicians	59
IT Support Specialists	199	Desktop Support Analysts	59
Desktop Support Managers	124	Help Desk Specialists	59
Help Desk Technicians	102	IT Help Desk Technicians	59
IT Support Technicians	100	IT Support Engineers	57
Cyberspace Operations Officers	97	Desktop Support Specialists	55
Technical Support Specialists	81	IT Engineers	51

Source: Lightcast

Table 4b. Top Job Titles for IT Customer Support Apprentice Occupations for latest 12 months (Oct. 2023 - Sep. 2024) SC-Monterey Sub-Region

Title	SC-Monterey	Title	SC-Monterey
IT Specialists	21	IT Specialists Appsw	6
IT Support Specialists	13	IT Specialists/System Administrators	6
Cyberspace Operations Officers	11	IT Technicians	6
Service Desk Technicians	11	Policy and Planning IT Specialists	6
Computer Technicians	8	Technical Support Specialists	5
IT Support Technicians	8	Field Technical Support Representatives	4
Field Installation Technicians	6	Help Desk Leads	4
Genius Administrators	6	Data Management Specialists	3
Help Desk Technicians	6	Desktop Support Analysts	3

Source: Lightcast

Industry Concentration

Table 5. Industries hiring IT Customer Support Apprentice Certificate Workers in Bay Region

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2023)	Jobs in Industry (2028)	% Change (2023-28)	% Occupation Group in Industry (2023)
Custom Computer Programming Services	4,436	5,591	26%	24%
Computer Systems Design Services	1,939	2,085	8%	10%
Software Publishers	1,714	1,996	16%	9%
Data Processing, Hosting, and Related Services	1,161	1,600	38%	6%
Electronic Computer Manufacturing	461	528	14%	2%
Corporate, Subsidiary, and Regional Managing Offices	431	413	-4%	2%
Colleges, Universities, and Professional Schools	408	433	6%	2%
Elementary and Secondary Schools (Local Government)	406	426	5%	2%
Web Search Portals and All Other Information Services	399	419	5%	2%
Temporary Help Services	397	373	-6%	2%

Source: Lightcast 2024.3

Table 6. Top Employers Posting IT Customer Support Apprentice Occupations in Bay Region and SC-Monterey Sub-Region (Oct. 2023 - Sep. 2024)

Employer	Bay	Employer	SC-Monterey
Apple	272	Apple	14
Robert Half	80	Department Of Defense	14
Allegis Group	70	Lintech Global	12
Year Up	70	Dish	9
Insight Global	68	County Of Santa Cruz	8
TEKsystems	61	TEKsystems	7

Source: Lightcast

Educational Supply

There are nine community colleges in the Bay Region issuing 51 awards on average annually (last 3 years ending 2021-23) on TOP 0708.20 - Computer Support. In the SC-Monterey Sub-Region, there are two community colleges that issued 17 awards on average annually (last 3 years) on this TOP code.

There are two other CTE educational institutions in the Bay Region issuing 14 awards on average annually (last 3 years ending 2020-22) on CIP 11.1006- Computer Support Specialist. There are no other CTE educational institution in the SC-Monterey Sub-Region issuing awards on average annually (last 3 years) on this CIP code.

Table 7a. Community College Awards on TOP 0708.20 - Computer Support in Bay Region

College	Subregion	Associate Degree	Low unit Certificate	Total
Cabrillo	SC-Monterey	2	13	15
Contra Costa	East Bay	0	1	1
Deanza	Silicon Valley	0	6	6
Las Positas	East Bay	0	2	2
Monterey	SC-Monterey	0	2	2
Ohlone	East Bay	1	8	9
San Francisco	Mid-Peninsula	0	2	2
Santa Rosa	North Bay	0	11	11
Skyline	Mid-Peninsula	0	3	3
Total	-	3	48	51

Source: Data Mart

Note: The annual average for awards is 2020-21 to 2022-23.

Table 7b. Other CTE Institutions Awards on CIP 11.1006- Computer Support Specialist. in Bay Region

College	Subregion	Certificates of less than 1 year
CET-San Jose	Silicon Valley	12
Empire College	North Bay	2
Total	-	14

Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 1,796 annual openings for the IT Customer Support Apprentice Certificate occupational cluster and 65 annual (3-year average) awards for an annual undersupply of 1,731 students. In the SC-Monterey Sub-Region, there is also a gap with 46 annual openings and 17 annual (3-year average) awards for an annual undersupply of 29 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0708.20 - Computer Support

Metric Outcomes	Bay All CTE Program	Cabrillo College All CTE Program	State 0708.20	Bay 0708.20	SC-Monterey 0708.20	Cabrillo College 0708.20
Students with a Job Closely Related to Their Field of Study	74%	80%	70%	62%	NA	NA
Median Annual Earnings for SWP Exiting Students	\$53,090	\$46,381	\$45,134	\$45,860	\$46,326	\$52,741
Median Change in Earnings for SWP Exiting Students	24%	23%	16%	26%	31%	46%
Exiting Students Who Attained the Living Wage	54%	44%	56%	46%	NA	NA

Source: Launchboard Strong Workforce Program Median of 2018 to 2021.

Skills, Certifications and Education

Table 9. Job Postings Top Skills for IT Customer Support Apprentice Occupations in Bay Region (Oct. 2023 - Sep. 2024)

Skill	Postin g	Skill	Postin g
Technical Support	1,773	Project Management	615
Help Desk Support	1,341	Issue Tracking	581
Operating Systems	1,306	ServiceNow	554
Computer Science	1,228	Customer Support	542
Desktop Support	1,101	Apple IOS	537
Active Directory	912	Virtual Private Networks (VPN)	526
Peripheral Devices	783	Linux	520
Mac OS	716	Microsoft Windows 10	513
Computer Hardware	711	Automation	506

Skill	Posting	Skill	Posting
Microsoft Office 365	620	Local Area Networks	461

Source: Lightcast

Table 10. Job Postings Certifications for IT Customer Support Apprentice Occupations in Bay Region (Oct. 2023 - Sep. 2024)

Certification	Posting	Certification	Posting
Microsoft Certified Professional	194	ITIL Certifications	66
Cisco Certified Network Associate	147	GIAC Certifications	27
ITIL Foundation Certification	68		

Source: Lightcast

Table 11. Education Requirements for IT Customer Support Apprentice Occupations in Bay Region

Education Level	Job Postings	% of Total
High school or GED	762	19%
other	572	14%
Bachelor's degree & higher	2,783	68%

Source: Lightcast

Note: 49% of records have been excluded because they do not include a degree level. As a result, the chart above may not be representative of the full sample.

Methodology

Occupations for this report were identified by use of job descriptions and skills listed in O*Net. Labor demand data is sourced from Lightcast occupation and job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CCCCCO Data Mart and CTE Launchboard.

Sources

O*Net Online
 Lightcast
 CTE LaunchBoard www.calpassplus.org
 Launchboard
 Statewide CTE Outcomes Survey
 Employment Development Department Unemployment Insurance Dataset
 Living Insight Center for Community Economic Development
 Chancellor's Office MIS system

Contacts

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