Labor Market Analysis for Program Recommendation
Technical Theatre Certificate of Achievement Occupations
Cabrillo College

Prepared by the Bay Region Center of Excellence for Labor Market Research

November 2024

Recommendation

Based on all available data, there appears to be an "undersupply" of Technical Theatre Certificate of Achievement 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 340 students in the Bay Region and 19 students in the SC-Monterey Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 1006.00 - Technical Theater 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 Technical Theatre Certificate of Achievement Occupations in the 12 county Bay Region and in the SC-Monterey Sub-Region for program recommendation at Cabrillo College.

- **Set and Exhibit Designers (27-1027):** Design special exhibits and sets for film, video, television, and theater productions. May study scripts, confer with directors, and conduct research to determine appropriate architectural styles.
  Entry-Level Educational Requirement: Bachelor's degree
  Training Requirement: None
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 28%

- **Audio and Video Technicians (27-4011):** Set up, maintain, and dismantle audio and video equipment, such as microphones, sound speakers, connecting wires and cables, sound and mixing boards, video cameras, video monitors and servers, and related electronic equipment for live or recorded events, such as concerts, meetings, conventions, presentations, podcasts, news conferences, and sporting events.
  Entry-Level Educational Requirement: Postsecondary nondegree award
  Training Requirement: Short-term on-the-job training
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 39%

- **Lighting Technicians (27-4015):** Set up, maintain, and dismantle light fixtures, lighting control devices, and the associated lighting electrical and rigging equipment used for photography, television, film, video, and live productions. May focus or operate light fixtures or attach color filters or other lighting accessories.
  Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Short-term on-the-job training

Percentage of Community College Award Holders or Some Postsecondary Coursework: 39%

Occupational Demand

Table 1. Employment Outlook for Technical Theatre Certificate of Achievement Occupations in the 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
Set and Exhibit Designers	677	646	-31	-5%	293	59	$21	$28
Audio and Video Technicians	2,649	2,829	180	7%	1,410	282	$21	$28
Lighting Technicians	276	299	23	8%	150	30	$23	$33
Total	**3,602**	**3,774**	**172**	**5%**	**1,853**	**371**	**$21**	**$28**

Source: Lightcast 2024.3

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

Table 2. Employment Outlook for Technical Theatre Certificate of Achievement Occupations in the 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
Set and Exhibit Designers	30	28	-3	-9%	12	2	$15	$30
Audio and Video Technicians	162	170	9	5%	84	17	$22	$25
Lighting Technicians	0	10	0	0%	0	0	$19	$28
Total	**192**	**208**	**16**	**8%**	**96**	**19**	**$19**	**$28**

Source: Lightcast 2024.3

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

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

Table 3. Number of Job Postings by Occupation for the latest 12 months

Occupation	Bay Region	SC-Monterey
Audio and Video Technicians	790	38
Set and Exhibit Designers	59	7
Lighting Technicians	56	1

Source: Lightcast 2024.4; "Job Posting Analytics." Nov. 2023 - Oct. 2024

Table 4a. Top Job Titles in Job Postings for Technical Theatre Certificate of Achievement Occupations in the Bay Region

Title	Bay	Title	Bay
Audiovisual Technicians	291	Management Services Technicians	12
Audiovisual Specialists	27	Remodel Associates	11
Audio/Video Technicians	22	Audiovisual/IT Technicians	10
Video Technicians	20	Broadcast Supervisors	9
Audio Visual Managers	16	On-Site Coordinators	9
Installation Technicians	14	Entertainment Technicians	8
Event Technicians	13	Front End Supervisors	8
Lighting Technicians	13	IT Service Technicians	8
Support Technicians	13	Stage Technicians	8

Source: Lightcast 2024.4; "Job Posting Analytics." Nov. 2023 - Oct. 2024

Table 4b. Top Job Titles in Job Posting for Technical Theatre Certificate of Achievement Occupations in the SC-Monterey Sub-Region

Title	SC-Monterey	Title	SC-Monterey
Audiovisual Technicians	14	Dynamics Engineers	1
Audio/Video Technicians	5	Exhibit Fabricators	1
Exhibit Developers	4	Exhibition Designers	1
Event Technicians	3	IT Service Technicians	1
Conference Staff	2	IT Support Associates	1
Front End Supervisors	2	Installer Technicians	1
Installation Technicians	2	Retail Product Specialists	1
Aquarists	1	Team Associates	1
Audio Visual Managers	1	VTC Technicians	1

Source: Lightcast 2024.4; "Job Posting Analytics." Nov. 2023 - Oct. 2024

Industry Concentration

Table 5. Industries Hiring for Technical Theatre Certificate of Achievement Occupations in the 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)
Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers	463	491	6%	13%

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)
Motion Picture and Video Production	320	327	2%	9%
Religious Organizations	185	177	-4%	5%
Promoters of Performing Arts, Sports, and Similar Events with Facilities	148	186	26%	4%
Theater Companies and Dinner Theaters	146	158	8%	4%
Independent Artists, Writers, and Performers	138	148	7%	4%
Colleges, Universities, and Professional Schools	124	134	8%	3%
Local Government, Excluding Education and Hospitals	84	87	4%	2%
Colleges, Universities, and Professional Schools (State Government)	81	80	-1%	2%
Teleproduction and Other Postproduction Services	80	87	9%	2%

Source: Lightcast 2024.4

Table 6. Top Employers Posting Technical Theatre Certificate of Achievement Occupations in the Bay Region and the SC-Monterey Sub-Region

Employer	Bay	Employer	SC-Monterey
Walmart	36	Monterey Bay Aquarium	7
Eos Group	32	Mount Hermon Association	6
Pinnacle Live	25	Pebble Beach Resorts	5
Diversified Agency	18	Five Star Audio Visual	3
Encore Global	16	Walmart	3
Apple	15	Encore	2

Source: Lightcast 2024.4; "Job Posting Analytics." Nov. 2023 - Oct. 2024

Educational Supply

There are five community colleges in the Bay Region issuing 31 awards on average annually (last 3 years ending 2021-23) on TOP 1006.00 - Technical Theater. In the SC-Monterey Sub-Region, there are no community colleges that issued awards on average annually (last 3 years) on this TOP code.

Table 7. Community College Awards on TOP 1006.00 - Technical Theater in the Bay Region

College	Subregion	Associate Degree	Low unit Certificate	Total
Diablo Valley	East Bay	5	4	9

College	Subregion	Associate Degree	Low unit Certificate	Total
Foothill	Silicon Valley	2	0	2
Las Positas	East Bay	0	1	1
Ohlone	East Bay	1	0	1
Santa Rosa	North Bay	0	18	18
Total	**-**	**8**	**23**	**31**

Source: Data Mart

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

Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay Region with 371 annual openings for the Technical Theatre Certificate of Achievement occupational cluster and 31 annual (3-year average) awards for an annual undersupply of 340 students. In the SC-Monterey Sub-Region, there is also a gap with 19 annual openings and no annual (3-year average) awards for an annual undersupply of 19 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1006.00 - Technical Theater

Metric Outcomes	Bay All CTE Program	Cabrillo College All CTE Program	State 1006.00	Bay 1006.00	SC-Monterey 1006.00	Cabrillo College1006.00
Students with a Job Closely Related to Their Field of Study	74%	80%	55%	57%	NA	NA
Median Annual Earnings for SWP Exiting Students	$53,090	$46,381	$23,142	$27,874	NA	NA
Median Change in Earnings for SWP Exiting Students	24%	23%	40%	46%	NA	NA
Exiting Students Who Attained the Living Wage	54%	44%	23%	19%	NA	NA

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

Skills and Education

Table 9. Top Skills in Job Postings for Technical Theatre Certificate of Achievement Occupations in the Bay Region

Skill	Posting	Skill	Posting
Crestron (A/V Systems)	149	Low Voltage	66
Zoom (Video Conferencing Tool)	137	Computer Hardware	63
Project Management	120	Cisco WebEx	58
Audio-Visual Technology	94	Invoicing	50
Control Systems	92	Auditing	49

Skill	Posting	Skill	Posting
Microsoft Teams	88	Peripheral Devices	48
Digital Signage	76	Audio Systems	46
Video Production	75	Effective Communication	43
Electrical Wiring	73	Computer Science	42
Audiovisual Equipment	66	Hand Tools	42

Source: Lightcast 2024.4; "Job Posting Analytics." Nov. 2023 - Oct. 2024

Table 10. Education Requirements for Technical Theatre Certificate of Achievement Occupations in the Bay Region

Education Level	Job Postings	% of Total
High school or GED	202	37%
Associate degree	97	18%
Bachelor's degree & higher	246	45%

Source: Lightcast 2024.4; "Job Posting Analytics." Nov. 2023 - Oct. 2024

Note: 52% 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 CCCCO 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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