



Labor Market Analysis for Program Recommendation

Music Production Occupations

Cabrillo College

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research
June 2022

Recommendation

Based on all available data, there appears to be an “undersupply” of Music Production 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 521 students in the Bay region and 33 students in the SC-Monterey Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 1005.00 Commercial Music 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 Music Production Occupations in the 12 county Bay region and in the SC-Monterey sub-region for a Regional program recommendation for Cabrillo College.

- **Music Directors and Composers (27-2041):** Conduct, direct, plan, and lead instrumental or vocal performances by musical groups, such as orchestras, bands, choirs, and glee clubs. Includes arrangers, composers, choral directors, and orchestrators.
Entry-Level Educational Requirement: Bachelor’s degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 18%
- **Broadcast Announcers and Radio Disc Jockeys (27-3011):** Speak or read from scripted materials, such as news reports or commercial messages, on radio or television. May announce artist or title of performance, identify station, or interview guests. Excludes “Broadcast News Analysts” (27-3021).
Entry-Level Educational Requirement: Bachelor’s degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 32%
- **Audio and Video Technicians (27-4011):** Set up, or set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards, and related electronic equipment for concerts, sports events, meetings and conventions, presentations, and news conferences. May also set up and operate associated spotlights and other custom lighting systems. Excludes “Sound Engineering Technicians” (27-4014).
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%

- **Sound Engineering Technicians (27-4014):** Operate machines and equipment to record, synchronize, mix, or reproduce music, voices, or sound effects in sporting arenas, theater productions, recording studios, or movie and video productions.

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%

Occupational Demand

Table 1. Employment Outlook for Music Production Occupations in Bay Region

| Occupation | 2020 Jobs | 2025 Jobs | 5-yr Change | 5-yr % Change | 5-yr Total Openings | Annual Openings | 25% Hourly Earning | Median Hourly Wage |
|---------------------------------------------|--------------|--------------|-------------|---------------|---------------------|-----------------|--------------------|--------------------|
| Music Directors and Composers | 1,386 | 1,406 | 19 | 1% | 840 | 168 | \$16 | \$27 |
| Broadcast Announcers and Radio Disc Jockeys | 803 | 764 | -39 | -5% | 411 | 82 | \$18 | \$31 |
| Audio and Video Technicians | 2,729 | 3,050 | 321 | 12% | 1,749 | 350 | \$21 | \$28 |
| Sound Engineering Technicians | 558 | 635 | 77 | 14% | 373 | 75 | \$21 | \$30 |
| Total | 5,476 | 5,855 | 378 | 7% | 3,373 | 675 | | |

Source: EMSI 2021.4

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 Music Production Occupations in SC-Monterey Sub-region

| Occupation | 2020 Jobs | 2025 Jobs | 5-yr Change | 5-yr % Change | 5-yr Total Openings | Annual Openings | 25% Hourly Earning | Median Hourly Wage |
|---------------------------------------------|------------|------------|-------------|---------------|---------------------|-----------------|--------------------|--------------------|
| Music Directors and Composers | 85 | 83 | -1 | -2% | 50 | 10 | \$14 | \$25 |
| Broadcast Announcers and Radio Disc Jockeys | 61 | 70 | 8 | 15% | 44 | 9 | \$13 | \$20 |
| Audio and Video Technicians | 106 | 120 | 13 | 13% | 70 | 14 | \$18 | \$22 |
| Sound Engineering Technicians | 17 | 20 | 3 | 19% | 13 | 3 | \$17 | \$31 |
| Total | 268 | 292 | 24 | 9% | 177 | 36 | | |

Source: EMSI 2021.4

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 (May 2021 - Apr 2022)

| Occupation | Bay Region | SC-Monterey |
|---------------------------------------|------------|-------------|
| Audio and Video Equipment Technicians | 850 | 34 |
| Sound Engineering Technicians | 298 | 16 |
| Radio and Television Announcers | 131 | 5 |
| Music Directors | 90 | 1 |
| Music Composers and Arrangers | 13 | 0 |

Source: Burning Glass

Table 4a. Top Job Titles for Music Production Occupations for latest 12 months (May 2021 - Apr 2022)

Bay Region

| Title | Bay | Title | Bay |
|--------------------------------------|-----|---------------------------------------------------|-----|
| Audio Visual Technician | 80 | Hospice Community Liaison | 11 |
| Av Technician | 33 | Audio Technician | 10 |
| Audio/Video Technician | 27 | Av Support Technician | 10 |
| Audio Visual Installation Technician | 20 | Music Director | 10 |
| Broadcast Engineer | 16 | Sound Designer | 10 |
| Audio Engineer | 12 | Tv Mounting Technician/ Home Theater Installer | 10 |
| Tier 1 Audio Visual Field Technician | 12 | Audio Video Technician | 9 |
| Audio Visual Support Technician | 11 | Audio Visual Field Service Technician | 9 |
| Av Technician II | 11 | Audio Visual Maintenance Tier 2 Technician | 9 |

Source: Burning Glass

Table 4b. Top Job Titles for Music Production Occupations for latest 12 months (May 2021 - Apr 2022)

| Title | SC-Monterey | Title | SC-Monterey |
|------------------------------------------------------------------------|-------------|---------------------------------|-------------|
| Audio Visual Technician | 8 | Television Specialist | 2 |
| Audio/Video Technician | 6 | Theater Technician - Short Term | 2 |
| Audio Video Installer/Technician | 4 | Video Production Technician | 2 |
| Senior Instructional Technician | 3 | Audio Dsp Staff Engineer | 1 |
| Theater Arts Department Design And Technology Lecturer Pool Ongoing | 3 | Audio Video Senior Technician | 1 |

| Title | SC-Monterey | Title | SC-Monterey |
|--------------------------------|-------------|-----------------------------------|-------------|
| Audio Visual Event Technician | 2 | Audio Visual Assistant Manager | 1 |
| Director Of Event Technology | 2 | Audio Visual Manager | 1 |
| Review Notification Clerk | 2 | Audio Visual Technician Associate | 1 |
| Staff Audio Algorithm Engineer | 2 | Effects Technician | 1 |

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Music Production Workers in Bay Region

| Industry - 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2020) | Jobs in Industry (2025) | % Change (2020-25) | % Occupation Group in Industry (2020) |
|-----------------------------------------------------------------------|-------------------------|-------------------------|--------------------|---------------------------------------|
| Religious Organizations | 764 | 779 | 2% | 14% |
| Internet Publishing and Broadcasting and Web Search Portals | 392 | 505 | 29% | 7% |
| Independent Artists, Writers, and Performers | 398 | 406 | 2% | 7% |
| Motion Picture and Video Production | 381 | 404 | 6% | 7% |
| Radio Stations | 277 | 248 | -10% | 5% |
| Sound Recording Studios | 191 | 245 | 29% | 4% |
| Colleges, Universities, and Professional Schools | 163 | 181 | 11% | 3% |
| Musical Groups and Artists | 165 | 153 | -7% | 3% |
| Television Broadcasting | 150 | 129 | -14% | 3% |
| Theater Companies and Dinner Theaters | 121 | 133 | 10% | 2% |

Source: EMSI 2021.4

Table 6. Top Employers Posting Music Production Occupations in Bay Region and SC-Monterey Sub-Region (May 2021 - Apr 2022)

| Employer | Bay | Employer | SC-Monterey |
|---------------|-----|--------------------------|-------------|
| Eos | 47 | Cabrillo College | 6 |
| Encore Global | 42 | University Of California | 5 |
| Diversified | 28 | Pebble Beach Resorts | 4 |
| Apple Inc. | 27 | Impact Technology Group | 4 |
| Astreya | 22 | Polycom Incorporated | 2 |
| Facebook | 21 | Mount Hermon Association | 2 |
| Amazon | 21 | State of California | 1 |

| Employer | Bay | Employer | SC-Monterey |
|-----------------------------------|-----|----------------------------------------|-------------|
| Audio Visual Management Solutions | 20 | West Efx Incorporated | 1 |
| Regent5 | 19 | Sound Design Audio & Video Contractors | 1 |
| University Of California | 16 | Seventh Dimension | 1 |

Source: Burning Glass

Educational Supply

There are six (6) community colleges in the Bay Region issuing 84 awards on average annually (last 3 years ending 2018-19) on TOP 1005.00 Commercial Music. In the SC-Monterey Sub-Region, there is one (1) community college (Cabrillo) that issued three (3) awards on average annually (last 3 years) on this TOP code.

There are four (4) other CTE educational institutions in the Bay Region issuing 70 awards on average annually (last 3 years ending 2016-17) on TOP 1005.00 Commercial Music. There are no other CTE educational institutions in the SC-Monterey Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

Table 7a. Community College Awards on TOP 1005.00 Commercial Music in Bay Region

| College | Subregion | Associate | Certificate Low | Noncredit | Total |
|---------------|----------------|-----------|-----------------|-----------|-----------|
| Cabrillo | SC-Monterey | 1 | 2 | 0 | 3 |
| Diablo Valley | East Bay | 11 | 10 | 0 | 21 |
| Foothill | Silicon Valley | 13 | 4 | 0 | 17 |
| Las Positas | East Bay | 0 | 0 | 1 | 1 |
| Los Medanos | East Bay | 7 | 25 | 0 | 32 |
| West Valley | Silicon Valley | 0 | 10 | 0 | 10 |
| Total | | 32 | 51 | 1 | 84 |

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

Table 7b. Other CTE Institutions Awards on TOP 1005.00 Commercial Music in Bay Region

| College | Subregion | Award 1 < 2 academic yrs | Bachelor's Degree | Total |
|-----------------------------------------------------------------|----------------|--------------------------|-------------------|-----------|
| Argosy University-The Art Institute of California-San Francisco | Mid-Peninsula | 0 | 14 | 14 |
| Cogswell College | Silicon Valley | 0 | 11 | 11 |
| SAE Expression College | East Bay | 0 | 42 | 42 |
| San Francisco Conservatory of Music | Mid-Peninsula | 3 | 0 | 3 |
| Total | | 3 | 67 | 70 |

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 675 annual openings for the Music Production occupational cluster and 154 annual (3-year average) awards for an annual undersupply of 521 students. In the SC-Monterey Sub-Region, there is also a gap with 36 annual openings and 3 annual (3-year average) awards for an annual undersupply of 33 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1005.00 Commercial Music

| Metric Outcomes | Bay All CTE Programs | Cabrillo All CTE Programs | State 1005.00 | Bay 1005.00 | SC-Monterey 1005.00 | Cabrillo 1005.00 |
|-------------------------------------------------------------|----------------------|---------------------------|---------------|-------------|---------------------|------------------|
| Students with a Job Closely Related to Their Field of Study | 74% | 80% | 46% | 40% | N/A | N/A |
| Median Annual Earnings for SWP Exiting Students | \$47,419 | \$40,665 | \$21,726 | \$28,480 | \$13,912 | \$13,912 |
| Median Change in Earnings for SWP Exiting Students | 23% | 23% | 40% | 43% | 21% | 21% |
| Exiting Students Who Attained the Living Wage | 52% | 47% | 23% | 27% | N/A | N/A |

Source: Launchboard Strong Workforce Program Median of 2017 to 2020.

Skills, Certifications and Education

Table 9. Top Skills for Music Production Occupations in Bay Region (May 2021 - Apr 2022)

| Skill | Posting | Skill | Posting |
|---------------------------------|---------|-------------------------------------|---------|
| Customer Service | 237 | Sales | 82 |
| Music | 177 | Power Tools | 81 |
| Video Conferencing | 177 | Budgeting | 77 |
| Repair | 158 | Operations Management | 77 |
| Scheduling | 145 | Audio Systems | 75 |
| Technical Support | 129 | Troubleshooting Technical Issues | 75 |
| Audio / Visual Knowledge | 128 | Predictive/Preventative Maintenance | 70 |
| Project Management | 124 | Break/Fix | 69 |
| Cabling | 115 | Python | 68 |
| Broadcast Industry Knowledge | 112 | Vaccination | 68 |
| Wiring | 111 | Audio Engineering | 66 |
| Digital Signal Processing (DSP) | 110 | Multimedia | 64 |
| Customer Contact | 89 | Event Planning | 63 |

| Skill | Posting | Skill | Posting |
|-------|---------|---------------------|---------|
| Cisco | 88 | Equipment Operation | 61 |

Source: Burning Glass

Table 10. Certifications for Music Production Occupations in Bay Region (May 2021 - Apr 2022)

| Certification | Posting | Certification | Posting |
|-------------------------------------------------------------|---------|-------------------------------------------------------------|---------|
| Driver's License | 345 | Certified Teacher | 3 |
| Cisco Certified Network Associate (CCNA) | 12 | Capability Model Maturity Integration (CMMI) Certification | 3 |
| Cisco Certified Network Professional (CCNP) | 8 | Financial Risk Manager (FRM) | 2 |
| Occupational Safety and Health Administration Certification | 6 | Engineer in Training Certification | 2 |
| OSHA Safety 10 Hour | 6 | Electrician Certification | 2 |
| First Aid Cpr Aed | 6 | Electrical Contractor | 2 |
| IT Infrastructure Library (ITIL) Certification | 5 | Certified Quality Technician (CQT) | 2 |
| CompTIA Network+ | 5 | Certified Information Systems Security Professional (CISSP) | 2 |
| Security Clearance | 3 | Cdl Class C | 2 |
| Project Management Certification | 3 | Audiovisual (AV) Certification | 2 |

Source: Burning Glass

Note: 71% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

Table 11. Education Requirements for Music Production Occupations in Bay Region

| Education (minimum advertised) | Latest 12 Mos. Postings | Percent 12 Mos. Postings |
|------------------------------------|-------------------------|--------------------------|
| High school or vocational training | 352 | 48% |
| Associate's degree | 46 | 6% |
| Bachelor's degree and higher | 329 | 46% |

Source: Burning Glass

Note: 47% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

Methodology

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

Sources

O*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

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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