** Visual Media Production Occupations**

**Labor Market Information Report**

**City College of San Francisco**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

May 2019

# Recommendation

Based on all available data, there appears to be an undersupply of Visual Media Production workers compared to the demand for this cluster of occupations in the Bay region and in the Mid-Peninsula sub-region (San Francisco and San Mateo Counties.) There is a projected annual gap of about 1,083 students in the Bay region and 355 students in the Mid-Peninsula Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 1030.00 - Graphic Art and Design 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 City College of San Francisco (CCSF) and in the region.

# Introduction

This report profiles Visual Media Production Occupations in the 12 county Bay region and in the Mid-Peninsula sub-region for the review of an existing program at City College of San Francisco.

|  |
| --- |
| * **Graphic Designers (SOC 27-1024):** Design or create graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects. |
| Entry-Level Educational Requirement: Bachelor's degree |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 29% |
|  |
| * **Multimedia Artists and Animators (**SOC 27-1014): Create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials. |
| Entry-Level Educational Requirement: Bachelor's *degree* |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 27*%* |

# Occupational Demand

**Table 1. Employment Outlook for Visual Media Production Occupations in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Graphic Designers | 12,797 | 13,191 | 393 | 3% | 6,476 | 1,295 | $16.35 | $23.65 |
| Multimedia Artists and Animators | 4,730 | 5,028 | 298 | 6% | 2,247 | 449 | $13.65 | $38.08 |
| **Total** | **17,527** | **18,219** | **692** | **4%** | **8,723** | **1,745** | **$15.62** | **$27.55** |

*Source: EMSI 2019.2*

**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 Visual Media Production** **Occupations in Mid-Peninsula Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Graphic Designers | 4,827 | 5,020 | 193 | 4% | 2,501 | 510 | $16.87 | $28.00 |
| Multimedia Artists and Animators | 1,690 | 1,828 | 138 | 8% | 823 | 172 | $14.89 | $40.74 |
| **TOTAL** | **6,517** | **6,848** | **331** | **5%** | **3,324** | **682** | **$16.35** | **$31.31** |

*Source: EMSI 2019.2*

**Mid-Peninsula Sub-Region** includes San Francisco and San Mateo Counties

### Job Postings in Bay Region and Mid-Peninsula Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (May 2018 - April 2019)**

| Occupation | Bay Region | Mid-Peninsula |
| --- | --- | --- |
| Graphic Designers | 4,386 | 2,346 |
| Multimedia Artists and Animators | 985 | 470 |
| **Total** | **5,371** | **2,816** |

*Source: Burning Glass*

**Table 4a. Top Job Titles for Visual Media Production** **Occupations for latest 12 months (May 2018 - April 2019)**

**Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Bay | Common Title | Bay |
| Graphic Designer | 1,889 | Production Manager | 30 |
| Visual Designer | 1,148 | Content Producer | 24 |
| Interaction Designer | 483 | Design Producer | 20 |
| Production Artist | 239 | Product Designer | 19 |
| Production Designer | 133 | Creative Designer | 18 |
| Animator | 122 | Junior Visual Designer | 17 |
| Junior Graphic Designer | 103 | 3D Modeler | 17 |
| Graphic Artist | 86 | Web Designer | 16 |
| Freelance Graphic Designer | 84 | Staff Digital Design Engineer | 15 |
| Interactive Designer | 76 | Art Producer | 15 |
| Visual Effects Artist | 40 | Photo Producer | 13 |
| User Interface (UX)/User Experience (UX) Designer | 40 | Digital Design Engineer | 13 |
| Lead Visual Designer | 36 | 3D Designer | 13 |
| Senior Digital Design Engineer | 32 | Production Assistant | 11 |

**Table 4.b Top Job Titles for Visual Media Production** **Occupations for latest 12 months (May 2018 - April 2019)**

**Mid-Peninsula Sub-Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Mid-Peninsula | Common Title | Mid-Peninsula |
| Graphic Designer | 983 | Lead Visual Designer | 12 |
| Visual Designer | 706 | Content Producer | 12 |
| Interaction Designer | 224 | Photo Producer | 10 |
| Production Artist | 142 | Junior Visual Designer | 10 |
| Production Designer | 87 | 3D Modeler | 8 |
| Animator | 63 | Web Designer | 7 |
| Junior Graphic Designer | 59 | Marketing Assistant | 7 |
| Interactive Designer | 44 | 3D Designer | 7 |
| Freelance Graphic Designer | 42 | Print Production Artist | 6 |
| Graphic Artist | 39 | Graphic Studio Manager | 6 |
| Visual Effects Artist | 26 | Digital Design Specialist | 6 |
| Production Manager | 18 | Design Producer | 6 |
| User Interface (UX)/User Experience (UX) Designer | 14 | Art Producer | 6 |
| Product Designer | 14 | Online Producer | 5 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Visual Media Production** **Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2018) | Jobs in Industry (2022) | % Change (2018-22) | % in Industry (2018) |
| Graphic Design Services (541430) | 2,346 | 2,129 | (9%) | 13.4% |
| Interior Design Services (541410) | 2,081 | 1,972 | 6% | 11.3% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 1,644 | 1,274 | 29% | 7.3% |
| Custom Computer Programming Services (541511) | 1,084 | 988 | 10% | 5.6% |
| Software Publishers (511210) | 1,101 | 956 | 15% | 5.5% |
| Computer Systems Design Services (541512) | 597 | 560 | 7% | 3.2% |
| Motion Picture and Video Production (512110) | 489 | 500 | (2%) | 2.9% |
| Advertising Agencies (541810) | 473 | 477 | (1%) | 2.7% |
| Other Specialized Design Services (541490) | 478 | 439 | 9% | 2.5% |
| Industrial Design Services (541420) | 433 | 409 | 6% | 2.3% |
| Commercial Printing (except Screen and Books) (323111) | 291 | 355 | (18%) | 2.0% |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 344 | 327 | 5% | 1.9% |
| Independent Artists, Writers, and Performers (711510) | 294 | 317 | (7%) | 1.8% |
| Electronic Shopping and Mail-Order Houses (454110) | 318 | 264 | 20% | 1.5% |
| Public Relations Agencies (541820) | 228 | 225 | 1% | 1.3% |
| Administrative Management and General Management Consulting Services (541611) | 253 | 217 | 17% | 1.2% |
| Newspaper Publishers (511110) | 130 | 184 | (29%) | 1.1% |
| Graphic Design Services (541430) | 2,346 | 2,129 | (9%) | 13.4% |
| Interior Design Services (541410) | 2,081 | 1,972 | 6% | 11.3% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 1,644 | 1,274 | 29% | 7.3% |
| Custom Computer Programming Services (541511) | 1,084 | 988 | 10% | 5.6% |
| Software Publishers (511210) | 1,101 | 956 | 15% | 5.5% |

*Source: EMSI 2019.2*

**Table 6. Top Employers Posting Visual Media Production** **Occupations in Bay Region and Mid-Peninsula Sub-Region (May 2018 - April 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Mid-Peninsula |
| Apple Inc. | 64 | Qualcomm | 13 | Williams-Sonoma | 35 |
| Google Inc. | 52 | Logitech | 13 | Facebook | 29 |
| Williams-Sonoma | 38 | Levi Strauss | 13 | Google Inc. | 22 |
| Facebook | 34 | Hogarth Worldwide | 13 | Ideo | 20 |
| Spartan Tool Llc | 27 | General Electric Company | 13 | Accenture | 19 |
| Ideo | 23 | Elsa Corporation | 13 | Spartan Tool Llc | 18 |
| Stanford University | 20 | Wunderland | 12 | Sony Electronics Incorporated | 16 |
| Jbcconnect | 19 | Osi Engineering, Inc | 12 | Jbcconnect | 15 |
| Accenture | 19 | Hh Global Incorporated | 12 | Gap Inc. | 15 |
| Sony Electronics Incorporated | 16 | Ford Motor Company | 12 | Levi Strauss | 12 |
| Lululemon | 16 | 2K Games | 12 | University San Francisco | 11 |
| IBM | 15 | University San Francisco | 11 | Disney | 11 |
| Gap Inc. | 15 | Trilyon, Inc | 11 | Walmart / Sam's | 10 |
| Disney | 15 | San Jose State University | 11 | Viscira Llc | 10 |
| Cisco Systems Incorporated | 15 | Machine Zone | 11 | Uber | 10 |
| Capital Markets Placement | 15 | Walmart / Sam's | 10 | Discord | 10 |
| Mediazoo | 14 | Viscira Llc | 10 | Salesforce | 9 |

*Source: Burning Glass*

# Educational Supply

There are 11 community colleges in the Bay Region issuing 150 awards on average annually (last 3 years) on TOP 1030.00 - Graphic Art and Design. There is one college (CCSF) in the Mid-Peninsula Sub-Region issuing 39 awards on average annually (last 3 years) on this TOP code.

**Table 7. Awards on TOP 1030.00 - Graphic Art and Design in the Bay Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Total |
| Chabot | East Bay | 34 |  |  |  |
| Deanza | Silicon Valley | 261 | 11 | 14 | 25 |
| Diablo Valley | East Bay | n/a | 3 | 0 | 3 |
| Evergreen Valley | Silicon Valley | 46 |  |  |  |
| Foothill | Silicon Valley | 631 | 11 | 3 | 14 |
| Laney | East Bay | 252 | 5 | 2 | 7 |
| Los Medanos | East Bay | 108 | 7 | 1 | 8 |
| Las Positas | East Bay | 218 |  |  |  |
| Mission | Silicon Valley | 332 | 7 | 2 | 9 |
| Monterey | Santa Cruz & Monterey | 98 | 6 | 3 | 9 |
| Napa | North Bay | 91 | 2 |  | 2 |
| Ohlone | East Bay | 28 | 2 | 1 | 3 |
| San Francisco | Mid-Peninsula | 701 | 6 | 33 | 39 |
| Santa Rosa | North Bay | 371 | 6 | 25 | 31 |
| Solano | North Bay | 75 |  |  |  |
| **Total Bay Region** | | **3,246** | **66** | **84** | **150** |
| **Total Mid-Peninsula Sub-Region** | | **701** | **6** | **33** | **39** |

# *Source: IPEDS, Data Mart and Launchboard*

NOTE: Headcount of students who took one or more courses is for 2016-17. The annual average for awards is 2014-17 unless there are only awards in 2016-17. The annual average for other postsecondary is for 2013-16.

There are 10 other postsecondary institutions (non-community college) in the Bay Region issuing 512 awards on average annually (last 3 years) on CIP 50.0409 - Graphic Design. There are four postsecondary institutions in the Mid-Peninsula Sub-Region issuing 288 awards on average annually (last 3 years) on this CIP code.

**Table 8. Awards on CIP 50.0409 - Graphic Design** **in the Bay Region**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **College** | **Sub-Region** | **CIP** | **Associates** | **Certificates** | **Noncredit** | **Total** |
| Academy of Art University | Mid-Peninsula | 50.0409 | 52 | 0 | 147 | 199 |
| Argosy University-The Art Institute of California-San Francisco | Mid-Peninsula | 50.0409 | 25 | 0 | 17 | 42 |
| Argosy University-The Art Institute of California-Silicon Valley | Silicon Valley | 50.0409 | 21 | 0 | 8 | 29 |
| California College of the Arts | East Bay | 50.0409 | 0 | 0 | 75 | 75 |
| Dominican University of California | East Bay | 50.0409 | 2 | 0 | 5 | 7 |
| FIDM-Fashion Institute of Design & Merchandising-San Francisco | Mid-Peninsula | 50.0409 | 17 | 0 | 3 | 20 |
| Notre Dame de Namur University | East Bay | 50.0409 | 1 | 0 | 11 | 12 |
| Pacific Union College | North Bay | 50.0409 | 4 | 1 | 12 | 17 |
| San Jose State University | Silicon Valley | 50.0409 | 0 | 0 | 84 | 84 |
| University of San Francisco | Mid-Peninsula | 50.0409 | 6 | 21 | 0 | 27 |
| **Total Bay Region** |  |  | **128** | **22** | **362** | **512** |
| **Mid-Peninsula Sub-Region** |  |  | **100** | **21** | **167** | **288** |

*Source: 2015, 2016, 2017 EMSI 2019 Q2*

# Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 1,745 annual openings for the Visual Media Production occupational cluster and 662 annual (3-year average) awards for an annual undersupply of 1,083 students. In the Mid-Peninsula Sub-Region, there is also a gap with 682 annual openings and 327 annual (3-year average) awards for an annual undersupply of 355 students.

# Student Outcomes

**Table 9. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1030.00 - Graphic Art and Design**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | City College of San Francisco (All CTE Programs) | State (1030.00) | Bay (1030.00) | Mid-Peninsula (1030.00) | City College of San Francisco (1030.00) |
| % Employed Four Quarters After Exit | 74% | 73% | 61% | 65% | 69% | 69% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $10,170 | $6,001 | $8,943 | $12,135 | $12,135 |
| Median % Change in Earnings | 46% | 50% | 58% | 43% | 51% | 51% |
| % of Students Earning a Living Wage | 63% | 55% | 39% | 47% | 52% | 52% |

*Source: Launchboard Pipeline (version available on 5/13/19)*

# Skills, Certifications and Education

**Table 10. Top Skills for Visual Media Production** **Occupations in Bay Region (May 2018 - April 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Adobe Photoshop | 3,353 | Illustration | 572 | E-Commerce | 287 |
| Graphic Design | 3,033 | User Interface (UI) Design | 543 | Print Production | 271 |
| Adobe Indesign | 2,633 | Digital Design | 522 | Photography | 265 |
| Adobe Illustrator | 2,148 | UX Wireframes | 517 | Digital Marketing | 257 |
| Adobe Acrobat | 1,978 | Art Direction | 454 | Brand Identity | 242 |
| Adobe Creative Suite | 1,943 | Packaging | 437 | Creative Design | 238 |
| Visual Design | 1,739 | Process Design | 421 | Video Editing | 235 |
| Typesetting | 1,412 | Product Design | 353 | Quality Assurance and Control | 228 |
| Web Site Design | 869 | Infographics | 349 | User Research | 225 |
| Social Media | 731 | Project Design | 327 | HTML5 | 220 |
| Interaction Design | 678 | Motion Graphics | 321 | Product Management | 214 |
| Adobe Aftereffects | 652 | Scheduling | 319 | Product Development | 209 |
| Animation | 645 | Budgeting | 313 | Retail Industry Knowledge | 205 |
| Prototyping | 591 | Marketing Materials | 306 | Creative Direction | 203 |
| Project Management | 575 | JavaScript | 300 | Information Architecture | 190 |

*Source: Burning Glass*

**Table 11. Certifications for Visual Media Production** **Occupations in the Bay Region (May 2018 - April 2019)**

Note: 51% 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Certification | Postings | Certification | Postings |
| Driver's License | 40 | Phlebotomy Certification | 3 |
| Graphic Design Certification | 9 | Licensed Professional Engineer | 2 |
| Security Clearance | 7 | Leadership In Energy And Environmental Design (LEED) Certified | 2 |
| Certified Graphic Designer | 7 | Cisco Certified Network Professional (CCNP) | 2 |
| LEED AP | 6 | Cisco Certified Network Associate (CCNA) | 2 |
| Project Management Certification | 5 | Adobe Photoshop Certificate | 2 |
| Certified ScrumMaster (CSM) | 4 | Welding Certification | 1 |
| Project Management Professional (PMP) | 3 | Mbe Certified | 1 |

*Source: Burning Glass*

**Table 12. Education Requirements for Visual Media Production** **Occupations in Bay Region**

Note: 51% 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.

|  |  |  |
| --- | --- | --- |
| Education (minimum advertised) | Latest 12 Mos. Postings | Percent 12 Mos. Postings |
| High school or vocational training | 82 | 3% |
| Associate Degree | 59 | 2% |
| Bachelor’s Degree or Higher | 2,383 | 95% |

*Source: Burning Glass*

# 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 CCCCO Data Mart.

# Sources

O\*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

CTE LaunchBoard [www.calpassplus.org/Launchboard/](http://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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