

Graphic Imaging and Typography Occupations Labor Market Information Report Cabrillo College

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

Based on all available data, there appears to be an "undersupply" of Graphic Imaging and Typography 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 632 students in the Bay region and 112 students in the SC-Monterey Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 1030.00 Graphic Art and Design 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 Graphic Imaging and Typography Occupations in the 12 county Bay region and in the SC-Monterey sub-region for two proposed new programs at Cabrillo College: Graphic Imaging Certificate of Achievement and Typography Certificate of Achievement. This report can be used when submitting to BACCC for both programs because the TOP code and SOC code are the same for both programs.

• **Graphic Designers (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: 26%

Occupational Demand

Table 1. Employment Outlook for Graphic Imaging and Typography 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 |
|-------------------|--------------|--------------|----------------|------------------|------------------------|--------------------|--------------------------|--------------------------|
| Graphic Designers | 10,422 | 10,460 | 38 | 0% | 5 , 715 | 1,143 | \$26 | \$60 |
| Total | 10,422 | 10,460 | 38 | 0% | 5,715 | 1,143 | \$26 | \$60 |

Source: EMSI 2021.3

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 Graphic Imaging and Typography 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 |
|-------------------|--------------|--------------|----------------|------------------|------------------------|--------------------|--------------------------|--------------------------|
| Graphic Designers | 1,325 | 1,356 | 31 | 2% | 758 | 152 | \$26 | \$61 |
| Total | 1,325 | 1,356 | 31 | 2% | 758 | 152 | \$26 | \$61 |

Source: EMSI 2021.3

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 2020 - Sep 2021)

| Occupation | Bay Region | SC-Monterey |
|----------------------------------|------------|-------------|
| Multimedia Artists and Animators | 579 | 1 |

Source: Burning Glass

Table 4a. Top Job Titles for Graphic Imaging and Typography Occupations for latest 12 months (Oct 2020 - Sep 2021) Bay Region

| Title | Bay | Title | Bay |
|-----------------------------|-----|--------------------------------|-----|
| Interaction Designer | 54 | Principal Interaction Designer | 7 |
| Motion Graphic Designer | 49 | Ux Interaction Designer | 7 |
| Senior Interaction Designer | 25 | Lead Animator | 6 |
| Digital Content Producer | 12 | Senior Vfx Artist | 6 |
| Animator | 11 | 2D Spine Animator | 5 |
| Interactive Designer | 11 | 3D Professional Scanner | 5 |
| Interaction Designer II | 9 | Digital Artist - Modeler | 5 |
| Vfx Artist | 9 | Illustrator/Storyboard Artist | 5 |
| 3D Animator | 8 | Interaction Designer, Senior | 5 |

Source: Burning Glass

Table 4b. Top Job Titles for Graphic Imaging and Typography Occupations for latest 12 months (Oct 2020 - Sep 2021) SC-Monterey Sub-Region

| Title | SC-Monterey |
|-----------------------------------|-------------|
| Associate Motion Graphic Designer | 1 |

Industry Concentration

Table 5. Industries hiring Graphic Imaging and Typography 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) |
|--|-------------------------------|-------------------------------|-----------------------|---|
| Graphic Design Services | 1,471 | 1,287 | -13% | 14% |
| Interior Design Services | 1,262 | 1,281 | 2% | 12% |
| Internet Publishing and Broadcasting and Web Search Portals | 695 | 848 | 22% | 7% |
| Software Publishers | 383 | 487 | 27% | 4% |
| Custom Computer Programming Services | 352 | 426 | 21% | 3% |
| Advertising Agencies | 302 | 295 | -2% | 3% |
| Industrial Design Services | 282 | 286 | 1% | 3% |
| Other Specialized Design Services | 264 | 262 | -1% | 3% |
| Electronic Shopping and Mail-Order Houses | 209 | 228 | 9% | 2% |
| Corporate, Subsidiary, and Regional Managing Offices | 229 | 219 | -5% | 2% |

Source: EMSI 2021.3

Table 6. Top Employers Posting Graphic Imaging and Typography Occupations in Bay Region and SC-Monterey Sub-Region (Oct 2020 - Sep 2021)

| Employer | Bay | Employer | SC-Monterey |
|--------------------------------------|------------|-------------------------------|-------------|
| Google Inc. | 1 <i>7</i> | Hamilton Road Productions Llc | 1 |
| U.S. Bancorp | 16 | | |
| Electronic Arts Incorporated | 16 | | |
| Activision | 16 | | |
| Blue Cross Blue Shield of California | 11 | | |
| Intuitive Surgical Incorporated | 9 | | |
| Facebook | 9 | | |
| Advanced Systems Group | 9 | | |
| Take-Two Interactive | 8 | | |
| Samsung America, Inc. | 8 | | |

Source: Burning Glass

Educational Supply

There are 13 community colleges in the Bay Region issuing 175 awards on average annually (last 3 years ending 2018-19) on TOP 1030.00 Graphic Art and Design. In the SC-Monterey Sub-Region, there is one (1) community college that issued 9 awards on average annually (last 3 years) on this TOP code.

There are 12 other CTE educational institutions in the Bay Region issuing 305 awards on average annually (last 3 years ending 2016-17) on TOP 1030.00 Graphic Art and Design. 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.

There is one (1) four-year institution in the Bay Region issuing 31 Bachelor's degrees on average annually (last 3 years ending 2016-17) on TOP 1030.00 Graphic Art and Design. There is one (1) four-year institution in the SC-Monterey Sub-Region issuing 31 Bachelor's degrees on this TOP code.

Table 7a. Community College Awards on TOP 1030.00 Graphic Art and Design in Bay Region

| College | Subregion | Associate | Certificate Low | Noncredit | Total |
|---------------|----------------|-----------|-----------------|-----------|-------|
| Chabot | East Bay | 1 | 0 | 0 | 1 |
| De Anza | Silicon Valley | 12 | 16 | 0 | 28 |
| Diablo Valley | East Bay | 5 | 0 | 0 | 5 |
| Foothill | Silicon Valley | 15 | 4 | 0 | 19 |
| Laney | East Bay | 6 | 4 | 0 | 10 |
| Las Positas | East Bay | 1 | 1 | 0 | 2 |
| Los Medanos | East Bay | 11 | 2 | 0 | 13 |
| Mission | Silicon Valley | 9 | 7 | 0 | 16 |
| Monterey | SC-Monterey | 5 | 3 | 1 | 9 |
| Napa | North Bay | 4 | 0 | 0 | 4 |
| Ohlone | East Bay | 2 | 1 | 0 | 3 |
| San Francisco | Mid-Peninsula | 9 | 33 | 0 | 42 |
| Santa Rosa | North Bay | 5 | 18 | 0 | 23 |
| Total | | 85 | 89 | 1 | 175 |

Source: Data Mart

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

Table 7b. Other CTE Institutions Awards on TOP 1030.00 Graphic Art and Design in Bay Region

| College | Subregion | Associate Degree | Bachelor's Degree | Total |
|---|----------------|---------------------|----------------------|-------|
| Academy of Art University | Mid-Peninsula | 17 | 49 | 66 |
| Argosy University-The Art Institute of California-San Francisco | Mid-Peninsula | 8 | 6 | 14 |
| Argosy University-The Art Institute of California-Silicon Valley | Silicon Valley | 7 | 3 | 10 |

| College | Subregion | Associate Degree | Bachelor's Degree | Total |
|---|----------------|---------------------|----------------------|-------|
| California College of the Arts | Mid-Peninsula | 0 | 36 | 36 |
| Dominican University of California | North Bay | 0 | 3 | 3 |
| FIDM-Fashion Institute of Design & Merchandising-San Francisco | Mid-Peninsula | 53 | 0 | 53 |
| Notre Dame de Namur University | Mid-Peninsula | 0 | 5 | 5 |
| Pacific Union College | North Bay | 1 | 5 | 6 |
| San Francisco Art Institute | Mid-Peninsula | 0 | 5 | 5 |
| San Francisco State University | Mid-Peninsula | 0 | 47 | 47 |
| San Jose State University | Silicon Valley | 0 | 36 | 36 |
| University of San Francisco | Mid-Peninsula | 0 | 24 | 24 |
| Total | | 86 | 219 | 305 |

Source: Data Mart

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

Table 7c. Bachelor's Degree Awards on TOP 1030.00 Graphic Art and Design in Bay Region

| College | Subregion | Bachelor's Degree | Total |
|--|-------------|-------------------|-------|
| California State University-Monterey Bay | SC-Monterey | 31 | 31 |
| Total | | 31 | 31 |

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 labor market gap in the Bay region with 1,143 annual openings for the Graphic Imaging and Typography occupational cluster and 511 annual (3-year average) awards for an annual undersupply of 632 students. In the SC-Monterey Sub-Region, there is also a gap with 152 annual openings and 40 annual (3-year average) awards for an annual undersupply of 112 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1030.00 Graphic Art and Design

| Metric Outcomes | Bay All CTE Programs | Cabrillo All CTE Programs | State 1030.00 | Bay 1030.00 | SC- Monterey 1030.00 | Cabrillo College 1030.00 |
|--|----------------------------|---------------------------------|------------------|----------------|----------------------------|--------------------------------|
| Students with a Job Closely Related to Their Field of Study | 73% | 76% | 61% | 65% | N/A | N/A |
| Median Annual Earnings for SWP Exiting Students | \$44,575 | \$39,206 | \$25,613 | \$35,018 | \$25,621 | N/A |

| Metric Outcomes | Bay All CTE Programs | Cabrillo All CTE Programs | State 1030.00 | Bay 1030.00 | SC- Monterey 1030.00 | Cabrillo College 1030.00 |
|---|----------------------------|---------------------------------|------------------|----------------|----------------------------|--------------------------------|
| Median Change in Earnings for SWP Exiting Students | 30% | 31% | 29% | 23% | N/A | N/A |
| Exiting Students Who Attained the Living Wage | 53% | 50% | 33% | 37% | N/A | N/A |

Source: Launchboard Strong Workforce Program Median of 2016-18.

Skills, Certifications and Education

Table 9. Top Skills for Graphic Imaging and Typography Occupations in Bay Region (Oct 2020 - Sep 2021)

| Skill | Posting | Skill | Posting |
|----------------------|---------|----------------------------|---------|
| Adobe Photoshop | 186 | Process Design | 82 |
| Animation | 185 | Product Design | 76 |
| Interaction Design | 185 | Human Computer Interaction | 68 |
| Maya | 124 | User Research | 60 |
| Graphic Design | 121 | Typesetting | 58 |
| Prototyping | 118 | Social Media | 54 |
| Adobe Aftereffects | 113 | Project Management | 48 |
| Adobe Illustrator | 113 | Motion Capture | 47 |
| Adobe Indesign | 113 | Information Architecture | 43 |
| Motion Graphics | 104 | Customer Contact | 42 |
| Adobe Acrobat | 101 | Python | 41 |
| Adobe Creative Suite | 101 | User Interface (UI) Design | 41 |
| UX Wireframes | 101 | Cinema 4D | 39 |
| Visual Design | 91 | Scheduling | 39 |

Source: Burning Glass

Table 10. Certifications for Graphic Imaging and Typography Occupations in Bay Region (Oct 2020 - Sep 2021)

| Certification | Posting |
|---------------------------------------|---------|
| Driver's License | 10 |
| Project Management Professional (PMP) | 1 |
| Project Management Certification | 1 |
| Certified ScrumMaster (CSM) | 1 |
| Certified Public Accountant (CPA) | 1 |
| Certified Fraud Examiner (CFE) | 1 |

Note: 98% of records have been excluded because they do not include a certification. As a result, the chart above may not be representative of the full sample.

Table 11. Education Requirements for Graphic Imaging and Typography Occupations in Bay Region

| Education (minimum advertised) | Latest 12 Mos. Postings | Percent 12 Mos. Postings |
|------------------------------------|----------------------------|-----------------------------|
| High school or vocational training | 6 | 2% |
| Associate's degree | 19 | 7% |
| Bachelor's degree | 262 | 91% |

Source: Burning Glass

Note: 50% 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 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/

Statewide CTE Outcomes Survey

Employment Development Department Unemployment Insurance Dataset

Living Insight Center for Community Economic Development

Chancellor's Office MIS system

Contacts

For more information, please contact:

- Leila Jamoosian, Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), leila@baccc.net
- John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, <u>icarrese@ccsf.edu</u> or (415) 267-6544