** Graphic Art and Design Occupations**

**Labor Market Information Report**

**College of Marin**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

September 2019

# Recommendation

Based on all available data, there appears to be an undersupply of Graphic Art and Design workers compared to the demand for this cluster of occupations in the Bay region and in the North Bay sub-region (Marin, Napa, Sonoma and Solano Counties.) There is a projected annual gap of about 1,914 students in the Bay region and 61 students in the North Bay 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 College of Marin and in the region.

# Introduction

This report profiles Graphic Art and Design Occupations in the 12 county Bay region and in the North Bay sub-region for the review of an existing program at College of Marin.

|  |
| --- |
| * **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% |

|  |
| --- |
| * **Designers, All Other (SOC 27-1029):** All Designers not listed separately.
 |
| Entry-Level Educational Requirement: Bachelor's degree |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 39% |

* **Commercial and Industrial Designers (SOC 27-1021):** Develop and design manufactured products, such as cars, home appliances, and children's toys. Combine artistic talent with research on product use, marketing, and materials to create the most functional and appealing product design.
 |
| *Entry-Level Educational Requirement: Bachelor's degree* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 29%* |

# Occupational Demand

**Table 1. Employment Outlook for Graphic Art and Design Occupations in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation  | 2018 Jobs | 2023 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25%ile Hourly Wage | Median Hourly Wage |
| Graphic Designers |  13,289  |  13,728  | 438 | 3% |  6,724  |  1,345  | $20.36 | $30.00 |
| Multimedia Artists and Animators | 5,025  | 5,328 | 303 | 6% | 2,348  | 470 | $29.20 | $40.34 |
| Commercial and Industrial Designers |  1,901  |  1,958  | 57 | 3% |  955  |  191  | $21.28 | $33.49 |
| Designers, All Other | 681  | 692  | 11 | 2% | 316  | 66  | $25.84 | $35.90 |
| **Total** | **20,896**  | **21,706**  | **809** | **4%** | **10,343**  | **2,072**  | **$24.17** | **$34.93** |

*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 Graphic Art and Design Occupations in North Bay Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation  | 2018 Jobs | 2023 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25%ile Hourly Wage | Median Hourly Wage |
| Graphic Designers |  526  |  528  | 2 | 0% |  250  |  50  | $17.92 | $27.11 |
| Multimedia Artists and Animators |  262 | 247  | -15 | -6% | 100  | 20  | $13.33 | $29.87 |
| Commercial and Industrial Designers |  161  |  162  | 1 | 1% |  76  |  15  | $17.64 | $30.48 |
| Designers, All Other | 57  | 57  | 0 | 0% | 28  | 6  | $14.20 | $29.81 |
| **TOTAL** | **1,006**  | **994**  | **-12** | **-1%** | **454**  | **91**  | **$15.77** | **$29.32** |

*Source: EMSI 2019.2*

**North Bay Sub-Region** includes Marin, Napa, Sonoma and Solano Counties

### Job Postings in Bay Region and North Bay Sub-Region

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

| Occupation | Bay Region | North Bay |
| --- | --- | --- |
|  Commercial and Industrial Designers | 5,153 | 51 |
|  Graphic Designers | 4,715 | 132 |
|  Designers, All Other | 3,166 | 70 |
|  Multimedia Artists and Animators |  989 | 44 |
|  **Total** | **14,023** | **297** |

*Source: Burning Glass*

**Table 4a. Top Job Titles for Graphic Art and Design Occupations for latest 12 months (September 2018 - August 2019) Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Bay | Common Title | Bay |
| Product Designer | 3,124 | User Interface (UI)/User Experience (UX) Designer | 168 |
| Graphic Designer | 2,054 | Animator | 162 |
| Visual Designer | 1,265 | Industrial Designer | 127 |
| Designer | 643 | Brand Designer | 124 |
| Interaction Designer | 407 | Digital Designer | 113 |
| Senior Designer | 357 | Junior Graphic Designer | 103 |
| Production Artist | 249 | Senior Product Engineer | 92 |
| Product Engineer | 244 | Graphic Artist | 90 |
| Product Design Engineer | 239 | Interactive Designer | 87 |
| Production Designer | 219 | Junior Designer | 87 |

*Source: Burning Glass*

**Table 4b. Top Job Titles for Graphic Art and Design Occupations for latest 12 months (September 2018 - August 2019) North Bay Sub-Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | North Bay | Common Title | North Bay |
| Graphic Designer | 77 | Digital Designer | 6 |
| Animator | 33 | Visual Designer | 4 |
| Product Designer | 18 | Production Designer | 4 |
| Production Artist | 15 | Product Design Engineer | 4 |
| Design Systems Designer | 11 | Junior Graphic Designer | 4 |
| Designer | 10 | Junior Designer | 4 |
| Product Engineer  | 8 | Industrial Designer | 4 |
| Senior Designer | 7 | Design Systems Designer, Store | 4 |
| Freelance Graphic Designer | 7 | Product Development Engineer | 3 |
| Graphic Artist | 6 | Brand Designer | 3 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Graphic Art and Design Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2018) | Jobs in Industry (2023) | % Change (2018-23) | % in Industry (2018) |
| Graphic Design Services (541430) | 2,713 | 2,405 | -11% | 13% |
| Interior Design Services (541410) | 2,320 | 2,481 | 7% | 11% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 1,185 | 1,576 | 33% | 6% |
| Software Publishers (511210) | 1,162 | 1,138 | 15% | 6% |
| Custom Computer Programming Services (541511) | 955 | 1,073 | 12% | 5% |
| Motion Picture and Video Production (512110) | 643 | 654 | 2% | 3% |
| Computer Systems Design Services (541512) | 548 | 595 | 9% | 3% |
| Other Specialized Design Services (541490) | 525 | 586 | 12% | 3% |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 518 | 552 | 7% | 3% |
| Advertising Agencies (541810) | 509 | 511 | 0% | 2% |
| Industrial Design Services (541420 | 487 | 518 | 6% | 2% |
| Electronic Shopping and Mail-Order Houses (454110) | 370 | 453 | 22% | 2% |

*Source: EMSI 2019.2*

**Table 6. Top Employers Posting Graphic Art and Design Occupations in Bay Region and North Bay Sub-Region (September 2018 - August 2019)**

|  |  |  |  |
| --- | --- | --- | --- |
| Employer | Bay | Employer | North Bay |
| Apple Inc. | 227 | Best Buy | 13 |
| Facebook | 145 | Elsa Corporation | 11 |
| Intuit  | 106 | 2K Games | 10 |
| Williams-Sonoma | 97 | Take-Two Interactive | 7 |
| Intel Corporation  | 62 | Kalo | 5 |
| Google Inc. | 61 | Eo Products | 5 |
| Visa | 57 | Navitas Naturals | 4 |
| Walmart / Sam's | 56 | Medtronic | 4 |
| Spartan Tool | 53 | Keysight Technologies | 4 |
| Uber | 50 | Salvation Army | 3 |
| Cisco Systems Incorporated | 49 | Nuvolum | 3 |
| Dribble | 48 | Jelly Belly Candy Company | 3 |
| Cadence Design Systems Inc.  | 43 | Flexo Finders | 3 |
| Best Buy | 41 | Ascendant Studios | 3 |
| Salesforce | 40 | Mediazoo | 2 |
| Square | 35 | Free Range Games | 2 |
| Accenture | 33 | Biomarin | 2 |

*Source: Burning Glass*

# Educational Supply

There are 12 community colleges in the Bay Region issuing 158 awards on average annually (last 3 years) on TOP 1030.00 - Graphic Art and Design. There are two colleges in the North Bay Sub-Region issuing 30 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 | Associates | Certificate 18+ units | Certificate Low unit | Total |
| City College of San Francisco  | Mid-Peninsula |  6  |  33  |  |  39  |
| College of San Mateo  | Mid-Peninsula |  -  |  -  |  |  -  |
| De Anza College  | Silicon Valley |  11  |  4  |  9  |  24  |
| Diablo Valley College  | East Bay |  4  |  0  |  |  4  |
| Foothill College  | Silicon Valley |  14  |  3  |  1  |  18  |
| Laney College  | East Bay |  6  |  2  |  |  8  |
| Los Medanos College  | East Bay |  10  |  1  |  |  11  |
| Mission College  | Silicon Valley |  8  |  4  |  |  12  |
| Monterey Peninsula College  | Santa Cruz - Monterey |  6  |  3  |  |  9  |
| Napa Valley College  | North Bay |  2  |  |  |  2  |
| Ohlone College  | East Bay |  2  |  1  |  |  3  |
| Santa Rosa Junior College  | North Bay |  5  |  9  |  14  |  28  |
| **Total Bay Region** |  **74**  |  **60**  |  **24**  |  **158**  |
| **Total North Bay Sub-Region** |  **7**  |  **9**  | **14** |  **30**  |

# *Source: Data Mart*

Note: The annual average for awards is 2015-16 to 2017-18.

# Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 2,072 annual openings for the Graphic Art and Design occupational cluster and 158 annual (3-year average) awards for an annual undersupply of 1,914 students. In the North Bay Sub-Region, there is also a gap with 91 annual openings and 30 annual (3-year average) awards for an annual undersupply of 61 students.

# Student Outcomes

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay (All CTE Programs) | College of Marin (All CTE Programs) | State (1030.00) | Bay (1030.00) | North Bay (1030.00) | College of Marin (1030.00) |
| % Employed Four Quarters After Exit | 74% | 65% | 61% | 65% | 66% | n/a |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $10,165 | $6,001 | $8,943 | $7,380 | n/a |
| Median % Change in Earnings | 46% | 48% | 58% | 43% | 16% | n/a |
| % of Students Earning a Living Wage | 63% | 61% | 39% | 47% | 40% | n/a |

*Source: Launchboard Pipeline (version available on 9/25/19*

# Skills and Education

**Table 9. Top Skills for Graphic Art and Design Occupations in Bay Region (September 2018 - August 2019)**

|  |  |  |  |
| --- | --- | --- | --- |
| Skill | Postings | Skill | Postings |
| Adobe Photoshop | 6,051 | User Research | 1,443 |
| Adobe Indesign | 4,661 | Web Site Design | 1,392 |
| Graphic Design | 4,378 | Project Management | 1,257 |
| Adobe Illustrator | 3,840 | User Interface (UI) Design | 1,211 |
| Visual Design | 3,743 | Social Media | 1,101 |
| Adobe Acrobat | 3,617 | Product Management | 1,086 |
| Adobe Creative Suite | 3,572 | Animation | 1,082 |
| Product Design | 2,831 | Adobe Aftereffects | 1,022 |
| Typesetting | 2,520 | Illustration | 1.020 |
| Prototyping | 2,478 | Digital Design | 989 |
| Interaction Design | 2,110 | Java Script | 933 |
| Process Design | 1,725 | Project Design | 833 |
| UX Wireframes | 1,447 | Information Architecture | 766 |

*Source: Burning Glass*

**Table 10. Education Requirements for Graphic Art and Design 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 | 177 | 3% |
| Associate Degree | 140 | 2% |
| Bachelor’s Degree or Higher | 6,527 | 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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