Graphic Design Occupations
Labor Market Information Report
San Jose City College

Prepared by the San Francisco Bay Center of Excellence
for Labor Market Research
December 2020

Recommendation

Based on all available data, there appears to be an undersupply of Graphic Design workers compared to the demand for this cluster of occupations in the Bay Region and in the Silicon Valley Sub-Region (Santa Clara County). There is a projected annual gap of about 1,121 students in the Bay Region and 271 students in the Silicon Valley Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 0614.00-Digital Media 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 San Jose City College and in the region.

This report profiles Graphic Design Occupations in the 12 county Bay Region and in the Silicon Valley Sub-Region for six (6) proposed new programs at San Jose City College. This report can be used by the college for all of the following programs when submitting to BACCC for the Program Recommendation process, because all programs are using the same TOP code and SOC code:

- AA in Graphic Design
- Certificate in Graphic Design
- AS in User Experience and Interaction Design
- Certificate in User Experience and Interaction Design
- AS in Motion Graphic Design
- Certificate in Motion Graphic Design

The following additional information was provided by San Jose City College about the need for these programs:
"Our current Art program does not cover any of the newer technology in computer graphics and digital media. Our new Department - Digital Media Arts plans to cover the gap by offering these newer programs. Our industry advisors our from various bay area entertainment companies such as Pixar, ServiceNow, Google, Electronic Arts, and Sixense Games. UI/UX is growing field and fairly new in the entertainment market, that produces a lot of entry-level jobs in the Bay Area. We verified this with our advisors with hiring information from their respective companies. Our advisor from ServiceNow said that they may have many opportunities for UI/UX and Graphic Design positions, but not enough applicants. ServiceNow is one of the Bay Areas major companies that offer Design Internships each summer in UI, UX and Visual Design. Many other nearby companies such as Apple, IBM and Nvidia also offer entry-level jobs in this field.

Our advisors guided us on creating specific courses, with the skills they need for hiring within their own companies. Our User Experience and Interaction Design certificate would be one of the first ones in our area, there are none in community colleges nearby us, and only a few UC Extensions currently offer courses in UI/UX, none of the CSUs do. Graphic Design and User Experience is one of the most requested programs from SJCC students besides Animation and Games."

- **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: 29%

Occupational Demand

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

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Average Annual Openings	25% Hourly Wage	Median Hourly Wage
Graphic Designers	11,352	11,849	497	4%	6,330	1,266	$22.35	$31.39

Source: EMSI 2020.3
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 Design Occupations in Silicon Valley Sub-Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Average Annual Openings	25% Hourly Wage	Median Hourly Wage
Graphic Designers	2,427	2,588	162	7%	1,418	284	$21.50	$31.08

Source: EMSI 2020.3
Silicon Valley Sub-Region includes Santa Clara County

Job Postings in Bay Region and Silicon Valley Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (November 2019 - October 2020)

Occupation	Bay Region	Silicon Valley Sub-Region
Graphic Designers	3,033	890

Source: Burning Glass

Table 4a. Top Job Titles for Graphic Design Occupations for latest 12 months (November 2019 - October 2020) Bay Region

Common Title	Bay	Common Title	Bay
Graphic Designer	508	Digital Graphic Designer	15
Visual Designer	281	Graphic Production Artist	14
Senior Graphic Designer	106	Graphic Designer/Production Specialist	14
Senior Visual Designer	88	Design Specialist	14
Production Artist	85	Visual UX Designer	13
Production Designer	61	UX/Visual Designer II	13
Freelance Graphic Designer	34	Graphic Designer III	13
Junior Graphic Designer	31	Environmental Graphic Designer	13

Showroom Design Specialist	28	UX/Visual Designer III	12
Senior Digital Design Engineer	20	Print Production Manager	12
UX Visual Designer	18	Lead Visual Designer	12
Graphic Designer II	18	Labeling Specialist	12
Associate Graphic Designer	17	Visual Designer II	11
Graphic Artist	15	Graphic/Web Designer	11

Table 4b. Top Job Titles for Graphic Design Occupations for latest 12 months (November 2019 - October 2020) Silicon Valley Sub-Region

Common Title	Silicon Valley	Common Title	Silicon Valley
Graphic Designer	114	Labeling Specialist	7
Visual Designer	70	Graphic Designer III	7
Senior Graphic Designer	23	Design Specialist	7
Production Designer	20	Asic Digital Design Engineer, Senior I	7
Senior Visual Designer	19	Asic Digital Design Engineer	7
Senior Digital Design Engineer	19	Visual UX Designer	6
UX/Visual Designer II	13	Senior Production Designer	5
UX/Visual Designer III	12	Graphic Designer II	5
Graphic Production Artist	12	Freelance Graphic Designer	5
Production Artist	10	Asic Digital Design Engineer, Staff	5
Graphic/Web Designer	9	Asic Digital Design Engineer, II	5
Lead Visual Designer	8	Asic Digital Design Engineer, I	5
Graphic Artist	8	Web Design & Graphic Design Coach - Summer Camp	4
Design Specialist II	8	Visual Designer III	4

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Graphic Design Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2024)	% Change (2019-24)	% Occupation Group in Industry (2019)
Graphic Design Services	1,640	1,572	-4%	14%
Interior Design Services	1,423	1,554	9%	13%
Internet Publishing and Broadcasting and Web Search Portals	652	824	26%	6%
Custom Computer Programming Services	369	432	17%	3%
Software Publishers	356	448	26%	3%
Advertising Agencies	344	343	0%	3%
Other Specialized Design Services	323	349	8%	3%
Industrial Design Services	318	342	8%	3%
Commercial Printing (except Screen and Books)	303	241	-20%	3%
Corporate, Subsidiary, and Regional Managing Offices	274	266	-3%	2%
Electronic Shopping and Mail-Order Houses	231	274	18%	2%
Computer Systems Design Services	202	229	13%	2%

Administrative Management and General Management Consulting Services	170	203	20%	2%
Newspaper Publishers	158	111	-30%	1%
Public Relations Agencies	151	146	-3%	1%
Other Services Related to Advertising	119	122	2%	1%
Other Scientific and Technical Consulting Services	110	101	-8%	1%

Source: EMSI 2020.3

Table 6. Top Employers Posting Graphic Design Occupations in Bay Region and Silicon Valley Sub-Region (November 2019 - October 2020)

Employer	Bay	Employer	Bay	Employer	Silicon Valley
Gap Inc.	52	Nvidia Corporation	11	Nsys Design Systems	41
Nsys Design Systems	41	Qualcomm	10	Apple Inc.	24
Exploratorium	39	Osi Engineering	10	Nvidia Corporation	11
Advantage Sales & Marketing	28	Hogarth Worldwide	10	Exploratorium	11
Kalo	25	Kidztopros	9	Qualcomm	10
Apple Inc.	24	Intuit	9	Osi Engineering	10
Facebook	21	The World's Largest Social Network	8	Hogarth Worldwide	10
Williams-Sonoma	20	Servicenow	8	Hh Global Incorporated	10
The Mom Project	19	Elsa Corporation	8	Akorbi	10
Amazon	17	Crawford Group	8	Intuit	9
Old Navy	15	80Twenty	8	Servicenow	7
Hh Global Incorporated	15	Wunderland	7	IBM	7
Ursus	12	United States Technical Solutions	7	Samsung America, Inc.	6
University Of California Berkeley	12	Tjg Civil Engineers And Land Planners	7	Nutanix	6
Akorbi	12	Salesforce	7	Kiwico Company	6
eBay	11	Park Computer Systems Incorporated	7	Advanced Micro Devices, Inc.	6
Square	11	Magenta Incorporated	7	Western Digital	5

Source: Burning Glass

Educational Supply

There are eight (8) community colleges in the Bay Region issuing 91 awards on average annually (last 3 years ending 2018-19) on TOP 0614.00-Digital Media. In the Silicon Valley Sub-Region here are three (3) community colleges that issued 11 awards on average annually (last 3 years) on this TOP code.

There are three (3) other CTE Educational Institutions in the Bay Region issuing 52 awards on average annually (last 3 years ending 2016-17) on TOP 0614.00-Digital Media. There is one (1) other CTE Educational Institution in the Silicon Valley Sub-Region issuing two (2) awards on average annually (last 3 years) on this TOP code.

There is one (1) other institution in the Bay Region issuing two (2) Bachelor's degrees on average annually (last 3 years ending 2016-17) on TOP 0614.00-Digital Media. There are no other institutions in the Silicon Valley Sub-Region issuing Bachelor's degrees on this TOP code.

Table 7a. Community College Awards on TOP 0614.00-Digital Media in Bay Region

College	Sub-Region	Associates	Certificate Low Unit	Total

College	Sub-Region	Associate Degree	Award 1 < 2 academic yrs	Grand Total
Berkeley City	East Bay		2	3
Cabrillo	SC - Monterey	5	9	14
Gavilan	Silicon Valley	4	1	5
Las Positas	East Bay	5	3	7
Mission	Silicon Valley		1	1
San Francisco	Mid-Peninsula		31	31
San Mateo	Mid-Peninsula	15	10	25
West Valley	Silicon Valley	2	3	5
Total Bay Region		**30**	**61**	**91**
Total Silicon Valley Sub-Region		**6**	**5**	**11**

Source: Data Mart

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

Table 7b. Other CTE Institution Awards on TOP 0614.00-Digital Media in Bay Region

College	Sub-Region	Associate Degree	Award 1 < 2 academic yrs	Grand Total
Academy of Art University	Mid-Peninsula	44		45
Argosy University-The Art Institute of California-San Francisco	Mid-Peninsula	3	2	5
Argosy University-The Art Institute of California-Silicon Valley	Silicon Valley	1	1	2
Total Bay Region		**48**	**3**	**52**
Total Silicon Valley Sub-Region		**1**	**1**	**2**

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Table 7c. Bachelor's Degree Awards on TOP 0614.00-Digital Media in Bay Region

College	Sub-Region	Bachelor's Degree
University of California-Santa Cruz	SC-Monterey	2
Total Bay Region		**2**
Total Silicon Valley Sub-Region		**0**

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay Region with 1,266 annual openings for the Graphic Design occupational cluster and 145 annual (3-year average) awards from community colleges and other institutions for an annual undersupply of 1,121 students. In the Silicon Valley Sub-Region, there is also a gap with 284 annual openings and 13 annual (3-year average) awards from community colleges and other institutions for an annual undersupply of 271 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0614.00-Digital Media

2017-18	Bay All CTE Programs	San Jose City College All CTE Programs	State 0614.00	Bay 0614.00	Silicon Valley 0614.00	San Jose City College 0614.00
% Employed Four Quarters After Exit	67%	63%	56%	55%	49%	n/a

Median Quarterly Earnings Two Quarters After Exit	$11,466	$10,678	$6,315	$7,565	$7,224	n/a
Median % Change in Earnings	31%	31%	32%	41%	79%	n/a
% of Students Earning a Living Wage	53%	45%	35%	31%	n/a	n/a

Source: Launchboard Pipeline (version available on August 2020)

Skills and Education

Table 9. Top Skills for Graphic Design Occupations in Bay Region (November 2019 - October 2020)

Skill	Postings	Skill	Postings	Skill	Postings
Adobe Photoshop	2,047	Art Direction	284	Creative Design	157
Graphic Design	1,926	Prototyping	273	UX Wireframes	156
Adobe Indesign	1,717	Animation	266	Video Editing	156
Adobe Illustrator	1,432	Marketing Materials	245	JavaScript	154
Adobe Acrobat	1,224	Process Design	225	E-Commerce	152
Adobe Creative Suite	1,181	Infographics	218	Digital Marketing	151
Visual Design	1,000	Scheduling	217	Brand Identity	149
Typesetting	930	Interaction Design	212	Business-to-Business	148
Social Media	532	User Interface (UI) Design	212	Quality Assurance and Control	145
Web Site Design	530	Product Design	197	HTML5	131
Project Management	419	Budgeting	185	Direct Mail	125
Adobe Aftereffects	410	Retail Industry Knowledge	182	Motion Graphics	116
Digital Design	376	Project Design	181	Creative Direction	115
Illustration	371	Print Production	178	Multimedia	115
Packaging	285	Photography	163	Printers	113

Source: Burning Glass

Table 10. Education Requirements for Graphic Design Occupations in Bay Region (Nov. 2019 – Oct. 2020)

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	87	6%
Associate Degree	67	4%
Bachelor's Degree or Higher	1,370	90%

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/
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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