

**Photography Digital Technician Occupations  
Labor Market Information Report  
City College of San Francisco  
Prepared by the San Francisco Bay Center of Excellence  
for Labor Market Research  
November 2018**

**Recommendation**

Based on all available data, there appears to be an undersupply of Photography Digital Technician 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). The annual gap is about 681 students annually in the Bay region and 161 students annually in the Mid-Peninsula sub-region.

This report also provides student outcomes data on employment and earnings for programs on TOP 1012.00 - Applied Photography in the state and region. It is recommended that this 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 and in the region.

**Introduction**

This report profiles Photography Digital Technician Occupations in the 12 county Bay region and in the Mid-Peninsula sub-region for a proposed new program at City College of San Francisco.

- **Photographers (SOC 27-4021):** Photograph people, landscapes, merchandise, or other subjects, using digital or film cameras and equipment. May develop negatives or use computer software to produce finished images and prints. Includes scientific photographers, aerial photographers, and photojournalists.

*Entry-Level Educational Requirement: High school diploma or equivalent*

*Training Requirement: Long-term on-the-job training*

*Percentage of Community College Award Holders or Some Postsecondary Coursework: 35%*

- **Photographic Process Workers and Processing Machine Operators (SOC 51-9151):** Perform work involved in developing and processing photographic images from film or digital media. May perform precision tasks such as editing photographic negatives and prints.

*Entry-Level Educational Requirement: High school diploma or equivalent*

*Training Requirement: Short-term on-the-job training*

*Percentage of Community College Award Holders or Some Postsecondary Coursework: 32%*

**Occupational Demand**

**Table 1. Employment Outlook for Photography Digital Technician Occupations in Bay Region**

| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Openings | Annual Openings | 10% Hourly Wage | Median Hourly |
|------------|-----------|-----------|-------------|---------------|---------------|-----------------|-----------------|---------------|
|------------|-----------|-----------|-------------|---------------|---------------|-----------------|-----------------|---------------|

|  |              |              |             |             |              |            |                | y<br>Wage      |
|--|--------------|--------------|-------------|-------------|--------------|------------|----------------|----------------|
| <b>Photographers</b>   | <b>5,641</b> | <b>6,112</b> | <b>471</b>  | <b>8%</b>   | <b>2,852</b> | <b>570</b> | <b>\$13.00</b> | <b>\$17.15</b> |
| <b>Photographic Process Workers and Processing Machine Operators</b> | <b>1,091</b> | <b>1,038</b> | <b>(52)</b> | <b>(5%)</b> | <b>838</b>   | <b>168</b> | <b>\$11.50</b> | <b>\$15.01</b> |
| <b>Total</b>   | <b>6,732</b> | <b>7,150</b> | <b>418</b>  | <b>6%</b>   | <b>3,690</b> | <b>738</b> | <b>\$12.76</b> | <b>\$16.81</b> |

Source: EMSI 2018.4

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 Photography Digital Technician Occupations in Mid-Peninsula Sub-Region

| Occupation   | 2017 Jobs    | 2022 Jobs    | 5-Yr Change | 5-Yr % Change | 5-Yr Openings | Annual Openings | 10% Hourly Wage | Median Hourly Wage |
|--|--------------|--------------|-------------|---------------|---------------|-----------------|-----------------|--------------------|
| <b>Photographers</b>   | <b>1,558</b> | <b>1,700</b> | <b>142</b>  | <b>9%</b>     | <b>789</b>    | <b>158</b>      | <b>\$13.63</b>  | <b>\$17.53</b>     |
| <b>Photographic Process Workers and Processing Machine Operators</b> | <b>260</b>   | <b>266</b>   | <b>6</b>    | <b>2%</b>     | <b>212</b>    | <b>42</b>       | <b>\$10.59</b>  | <b>\$17.12</b>     |
| <b>TOTAL</b>   | <b>1,817</b> | <b>1,966</b> | <b>148</b>  | <b>8%</b>     | <b>1,001</b>  | <b>200</b>      | <b>\$13.20</b>  | <b>\$17.47</b>     |

Source: EMSI 2018.4

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 (Oct 2017 - Sept 2018)

| Occupation  | Bay Region | Mid-Peninsula |
|---|------------|---------------|
| <b>Photographers (SOC 27-4021):</b>   | <b>555</b> | <b>226</b>    |
| <b>Photographic Process Workers and Processing Machine Operators (SOC 51-9151):</b> | <b>235</b> | <b>75</b>     |
| <b>Total</b>  | <b>790</b> | <b>301</b>    |

Source: Burning Glass

Table 4. Top Job Titles for Photography Digital Technician Occupations for latest 12 months (Oct 2017 - Sept 2018)

| Common Title               | Bay        | Mid-Peninsula | Common Title   | Bay      | Mid-Peninsula |
|----------------------------|------------|---------------|--|----------|---------------|
| <b>Photographer</b>        | <b>368</b> | <b>154</b>    | <b>Assistant, Photography, Information And Technology Industry</b> | <b>9</b> | <b>3</b>      |
| <b>School Photographer</b> | <b>73</b>  | <b>16</b>     | <b>Processor</b>   | <b>9</b> | <b>1</b>      |
| <b>Developer</b>           | <b>33</b>  | <b>5</b>      | <b>Photo Retoucher</b>   | <b>8</b> | <b>6</b>      |

|                                 |           |           |   |          |          |
|---------------------------------|-----------|-----------|---|----------|----------|
| <b>Real Estate Photographer</b> | <b>18</b> | <b>7</b>  | <b>Assistant, Photography, Event, Information And Technology Industry</b> | <b>6</b> | <b>3</b> |
| <b>Technician</b>               | <b>18</b> |           | <b>Digital Specialist</b>   | <b>6</b> | <b>4</b> |
| <b>Wedding Photographer</b>     | <b>17</b> | <b>13</b> | <b>Photojournalist</b>  | <b>6</b> | <b>6</b> |
| <b>Black Box Photography Qe</b> | <b>10</b> | <b>0</b>  | <b>Retoucher</b>  | <b>6</b> | <b>5</b> |
| <b>Specialist</b>               | <b>10</b> | <b>1</b>  | <b>Ap Processor</b>   | <b>5</b> | <b>5</b> |

Source: *Burning Glass*

**Industry Concentration**

**Table 5. Industries hiring Photography Digital Technician Workers in Bay Region**

| <b>Industry – 6 Digit NAICS (No. American Industry Classification) Codes</b> | <b>Jobs in Industry (2017)</b> | <b>Jobs in Industry (2022)</b> | <b>% Change (2017-22)</b> | <b>% in Industry (2017)</b> |
|--|--------------------------------|--------------------------------|---------------------------|-----------------------------|
| <b>All Other Professional, Scientific, and Technical Services (541990)</b>   | <b>3,012</b>                   | <b>3,117</b>                   | <b>13%</b>                | <b>45.3%</b>                |
| <b>Photography Studios, Portrait (541921)</b>                                | <b>781</b>                     | <b>799</b>                     | <b>(8%)</b>               | <b>11.6%</b>                |
| <b>Independent Artists, Writers, and Performers (711510)</b>                 | <b>455</b>                     | <b>450</b>                     | <b>(4%)</b>               | <b>6.5%</b>                 |
| <b>Commercial Photography (541922)</b>                                       | <b>343</b>                     | <b>361</b>                     | <b>2%</b>                 | <b>5.2%</b>                 |
| <b>Translation and Interpretation Services (541930)</b>                      | <b>198</b>                     | <b>207</b>                     | <b>16%</b>                | <b>3.0%</b>                 |
| <b>Internet Publishing and Broadcasting and Web Search Portals (519130)</b>  | <b>192</b>                     | <b>198</b>                     | <b>40%</b>                | <b>2.9%</b>                 |
| <b>Marketing Research and Public Opinion Polling (541910)</b>                | <b>124</b>                     | <b>129</b>                     | <b>15%</b>                | <b>1.9%</b>                 |
| <b>Warehouse Clubs and Supercenters (452311)</b>                             | <b>99</b>                      | <b>98</b>                      | <b>(3%)</b>               | <b>1.4%</b>                 |
| <b>Parking Lots and Garages (812930)</b>                                     | <b>95</b>                      | <b>92</b>                      | <b>(1%)</b>               | <b>1.3%</b>                 |
| <b>Motion Picture and Video Production (512110)</b>                          | <b>89</b>                      | <b>91</b>                      | <b>9%</b>                 | <b>1.3%</b>                 |
| <b>Photofinishing Laboratories (except One-Hour) (812921)</b>                | <b>89</b>                      | <b>86</b>                      | <b>0%</b>                 | <b>1.2%</b>                 |
| <b>Department Stores (452210)</b>  | <b>88</b>                      | <b>85</b>                      | <b>(35%)</b>              | <b>1.2%</b>                 |
| <b>Pharmacies and Drug Stores (446110)</b>                                   | <b>75</b>                      | <b>73</b>                      | <b>(12%)</b>              | <b>1.1%</b>                 |
| <b>Pet Care (except Veterinary) Services (812910)</b>                        | <b>71</b>                      | <b>68</b>                      | <b>4%</b>                 | <b>1.0%</b>                 |

Source: *EMSI 2018.4*

**Table 6. Top Employers Posting Photography Digital Technician Occupations in Bay Region and Mid-Peninsula Sub-Region (Oct 2017 - Sept 2018)**

| <b>Employer</b>           | <b>Bay</b> | <b>Employer</b>                     | <b>Bay</b> | <b>Employer</b>           | <b>Mid-Peninsula</b> |
|---------------------------|------------|-------------------------------------|------------|---------------------------|----------------------|
| <b>Lifetouch</b>          | <b>92</b>  | <b>NBC</b>                          | <b>6</b>   | <b>Lifetouch</b>          | <b>21</b>            |
| <b>Pro Motionpix, Llc</b> | <b>54</b>  | <b>Walgreens Boots Alliance Inc</b> | <b>6</b>   | <b>Pro Motionpix, Llc</b> | <b>18</b>            |
| <b>Iconic Group</b>       | <b>31</b>  | <b>Academy Art University</b>       | <b>5</b>   | <b>Iconic Group</b>       | <b>17</b>            |

|                        |    |                                     |   |                                     |    |
|------------------------|----|-------------------------------------|---|-------------------------------------|----|
| Gradimages             | 30 | Charleys Angels Newborn Photography | 5 | Gradimages                          | 15 |
| Bella Baby Photography | 19 | Classic Photographers               | 5 | Mom365                              | 6  |
| Mom365                 | 12 | Cozymeal                            | 5 | Bella Baby Photography              | 5  |
| Dealervision Com       | 11 | Hornblower Cruises Events           | 5 | Charleys Angels Newborn Photography | 5  |
| Jcpenney Portraits     | 10 | Kodakit                             | 5 | Hornblower Cruises Events           | 5  |
| Teddy Bear Portraits   | 8  | Mom365, Inc                         | 5 | Academy Art University              | 4  |
| Costar Group           | 6  | Xcite Advertising                   | 5 | CBS Broadcasting                    | 4  |

Source: Burning Glass

### Educational Supply

There are seven community colleges in the Bay Region issuing 57 awards annually on TOP 1012.00 - Applied Photography. City College of San Francisco is the only college in the Mid-Peninsula sub-region with a program on this TOP code, issuing 39 awards annually.

Table 7. Awards on TOP 1012.00 - Applied Photography in the Bay Area

| College                               | Sub-Region     | Headcount    | Associates | Certificates | Total     |
|---------------------------------------|----------------|--------------|------------|--------------|-----------|
| Chabot Hayward                        | East Bay       | 281          | 2          |              | 2         |
| De Anza                               | Silicon Valley | 685          | 2          | 6            | 8         |
| Laney                                 | East Bay       | 382          | 0          | 1            | 1         |
| Napa                                  | North Bay      | 257          | 0          | 1            | 1         |
| San Francisco                         | Mid-Peninsula  | 432          |            | 39           | 39        |
| Solano                                | North Bay      | 251          | 2          | 3            | 5         |
| West Valley                           | Silicon Valley | n/a          |            | 1            | 1         |
| <b>Total Bay Region</b>               |                | <b>2,288</b> | <b>6</b>   | <b>51</b>    | <b>57</b> |
| <b>Total Mid-Peninsula Sub-Region</b> |                | <b>432</b>   |            | <b>39</b>    | <b>39</b> |

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.

### Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 738 annual openings for the Photography Digital Technician occupational cluster and 57 annual awards for an annual undersupply of 681. In the Mid-Peninsula sub-region, there is also a gap with 200 annual openings and 39 annual awards for an annual undersupply of 161.

Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1012.00 - Applied Photography**

| 2015-16   | Bay (All CTE Programs) | City College of San Francisco (All CTE Programs) | State (TOP 1012.00) | Bay (TOP 1012.00) | Mid-Peninsula (TOP 1012.00) | City College of San Francisco (TOP 1012.00) |
|---|------------------------|--|---------------------|-------------------|-----------------------------|---|
| % Employed Four Quarters After Exit               | 75%                    | 72%  | 58%                 | 57%               | 60%                         | 60%   |
| Median Quarterly Earnings Two Quarters After Exit | \$13,996               | \$10,794   | \$5,970             | \$7,589           | \$11,380                    | \$11,380                                    |
| Median % Change in Earnings                       | 40%                    | 46%  | 36%                 | 38%               | 50%                         | 50%   |
| % of Students Earning a Living Wage               | 63%                    | 55%  | 37%                 | 44%               | 53%                         | 53%   |

Source: Launchboard Pipeline (version available on 10/17/18)

Skills, Certifications and Education

**Table 9. Top Skills for Photography Digital Technician Occupations in Bay Region (Oct 2017 - Sept 2018)**

| Skill   | Postings | Skill                         | Postings | Skill                     | Postings |
|---|----------|-------------------------------|----------|---------------------------|----------|
| Photography   | 537      | Videography                   | 42       | Repair                    | 26       |
| Customer Service                                      | 159      | Social Media                  | 39       | Color Editing             | 25       |
| Lifting Ability                                       | 125      | Adobe Indesign                | 38       | Retail Industry Knowledge | 25       |
| Adobe Photoshop                                       | 121      | E-Commerce                    | 31       | Digital Photography       | 24       |
| Sales   | 87       | Product Sales                 | 31       | Graphic Design            | 21       |
| Automotive Industry Knowledge                         | 68       | Adobe Acrobat                 | 30       | Photo Editing             | 20       |
| Scheduling  | 67       | Adobe Creative Suite          | 29       | Printers                  | 19       |
| Client Base Retention                                 | 55       | Adobe Illustrator             | 28       | Journalism                | 17       |
| Computer-Assisted Auditing Technology (CAAT) services | 43       | Quality Assurance and Control | 28       | Python                    | 17       |

Source: Burning Glass

**Table 10. Certifications for Photography Digital Technician Occupations in the Bay Region (Oct 2017 - Sept 2018)**

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.

| Certification                            | Postings | Certification                                  | Postings |
|--|----------|--|----------|
| Driver's License                         | 212      | IT Infrastructure Library (ITIL) Certification | 2        |
| Certified Ophthalmic Assistant           | 6        | ITIL Certification                             | 2        |
| First Aid Cpr Aed                        | 6        | Pilot Certification                            | 2        |
| Basic Life Saving (BLS)                  | 4        | Project Management Certification               | 2        |
| Certified Ophthalmic Technician          | 4        | Six Sigma Certification                        | 2        |
| Phlebotomy Certification                 | 3        | Alcohol Server Certification                   | 1        |
| American Heart Association Certification | 2        | Certified Clinical Research Professional       | 1        |
| Driver's License                         | 212      | Certified Quality Auditor (CQA)                | 1        |

Source: Burning Glass

**Table 11. Education Requirements for Photography Digital Technician Occupations in Bay Region**

Note: 56% 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 |
|------------------------------------|-------------------------|
| High school or vocational training | 226 (65%)               |
| Associate Degree                   | 5 (1%)                  |
| Bachelor's Degree or Higher        | 117 (34%)               |

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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