** Accounting/Bookkeeping Occupations**

**Labor Market Information Report**

**Monterey Peninsula College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

February 2019

**Recommendation**

Based on all available data, there appears to be a significant undersupply of Accounting/Bookkeeping workers compared to the demand for this cluster of occupations in the Bay region and in the Santa Cruz-Monterey sub-region (Monterey, San Benito, Santa Cruz and Counties). There is a projected annual gap of about 5,002 students in the Bay region and 386 students in the Santa Cruz-Monterey Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0502.00 - Accounting 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 Monterey Peninsula College and in the region.

**Introduction**

This report profiles Accounting/Bookkeeping Occupations in the 12 county Bay region and in the Santa Cruz- Monterey sub-region for the conversion of a local, low unit certificate to a Certificate of Achievement at Monterey Peninsula College.

|  |
| --- |
| * **Bookkeeping, Accounting, and Auditing Clerks (SOC 43-3031):** Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers. Excludes “Payroll and Timekeeping Clerks” (43-3051). |
| *Entry-Level Educational Requirement: Some college, no degree* |
| *Training Requirement: Moderate-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 48%* |
| * **Financial Clerks, All Other (SOC 43-3099)**: All financial clerks not listed separately. |
| *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 Accounting/Bookkeeping 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 |
| Bookkeeping, Accounting, and Auditing Clerks | 48,359 | 49,642 | 1,283 | 3% | 28,300 | 5,660 | $15.46 | $23.85 |
| Financial Clerks, All Other | 1,378 | 1,441 | 63 | 5% | 802 | 160 | $12.66 | $18.39 |
| **Total** | **49,737** | **51,083** | **1,347** | **3%** | **29,102** | **5,820** | **$14.06** | **$21.12** |

*Source: EMSI 2019.1*

**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 Accounting/Bookkeeping Occupations in Santa Cruz-Monterey 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 |
| Bookkeeping, Accounting, and Auditing Clerks | 3,960 | 3,955 | (4) | (0%) | 2,213 | 443 | $12.21 | $21.55 |
| Financial Clerks, All Other | 181 | 180 | (1) | (0%) | 95 | 19 | $12.26 | $17.88 |
| **Total** | **4,140** | **4,136** | **(5)** | **(0%)** | **2,308** | **462** | **$12.24** | **$19.72** |

*Source: EMSI 2019.1*

**Santa Cruz - Monterey Sub-Region** includes Monterey, San Benito, Santa Cruz and Counties

**Job Postings in Bay Region and Santa Cruz - Monterey Sub-Region**

**Table 3. Number of Job Postings by Occupation for latest 12 months (Feb 2018 - Jan 2018)**

| Occupation | Bay Region | Santa Cruz - Monterey |
| --- | --- | --- |
| Bookkeeping, Accounting, and Auditing Clerks | 11,411 | 314 |

*Source: Burning Glass*

**Table 4. Top Job Titles for Accounting/Bookkeeping Occupations for latest 12 months (Feb 2018 - Jan 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | Santa Cruz - Monterey | Common Title | Bay | Santa Cruz - Monterey |
| Bookkeeper | 1,675 | 48 | Accounts Payable Analyst | 120 | 1 |
| Accounting Clerk | 1,264 | 37 | Accounting Technician | 113 | 15 |
| Accounts Payable Specialist | 1,209 | 20 | Accounts Payable Coordinator | 109 | 3 |
| Accounts Payable Clerk | 966 | 44 | Accounts Receivable Coordinator | 99 | 18 |
| Accounts Receivable Clerk | 588 | 18 | Clerk | 95 | 3 |
| Accounting Assistant | 521 | 13 | Accounts Receivable Analyst | 89 |  |
| Accounts Receivable Specialist | 514 | 8 | Accounting Coordinator | 71 | 2 |
| Accounting Specialist | 411 | 9 | Accounts Payable Associate | 62 |  |
| Specialist | 287 |  | AP Clerk | 62 | 5 |
| Accounts Payable | 264 | 5 | Account Clerk | 58 | 37 |
| Accountant | 212 |  | Accounts Payable Processor | 52 |  |
| Bookkeeper/Office Manager | 167 |  | Finance Assistant | 39 | 3 |
| Accounting Associate | 159 | 1 | Accounts Receivable Associate | 31 | 3 |
| Accounts Receivable | 143 | 1 | Accounts Receivable Representative | 30 |  |

*Source: Burning Glass*

**Industry Concentration**

**Table 5. Industries hiring Accounting/Bookkeeping Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2017) | Jobs in Industry (2022) | % Change (2017-22) | % in Industry (2017) |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 2,323 | 2,450 | 7% | 4.9% |
| Local Government, Excluding Education and Hospitals (903999) | 1,974 | 1,966 | 1% | 3.9% |
| Other Accounting Services (541219) | 1,665 | 1,704 | 6% | 3.4% |
| Offices of Certified Public Accountants (541211) | 1,684 | 1,675 | 5% | 3.4% |
| Colleges, Universities, and Professional Schools (State Government) (902612) | 1,027 | 1,061 | 9% | 2.1% |
| Religious Organizations (813110) | 934 | 933 | (1%) | 1.9% |
| Colleges, Universities, and Professional Schools (611310) | 833 | 846 | 7% | 1.7% |
| Custom Computer Programming Services (541511) | 813 | 822 | 11% | 1.7% |
| Office Administrative Services (561110) | 865 | 765 | (17%) | 1.5% |
| Plumbing, Heating, and Air-Conditioning Contractors (238220) | 738 | 744 | 5% | 1.5% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 683 | 708 | 32% | 1.4% |
| Hotels (except Casino Hotels) and Motels (721110) | 670 | 668 | (2%) | 1.3% |
| Offices of Lawyers (541110) | 655 | 652 | (3%) | 1.3% |
| Commercial Banking (522110) | 661 | 643 | (16%) | 1.3% |
| Tax Preparation Services (541213) | 607 | 623 | 8% | 1.3% |
| New Car Dealers (441110) | 578 | 579 | 5% | 1.2% |
| Temporary Help Services (561320) | 530 | 524 | 2% | 1.1% |
| Computer Systems Design Services (541512) | 519 | 507 | 5% | 1.0% |
| Supermarkets and Other Grocery (except Convenience) Stores (445110) | 510 | 500 | (3%) | 1.0% |
| Residential Property Managers (531311) | 487 | 486 | 8% | 1.0% |

*Source: EMSI 2019.1*

**Table 6. Top Employers Posting Accounting/Bookkeeping Occupations in Bay Region and Santa Cruz-Monterey Sub-Region (Feb 2018 - Jan 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Santa Cruz - Monterey |
| Marriott International Incorporated | 36 | Department of Veterans Affairs | 11 | California State University | 7 |
| Sprouts Farmers Markets | 34 | Ernst & Young | 11 | Employnet Inc | 4 |
| US Army | 29 | Toll Brothers Incorporated | 11 | University Of California Santa Cruz | 4 |
| ARC Document Solutions | 17 | Victory Automotive | 11 | Victory Dealership Group | 4 |
| Stanford University | 17 | Bpm | 10 | West Marine | 4 |
| Bio-Rad Laboratories | 15 | Lennar Corporation | 10 | Department Army | 3 |
| Jones Lang Lasalle Incorporated | 15 | Rosendin Electric Incorporated | 10 | Threshold Enterprises Limited | 3 |
| Sfmta | 15 | University California | 10 | Bay Photo Lab | 2 |
| Aladdin Bail Bonds | 14 | UC Berkeley | 10 | Dole Food Company | 2 |
| Alameda Health System | 14 | 3Q Digital | 9 | Dole Food Company Inc | 2 |
| Hilton Hotel Corporation | 14 | Backroads Incorporated | 9 | El Super | 2 |
| Rite Aid Corporation | 14 | Compass Group Plc | 9 | H&R Block | 2 |
| California State University | 13 | Deloitte | 9 | Interim Incorporated | 2 |
| Fenwick & West | 13 | Doubletree Hotel | 9 | Monterey COE | 2 |
| Penske Automotive Group | 12 | Hyatt | 9 | Monterey One Water | 2 |
| Compass Group | 11 | Lmg Healthcare | 9 | Mount Madonna School | 2 |

*Source: Burning Glass*

**Educational Supply**

There are 28 community colleges in the Bay Region issuing 818 awards on average annually on TOP 0502.00 – Accounting. There are four colleges in the Santa Cruz-Monterey Sub-Region issuing 76 awards on average annually on this TOP code.

**Table 7. Awards on TOP 0502.00 - Accounting in the Bay Region**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Non Credit | Total |
| Berkeley City College | East Bay | 253 | 5 | 10 |  | 16 |
| Cabrillo College | Santa Cruz - Monterey | 702 | 22 | 35 |  | 57 |
| Cañada College | Mid Peninsula | 279 | 10 | 13 |  | 23 |
| Chabot College | East Bay | 1,301 | 20 | 38 |  | 58 |
| City College of San Francisco | Mid Peninsula | 1,056 | 6 | 11 |  | 17 |
| College of Alameda | East Bay | 269 | 12 | 2 |  | 13 |
| College of Marin | North Bay | 219 | 2 | 5 |  | 7 |
| College of San Mateo | Mid Peninsula | 1,552 | 30 | 95 |  | 125 |
| Contra Costa College | East Bay | 255 |  | 6 |  | 6 |
| De Anza College | Silicon Valley | 2,878 | 32 | 47 |  | 79 |
| Diablo Valley College | East Bay | 1,955 | 11 | 31 |  | 42 |
| Evergreen Valley College | Silicon Valley | 712 | 25 | 6 |  | 31 |
| Foothill College | Silicon Valley | 3,677 | 26 | 64 |  | 90 |
| Gavilan College | Santa Cruz - Monterey | 382 | 9 | 2 |  | 11 |
| Hartnell College | Santa Cruz - Monterey | 417 |  | 1 |  | 1 |
| Laney College | East Bay | 931 | 13 | 6 |  | 19 |
| Las Positas College | East Bay | 628 |  | 6 |  | 6 |
| Los Medanos College | East Bay | 384 | 13 | 8 |  | 21 |
| Merritt College | East Bay | 93 | 7 | 3 |  | 10 |
| Mission College | Silicon Valley | 826 | 13 | 9 |  | 22 |
| Monterey Peninsula College | Santa Cruz - Monterey | 479 | 4 | 3 |  | 7 |
| Napa Valley College | North Bay | 372 | 9 | 5 |  | 14 |
| Ohlone College | East Bay | 912 | 4 | 4 |  | 8 |
| San Francisco City Centers |  | 365 |  |  | 25 | 25 |
| San Jose City College | Silicon Valley | 458 | 16 | 11 |  | 27 |
| Santa Rosa Junior College | North Bay | 1,369 |  | 34 |  | 34 |
| Skyline College | Mid Peninsula | 1,047 | 19 | 13 |  | 32 |
| Solano College | North Bay | 523 | 9 | 8 |  | 16 |
| West Valley College | Silicon Valley | 730 |  | 4 |  | 4 |
| **Total Bay Region** |  | **25,024** | **315** | **479** | **25** | **818** |
| **Total SC-Monterey Sub Region** |  | **1,980** | **34** | **42** | **0** | **76** |

*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 large labor market gap in the Bay region with 5,820 annual openings for the Accounting/Bookkeeping occupational cluster and 818 annual (3-year average) awards for an annual undersupply of 5,002 students. In the Santa Cruz-Monterey Sub-Region, there is also a gap with 462 annual openings and 76 annual (3-year average) awards for an annual undersupply of 386 students.

**Student Outcomes**

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0502.00 - Accounting**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | Monterey Peninsula College (All CTE Programs) | State (0502.00) | Bay (0502.00) | Santa Cruz - Monterey (0502.00) | Monterey Peninsula College (0502.00) |
| % Employed Four Quarters After Exit | 74% | 78% | 72% | 75% | 75% | 71% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $34,475 | $21,181 | $21,579 | $18,285 | $14.574 |
| Median % Change in Earnings | 46% | 29% | 53% | 67% | 71% | 119% |
| % of Students Earning a Living Wage | 63% | 71% | 65% | 70% | 70% | 63% |

*Source: Launchboard Pipeline (version available on 2/6/19)*

**Skills, Certifications and Education**

**Table 9. Top Skills for Accounting/Bookkeeping Occupations in Bay Region (Feb 2018 - Jan 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Accounting | 8,741 | Accounting Software | 1,003 | Payables | 628 |
| Accounts Payable / Accounts Receivable | 5,186 | Budgeting | 953 | Accounting Management | 602 |
| Bookkeeping | 3,088 | Invoicing | 892 | Accruals | 600 |
| Data Entry | 2,612 | Cash Deposits and Receipts | 884 | Oracle | 549 |
| Invoice Processing | 2,504 | Customer Contact | 876 | SAP | 535 |
| Quickbooks | 2,251 | Payroll Processing | 835 | Mailing | 525 |
| Account Reconciliation | 2,150 | Scheduling | 795 | Customer Accounts | 518 |
| General Ledger | 1,863 | Accounting Systems | 775 | Filing | 504 |
| Customer Billing | 1,862 | Invoice Matching | 751 | Purchasing | 496 |
| Customer Checkout | 1,789 | Financial Statements | 747 | Balance Sheet | 480 |
| Month-End Close Processes | 1,788 | NetSuite | 740 | Mail Sorting | 462 |
| Expense Reports | 1,629 | Invoice Preparation | 710 | Finance | 447 |
| Customer Service | 1,439 | External Auditing | 704 | Business Administration | 423 |
| Spreadsheets | 1,323 | Bank Reconciliation | 699 | Full Cycle Accounts Payable | 422 |
| Enterprise Resource Planning (ERP) | 1,236 | Record Keeping | 672 | Account Closing | 400 |

*Source: Burning Glass*

**Table 10. Certifications for Accounting/Bookkeeping Occupations in the Bay Region (Feb 2018 - Jan 2018)**

Note: 95% 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 | 254 | Quickbooks Certification | 10 |
| Certificate in Accounting | 46 | Certified Information Systems Security Professional (CISSP) | 9 |
| Certified Public Accountant (CPA) | 37 | Financial Accounting Standards Board (FASB) | 7 |
| Institute of Internal Auditors (IIA) | 29 | Certified Medical Assistant | 6 |
| Business License | 18 | Leadership In Energy And Environmental Design (LEED) Certified | 6 |
| Certified Information Systems Auditor (CISA) | 15 | Registered Dietitian | 6 |
| Bookkeeping Certification | 11 | Accounts Receivable Clerk Certificate | 5 |
| Security Clearance | 11 | Medical Billing and Coding Certification | 5 |
| Certified Payroll Professional (CPP) | 10 | Cdl Class C | 4 |

*Source: Burning Glass*

**Table 11. Education Requirements for Accounting/Bookkeeping Occupations in Bay Region**

Note: 42% 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 | 1,659 (25%) |
| Associate Degree | 938 (14%) |
| Bachelor’s Degree or Higher | 4,038 (61%) |

*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**

For more information, please contact:

* Doreen O’Donovan, Data Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), [doreen@baccc.net](mailto:doreen@baccc.net) or (831) 479-6481
* John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, [jcarrese@ccsf.edu](mailto:jcarrese@ccsf.edu) or (415) 267-6544