

Baking Occupations Labor Market Information Report Mission 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 Baking 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 18,692 students in the Bay Region and 4,196 students in the Silicon Valley Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 1306.30-Culinary Arts 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 Mission College and in the region.

This report profiles Baking Occupations in the 12 county Bay Region and in the Silicon Valley Sub-Region for a proposed new program at Mission College.

- **Bakers (51-3011):** Mix and bake ingredients to produce breads, rolls, cookies, cakes, pies, pastries, or other baked goods. Pastry chefs in restaurants and hotels are included with "Chefs and Head Cooks" (35-1011).
Entry-Level Educational Requirement: No formal educational credential
Training Requirement: Long-term on-the-job training
Percentage of Community College Award Holders or Some Postsecondary Coursework: 29%
- **Cooks, Restaurant (35-2014):** Prepare, season, and cook dishes such as soups, meats, vegetables, or desserts in restaurants. May order supplies, keep records and accounts, price items on menu, or plan menu.
Entry-Level Educational Requirement: No formal educational credential
Training Requirement: Moderate-term on-the-job training
Percentage of Community College Award Holders or Some Postsecondary Coursework: 24%
- **General and Operations Managers (11-1021):** Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services. Excludes First-Line Supervisors.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 34%
- **Food Service Managers (11-9051):** Plan, direct, or coordinate activities of an organization or department that serves food and beverages. Excludes "Chefs and Head Cooks" (35-1011).
Entry-Level Educational Requirement: High school diploma or equivalent
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 37%

Occupational Demand

Table 1. Employment Outlook for Baking 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
Bakers	7,739	8,040	301	4%	5,723	1,145	\$14.03	\$17.00
Cooks, Restaurant	49,004	55,225	6,222	13%	42,773	8,555	\$14.17	\$16.57
General and Operations Managers	180	78,847	78,667	43704 %	38,986	7,797	\$40.75	\$63.57
Food Service Managers	14,833	15,770	936	6%	9,784	1,957	\$18.82	\$26.62
TOTAL	71,756	157,881	86,126	120%	97,266	19,453	\$15.18	\$18.81

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 Baking 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
Bakers	1,360	1,412	52	4%	1,002	200	\$14.02	\$17.11
Cooks, Restaurant	9,466	10,652	1,186	13%	8,241	1,648	\$14.10	\$16.29
General and Operations Managers	17,530	19,054	1,524	9%	9,490	1,898	\$45.09	\$69.42
Food Service Managers	3,554	3,785	231	7%	2,354	471	\$21.25	\$30.74
TOTAL	31,910	34,904	2,994	9%	21,087	4,217	\$31.92	\$47.12

Source: EMSI 2020.3

Silicon Valley Sub-Region includes: Monterey, San Benito, and Santa Cruz Counties

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
Marketing Managers	34,463	10,628
Food Service Managers	8,240	2,131
Cooks, Restaurant	4,633	1,136
Bakers	1,951	333
TOTAL	49,287	14,228

Source: Burning Glass

Table 4a. Top Job Titles for Baking Occupations for latest 12 months (November 2019 - October 2020)

Bay Region

Common Title	Bay	Common Title	Bay
Product Manager	2,120	Technical Product Manager	278
Cook	937	Restaurant General Manager	242
Senior Product Manager	877	Marketing Operations Manager	209
Product Marketing Manager	864	Content Marketing Manager	191
Marketing Manager	857	Shift Manager	187
Line Cook	755	Shipt Shopper	158
General Manager	707	Growth Marketing Manager	158
Assistant Manager	599	Amazon Shopper	146
Restaurant Manager	430	Director Of Marketing	144
Assistant General Manager	426	Director Of Product Marketing	143
Baker	412	Amazon Prime Now Shopper	142
Prep Cook	331	Associate Product Manager	140

Digital Marketing Manager	315	Head Of Marketing	138
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**Table 4b. Top Job Titles for Baking Occupations for latest 12 months (November 2019 - October 2020)
Silicon Valley Sub-Region**

Common Title	Silicon Valley	Common Title	Silicon Valley
Product Manager	576	Restaurant General Manager	69
Senior Product Manager	281	Amazon Prime Now Shopper	61
Product Marketing Manager	255	Principal Product Manager	58
Marketing Manager	251	Amazon Shopper	55
Cook	226	Restaurant Assistant Manager	52
Line Cook	204	Prime Now Shopper	50
General Manager	186	Director, Product Management	50
Restaurant Manager	116	Marketing Operations Manager	47
Assistant Manager	104	Kitchen Manager	43
Digital Marketing Manager	95	Shift Manager	41
Assistant General Manager	89	Director, Product Marketing	41
Prep Cook	88	Director Of Product Marketing	41
Baker	84	Content Marketing Manager	41
Technical Product Manager	73	Email Marketing Manager	40

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Baking 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)
Full-Service Restaurants	41,145	45,016	9%	28%
Limited-Service Restaurants	7,747	8,359	8%	5%
Hotels (except Casino Hotels) and Motels	4,005	4,233	6%	3%
Food Service Contractors	3,070	3,348	9%	2%
Corporate, Subsidiary, and Regional Managing Offices	2,990	2,906	-3%	2%
Snack and Nonalcoholic Beverage Bars	2,900	3,380	17%	2%
Supermarkets and Other Grocery (except Convenience) Stores	2,768	2,851	3%	2%
Custom Computer Programming Services	2,485	2,964	19%	2%
Internet Publishing and Broadcasting and Web Search Portals	2,414	3,066	27%	2%
Caterers	2,403	2,617	9%	2%
Local Government, Excluding Education and Hospitals	2,264	2,382	5%	2%

Source: EMSI 2020.3

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

Employer	Bay	Employer	Bay	Employer	Silicon Valley
Facebook	923	Splunk	209	Apple Inc.	360
Marriott International Inc	551	Genentech	206	Vmware Inc	342
Google Inc.	466	Wells Fargo	194	Google Inc.	330
Compass Group North America	435	Appcast Shipt	188	Intuit	317
Salesforce	381	Bjs Restaurants Inc	172	Paypal	259
Vmware Inc	376	Nvidia Corporation	169	Cisco Systems Inc	215
Intuit	369	Chili's	169	Nvidia Corporation	163

Apple Inc.	361	Whole Foods Market, Inc.	167	Compass Group North America	163
Panera Bread	346	Chipotle Mexican Grill	164	eBay	144
Cisco Systems Inc	316	Restaurant Depot	163	Marriott International Inc	137
Paypal	308	Walmart / Sam's	161	Palo Alto Networks	119
Amazon	296	Gap Inc.	157	Amazon	110
Panda Express	262	Visa	147	Splunk	107
Taco Bell	242	Ringcentral Inc	147	Super Micro Computer Inc	87
McDonald's	233	Shake Shack	138	Servicenow	78
eBay	230	The Save Mart Companies	129	Adobe Systems	73
Thermo Fisher Scientific Inc	223	Burger King	129	Samsung America, Inc.	72

Source: Burning Glass

Educational Supply

There are six (6) community colleges in the Bay Region issuing 308 awards on average annually (last 3 years ending 2018-19) on TOP 1306.30-Culinary Arts. In the Silicon Valley Sub-Region there are no community colleges issuing awards on average annually (last 3 years) on this TOP code.

There are five (5) other CTE Educational Institutions in the Bay Region issuing 373 awards on average annually (last 3 years ending 2016-17) on TOP 1306.00 - Nutrition, Foods, and Culinary Arts. There is one (1) other CTE Educational Institution in the Silicon Valley Sub-Region issuing 21 awards on average annually (last 3 years) on this TOP code.

There is one (1) institution in the Bay Region issuing 80 Bachelor's Degrees on average annually (last 3 years ending 2018-19) on TOP 1306.00 - Nutrition, Foods, and Culinary Arts.

Table 7a. Community College Awards on TOP 1306.30-Culinary Arts in Bay Region

College	Sub-Region	Associates	Certificate Low Unit	Noncredit	Total
Cabrillo	SC - Monterey	12	27		39
Contra Costa	East Bay	3	26		30
Diablo Valley	East Bay	7	34		41
Laney	East Bay	19	31		49
San Francisco	Mid-Peninsula	23			23
San Francisco Ctrs	Mid-Peninsula			40	40
Santa Rosa	North Bay	7	54	25	86
Total Bay Region		71	172	65	308
Total Silicon Valley Sub-Region		0	0	0	0

Source: Data Mart

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

Table 7b. Other CTE Institution Awards on 1306.00 - Nutrition, Foods, and Culinary Arts in Bay Region

College	Sub-Region	Associate Degree	Award < 1 academic yr	Award 1 < 2 academic yrs	Grand Total
Argosy University-The Art Institute of California-San Francisco	Mid-Peninsula	30		4	34
Argosy University-The Art Institute of California-Silicon Valley	Silicon Valley	18		3	21
CET-Sobrato	Santa Cruz-Monterey		24		24
International Culinary Center-California	Silicon Valley		122		122
Le Cordon Bleu College of Culinary Arts-San Francisco	Mid-Peninsula	88		84	172
Total Bay Region		136	146	91	373
Total Silicon Valley Sub-Region		18	0	3	21

Source: Data Mart

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

Table 7c. Bachelor's Degree Awards on TOP 1306.00 - Nutrition, Foods, and Culinary Arts in Bay Region

College	Sub-Region	Bachelor's Degree
University of California-Berkeley	East Bay	80
Total Bay Region		80
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 large labor market gap in the Bay Region with 19,453 annual openings for the Baking occupational cluster and 761 annual (3-year average) awards from community colleges and other institutions for an annual undersupply of 18,692 students. In the Silicon Valley Sub-Region, there is also a gap with 4,217 annual openings and 21 annual (3-year average) awards from community colleges and other institutions for an annual undersupply of 4,196 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1306.30-Culinary Arts

2017-18	Bay All CTE Programs	Mission College All CTE Programs	State 1306.30	Bay 1306.30	Silicon Valley 1306.30	Mission College 1306.30
% Employed Four Quarters After Exit	67%	77%	55%	57%	59%	59%
Median Quarterly Earnings Two Quarters After Exit	\$11,466	\$10,336	\$6,235	\$7,228	n/a	n/a
Median % Change in Earnings	31%	49%	25%	18%	n/a	n/a
% of Students Earning a Living Wage	53%	66%	35%	32%	n/a	n/a

Source: Launchboard Pipeline (version available on August 2020)

Skills, Certifications and Education

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

Skill	Postings	Skill	Postings	Skill	Postings
Product Management	17,501	Social Media	3,567	Experiments	2,300
Marketing	9,980	Digital Marketing	3,387	Retail Industry Knowledge	2,279
Product Marketing	8,131	Product Sales	3,169	Facebook	2,194
Budgeting	7,265	Restaurant Management	2,951	Stakeholder Management	2,156
Product Development	7,195	Salesforce	2,932	Staff Management	2,102
Project Management	7,025	Market Research	2,772	Description and Demonstration of Products	2,087
Customer Service	5,369	Sales	2,763	Articulating Value Propositions	2,052
Market Strategy	4,831	Competitive Analysis	2,690	Quality Assurance and Control	1,970
Scheduling	4,797	Thought Leadership	2,608	Cleaning	1,960
Marketing Management	4,730	Customer Contact	2,514	Software Development	1,882
Software as a Service (SaaS)	4,427	Food Preparation	2,450	Scrum	1,878
Business-to-Business	4,342	E-Commerce	2,400	Market Planning	1,810
Cooking	4,294	SQL	2,377	Agile Development	1,698
Key Performance Indicators (KPIs)	3,958	Data Science	2,371	Marketing Programs	1,687
Business Development	3,791	Food Safety	2,312	Cost Control	1,678

Source: Burning Glass

Table 10. Certifications for Baking Occupations in Bay Region (November 2019 - October 2020)

Note: 89% 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
ServSafe	2,108	Leadership In Energy And Environmental Design (LEED) Certified	43
Driver's License	1,578	Training For Intervention Procedures (TIPS) Certification	36
Food Handler Certification	1,140	Alcohol Awareness Certification	36
Food Service Certification	551	Hazard Analysis and Critical Control Point (HACCP) Certification	35
Project Management Certification	326	Six Sigma Certification	34
Project Management Professional (PMP)	184	Chartered Advisor For Senior Living	33
Certified Dietary Manager	149	IT Infrastructure Library (ITIL) Certification	29
Security Clearance	136	Certified Information Systems Security Professional (CISSP)	29
Registered Dietitian	58	Agile Certification	29
Certified ScrumMaster (CSM)	54	Certified Scrum Product Owner (CSPO)	28
First Aid CPR AED	53	Series 7	22
Food Safety Manager Certification	49	Certified Salesforce Administrator	22

Source: Burning Glass

Table 11. Education Requirements for Baking Occupations in Bay Region (November 2019 - October 2020)

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	4,820	18%
Associate Degree	548	2%
Bachelor's Degree or Higher	21,966	80%

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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