



International Business Occupations Labor Market Information Report College of San Mateo

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research
November 2021

Recommendation

Based on all available data, there appears to be an “undersupply” of International Business 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). There is a projected annual gap of about 15,520 students in the Bay region and 4,378 students in the Mid-Peninsula Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 0508.00 International Business and Trade 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 College of San Mateo College and in the region.

This report profiles International Business Occupations in the 12 county Bay region and in the Mid-Peninsula sub-region for a proposed new program at College of San Mateo College.

- **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: 35%
- **Buyers and Purchasing Agents (13-1028):** Buy merchandise or commodities, other than farm products, for resale to consumers at the wholesale or retail level, including both durable and nondurable goods. Analyze past buying trends, sales records, price, and quality of merchandise to determine value and yield. Select, order, and authorize payment for merchandise according to contractual agreements. May conduct meetings with sales personnel and introduce new products. May negotiate contracts. Includes assistant wholesale and retail buyers of nonfarm products.
Entry-Level Educational Requirement: Bachelor’s degree
Training Requirement: Moderate-term on-the-job training
Percentage of Community College Award Holders or Some Postsecondary Coursework: 57%
- **Logisticians (13-1081):** Analyze and coordinate the logistical functions of a firm or organization. Responsible for the entire life cycle of a product, including acquisition, distribution, internal allocation, delivery, and final disposal of resources. Excludes “Transportation, Storage, and Distribution Managers” (11-3071).
Entry-Level Educational Requirement: Bachelor’s degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 39%

- Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011):** Sell goods for wholesalers or manufacturers where technical or scientific knowledge is required in such areas as biology, engineering, chemistry, and electronics, normally obtained from at least 2 years of post-secondary education. Excludes “Sales Engineers” (41-9031).

Entry-Level Educational Requirement: Bachelor’s degree

Training Requirement: Moderate-term on-the-job training

Percentage of Community College Award Holders or Some Postsecondary Coursework: 30%
- Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012):** Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Moderate-term on-the-job training

Percentage of Community College Award Holders or Some Postsecondary Coursework: 30%

Occupational Demand

Table 1. Employment Outlook for International Business Occupations in Bay Region

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
General and Operations Managers	74,266	78,126	3,860	5%	38,421	7,684	\$49	\$95
Buyers and Purchasing Agents	12,557	12,386	-170	-1%	6,744	1,349	\$33	\$64
Logisticians	8,557	9,019	462	5%	4,933	987	\$37	\$71
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	17,725	18,737	1,011	6%	11,177	2,235	\$47	\$89
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	30,234	29,576	-657	-2%	16,382	3,276	\$28	\$61
Total	143,339	147,844	4,505	3%	77,657	15,531		

Source: EMSI 2021.3

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 International Business Occupations in Mid-Peninsula Sub-region

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
General and Operations Managers	22,142	23,934	1,791	8%	12,354	2,471	\$53	\$102
Buyers and Purchasing Agents	3,084	3,115	30	1%	1,715	343	\$36	\$67
Logisticians	2,086	2,271	184	9%	1,305	261	\$36	\$69
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	4,074	4,549	475	12%	2,905	581	\$47	\$83
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	6,583	6,579	-4	-0%	3,665	733	\$32	\$65

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Total	37,969	40,448	2,479	7%	21,944	4,389		

Source: EMSI 2021.3

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 2020 - Sep 2021)

Occupation	Bay Region	Mid-Peninsula
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	38,056	14,420
General and Operations Managers	22,146	9,856
Purchasing Agents, Except Wholesale, Retail, and Farm Products	4,498	1,331
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	3,892	1,495
Logisticians	1,569	377
Logistics Analysts	1,219	281
Solar Sales Representatives and Assessors	526	92
Wholesale and Retail Buyers, Except Farm Products	332	154
Buyers and Purchasing Agents, Farm Products	53	32
Logistics Engineers	33	6

Source: Burning Glass

Table 4a. Top Job Titles for International Business Occupations for latest 12 months (Oct 2020 - Sep 2021)

Bay Region

Title	Bay	Title	Bay
Sales Representative	2,036	Buyer	395
Account Executive	1,499	Enterprise Account Executive	374
Operations Manager	1,261	Operations Assistant Manager	359
Account Manager	1,255	Inside Sales	300
Outside Sales Representative	1,157	Chief Of Staff	275
Inside Sales Representative	640	Sales Executive	274
General Manager	561	Bilingual Store Counter Sales	270
Sales Consultant	501	Director Of Operations	264
Operations Supervisor	454	Operations Coordinator	257

Title	Bay	Title	Bay
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Source: Burning Glass

**Table 4b. Top Job Titles for International Business Occupations for latest 12 months (Oct 2020 - Sep 2021)
Mid-Peninsula Sub-Region**

Title	Mid-Peninsula	Title	Mid-Peninsula
Account Executive	807	Senior Account Executive	121
Account Manager	476	Sales Consultant	112
Sales Representative	464	Inside Sales Representative	106
Operations Manager	342	Technical Account Manager	101
Enterprise Account Executive	278	Operations Supervisor	99
Outside Sales Representative	271	Product Owner	97
Chief Of Staff	170	Strategic Account Executive	88
General Manager	163	Account Director	87
Sales Executive	133	Contracts Manager	87

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring International Business Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2020)	Jobs in Industry (2025)	% Change (2020-25)	% Occupation Group in Industry (2020)
Electronic Computer Manufacturing	6,808	7,687	13%	5%
Custom Computer Programming Services	4,958	6,046	22%	4%
Software Publishers	4,536	5,694	26%	3%
Internet Publishing and Broadcasting and Web Search Portals	4,464	5,400	21%	3%
Corporate, Subsidiary, and Regional Managing Offices	4,622	4,354	-6%	3%
Computer Systems Design Services	2,653	3,049	15%	2%
Local Government, Excluding Education and Hospitals	2,145	2,225	4%	2%
Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	2,004	2,194	9%	1%
Administrative Management and General Management Consulting Services	1,578	1,989	26%	1%
Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	2,569	1,929	-25%	2%

Source: EMSI 2021.3

Table 6. Top Employers Posting International Business Occupations in Bay Region and Mid-Peninsula Sub-Region (Oct 2020 - Sep 2021)

Employer	Bay	Employer	Mid-Peninsula
Microsoft Corporation	725	Salesforce	584
Salesforce	675	Doordash	309
Google Inc.	627	Gap Inc.	256
Anthem Blue Cross	439	Facebook	242
Facebook	401	Microsoft Corporation	233
Amazon	400	Amazon	232
CVS Health	362	Google Inc.	230
Doordash	327	Uber	214
Gap Inc.	304	DocuSign	162
Cisco Systems Incorporated	300	Visa	123

Source: Burning Glass

Educational Supply

There are two (2) community colleges in the Bay Region issuing 11 awards on average annually (last 3 years ending 2018-19) on TOP 0508.00 International Business and Trade. In the Mid-Peninsula Sub-Region, there are two (2) community colleges that issued 11 awards on average annually (last 3 years) on this TOP code.

Table 7. Community College Awards on TOP 0508.00 International Business and Trade in Bay Region

College	Subregion	Associate	Certificate Low	Total
San Francisco	Mid-Peninsula	0	7	7
Skyline	Mid-Peninsula	1	3	4
Total		1	10	11

Source: Data Mart

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

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 15,531 annual openings for the International Business occupational cluster and 11 annual (3-year average) awards for an annual undersupply of 15,520 students. In the Mid-Peninsula Sub-Region, there is also a gap with 4,389 annual openings and 11 annual (3-year average) awards for an annual undersupply of 4,378 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0508.00 International Business and Trade

Metric Outcomes	Bay All CTE Programs	College San Mateo All CTE Programs	State 0508.00	Bay 0508.00	Mid-Peninsula 0508.00	College of San Mateo 0508.00
Students with a Job Closely Related to Their Field of Study	73%	73%	71%	79%	N/A	N/A
Median Annual Earnings for SWP Exiting Students	\$44,575	\$52,943	\$35,195	\$41,856	\$45,572	N/A
Median Change in Earnings for SWP Exiting Students	30%	31%	28%	24%	31%	64%
Exiting Students Who Attained the Living Wage	53%	49.5%	45%	39%	34%	38%

Source: Launchboard Strong Workforce Program Median of 2016-18.

Skills, Certifications and Education

Table 9. Top Skills for International Business Occupations in Bay Region (Oct 2020 - Sep 2021)

Skill	Posting	Skill	Posting
Sales	35,359	Retail Industry Knowledge	5,086
Customer Service	14,934	Software as a Service (SaaS)	4,685
Budgeting	9,660	Procurement	4,261
Scheduling	8,710	Purchasing	4,182
Sales Goals	8,224	Business-to-Business	4,147
Project Management	7,756	Key Performance Indicators (KPIs)	4,045
Salesforce	7,724	Negotiation Skills	3,860
Business Development	7,697	Staff Management	3,791
Customer Contact	7,553	Onboarding	3,771
Product Sales	6,798	Sales Management	3,587
Prospective Clients	6,773	Inside Sales	3,570
Operations Management	5,964	Business Planning	3,566
Outside Sales	5,949	Product Knowledge	3,496
Account Management	5,533	Merchandising	3,397

Source: Burning Glass

Table 10. Certifications for International Business Occupations in the Bay Region (Oct 2020 - Sep 2021)

Certification	Posting	Certification	Posting
Driver's License	10,232	First Aid Cpr Aed	196
Project Management Certification	719	Six Sigma Certification	177
Insurance License	399	Real Estate Certification	164
Project Management Professional (PMP)	356	Series 7	163
Insurance Agent Certification	352	IT Infrastructure Library (ITIL) Certification	155
Property and Casualty License	326	Certified Supply Chain Professional (CSCP)	126
American Production and Inventory Control Society (APICS) Certification	256	OSHA Forklift Certification	121
Certified in Production and Inventory Management (CPIM)	249	Life Insurance License	113
Life and Health Insurance License	244	Certified Information Systems Security Professional (CISSP)	101
Security Clearance	212	Certified Professional in Supply Management (CPSM)	97

Source: Burning Glass

Note: 79% of records have been excluded because they do not include a certification. As a result, the chart above may not be representative of the full sample.

Table 11. Education Requirements for International Business Occupations in Bay Region

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	10,041	23%
Associate's degree	1,517	3%
Bachelor's degree and higher	32,982	74%

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 CCCCCO 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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