



Applied Professional Studies - Baccalaureate (Other Business and Management TOP 0599.00)

November 2023

Prepared by the South Central Coast Center of Excellence for Labor Market Research

Labor Market Information Report

This report was compiled by the South Central Coast Center of Excellence to provide regional labor market information for Applied Professional Studies. Considering the recent Assembly Bill No. 927, which would extend the community college statewide baccalaureate degree pilot program indefinitely, community colleges have an extraordinary opportunity to provide training in areas requiring increasing levels of educational demand. Further, job posting data can be utilized to determine if employers are seeking candidates with a bachelor's degree as often as those with an associate degree.

Key Findings

- In the South Central Coast region, **the number of jobs related to Applied Professional Studies are expected to remain steady** for Sales Managers and Industrial Production Managers and **increase** for Business Operations Specialists, All Other, Human Resources Specialists, Project Management Specialists, Social and Community Service Managers, Logisticians, Administrative Services Managers, Purchasing Managers, Public Relations Managers, and Training and Development Managers.
- Applied Professional Studies is anticipated to experience a **low risk of automation** for all eleven related occupations.
- In 2021 there were 3,842 regional completions in programs related to the occupations identified as aligned with Applied Professional Studies and 4,249 openings, indicating an **undersupply**.
- Typical entry-level education is a **bachelor's degree** for all eleven related occupations.
- Completers of Applied Professional Studies programs from the 2019-2020 academic year in the South Central Coast region had a **median annual wage upon completion of \$49,330**.
- 70% of students are **employed within a year** after completing a program.
- 69% of students **attained a living wage** within a year of completion.
- Completers experienced an average of **+22% change in earnings after exiting**.
- 74% of students were **part-time**, 8% **skill builders**, 35% **first-generation**, and 53% **economically disadvantaged**.

¹ The South Central Coast Region consists of San Luis Obispo County, Santa Barbara County, Ventura County, and the following cities from North Los Angeles County: Canyon Country, Castaic, Lake Hughes, Lancaster, Littlerock, Llano, Newhall, Palmdale, Pearblossom, Santa Clarita, Stevenson Ranch, and Valencia.

Occupation Codes and Descriptions

There are eleven occupations in the standard occupational classification (SOC) system that were identified as related to Applied Professional Studies for this analysis. The occupation titles and descriptions, as well as reported job titles, are included in Exhibit 1.

Exhibit 1 – Occupation, Description, and Sample Job Titles

SOC Code	Title	Description	Sample of Reported Job Titles
11-2022	Sales Managers	Plan, direct, or coordinate the actual distribution or movement of a product or service to the customer. Coordinate sales distribution by establishing sales territories, quotas, and goals and establish training programs for sales representatives. Analyze sales statistics gathered by staff to determine sales potential and inventory requirements and monitor the preferences of customers.	District Sales Manager, National Sales Manager, Regional Sales Manager, Sales and Marketing Vice President (Sales and Marketing VP), Sales Director, Sales Manager, Sales Supervisor, Sales Vice President (Sales VP)
11-2032	Public Relations Managers	Plan, direct, or coordinate activities designed to create or maintain a favorable public image or raise issue awareness for their organization or client.	Communications Director, Communications Manager, Community Relations Director, Development Director, Public Affairs Director, Public Relations Director (PR Director), Public Relations Manager (PR Manager)
11-3012	Administrative Services Managers	Plan, direct, or coordinate one or more administrative services of an organization, such as records and information management, mail distribution, and other office support services.	Administrative Coordinator, Administrative Director, Administrative Manager, Administrative Officer, Administrator, Business Administrator, Business Manager
11-3051	Industrial Production Managers	Plan, direct, or coordinate the work activities and resources necessary for manufacturing products in accordance with cost, quality, and quantity specifications.	Area Plant Manager, Assembly Manager, General Production Manager, Manufacturing Coordinator, Manufacturing Manager, Plant Manager, Product Line Manager, Production Control Manager, Production Manager, Sub Plant Manager
11-3061	Purchasing Managers	Plan, direct, or coordinate the activities of buyers, purchasing officers, and related workers involved in purchasing materials, products, and services. Includes wholesale or retail trade merchandising managers and procurement managers.	Category Purchasing Manager, Commodity Manager, Materials Director, Materials Manager, Procurement Director, Procurement Manager, Purchasing Director, Purchasing Manager, Purchasing Supervisor, Strategic Sourcing Director

SOC Code	Title	Description	Sample of Reported Job Titles
11-3131	Training and Development Managers	Plan, direct, or coordinate the training and development activities and staff of an organization.	Development Manager, Education and Development Manager, Education Director, Learning and Development Director, Learning Manager, Staff Training and Development Manager, Training and Development Coordinator, Training and Development Director, Training Director, Training Manager
11-9151	Social and Community Service Managers	Plan, direct, or coordinate the activities of a social service program or community outreach organization. Oversee the program or organization's budget and policies regarding participant involvement, program requirements, and benefits. Work may involve directing social workers, counselors, or probation officers.	Adoption Services Manager, Child Welfare Services Director, Children's Service Supervisor, Clinical Services Director, Community Services Director, Psychiatric Social Worker Supervisor, Social Services Director, Transitional Care Director, Vocational Rehabilitation Administrator
13-1071	Human Resources Specialists	Recruit, screen, interview, or place individuals within an organization. May perform other activities in multiple human resources areas.	Corporate Recruiter, Employment Representative, HR Analyst (Human Resources Analyst), HR Coordinator (Human Resources Coordinator), HR Generalist (Human Resources Generalist), Human Resources Representative (HR Rep), Human Resources Specialist (HR Specialist), Personnel Analyst, Personnel Officer, Recruiter
13-1081	Logisticians	Analyze and coordinate the ongoing 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.	Client Services Administrator, Logistician, Production Planner, Supply Management Specialist
13-1082	Project Management Specialists	Analyze and coordinate the schedule, timeline, procurement, staffing, and budget of a product or service on a per project basis. Lead and guide the work of technical staff. May serve as a point of contact for the client or customer.	--
13-1199	Business Operations Specialists, All Other	All business operations specialists not listed separately.	--

Source: O*NET Online

Current and Future Employment

In the South Central Coast region, the number of jobs related to Applied Professional Studies are expected to remain steady for Sales Managers and Industrial Production Managers and increase for Business Operations Specialists, All Other, Human Resources Specialists, Project Management Specialists, Social and Community Service Managers, Logisticians, Administrative Services Managers, Purchasing Managers, Public Relations Managers, and Training and Development Managers.

Exhibit 2 – Five-Year Projections for Applied Professional Studies in the South Central Coast Region

SOC	Occupation	2022 Jobs	2027 Jobs	2022-2027 Change	2022-2027 % Change
13-1199	Business Operations Specialists, All Other	8,247	8,694	446	5%
11-2022	Sales Managers	4,681	4,758	76	2%
13-1071	Human Resources Specialists	4,330	4,644	314	7%
13-1082	Project Management Specialists	4,064	4,355	291	7%
11-9151	Social and Community Service Managers	1,710	1,907	197	12%
13-1081	Logisticians	1,642	1,811	170	10%
11-3051	Industrial Production Managers	1,456	1,506	50	3%
11-3012	Administrative Services Managers	1,416	1,495	79	6%
11-3061	Purchasing Managers	352	385	33	9%
11-2032	Public Relations Managers	295	317	21	7%
11-3131	Training and Development Managers	276	290	14	5%

Source: Lightcast™ Analyst 2022

Earnings

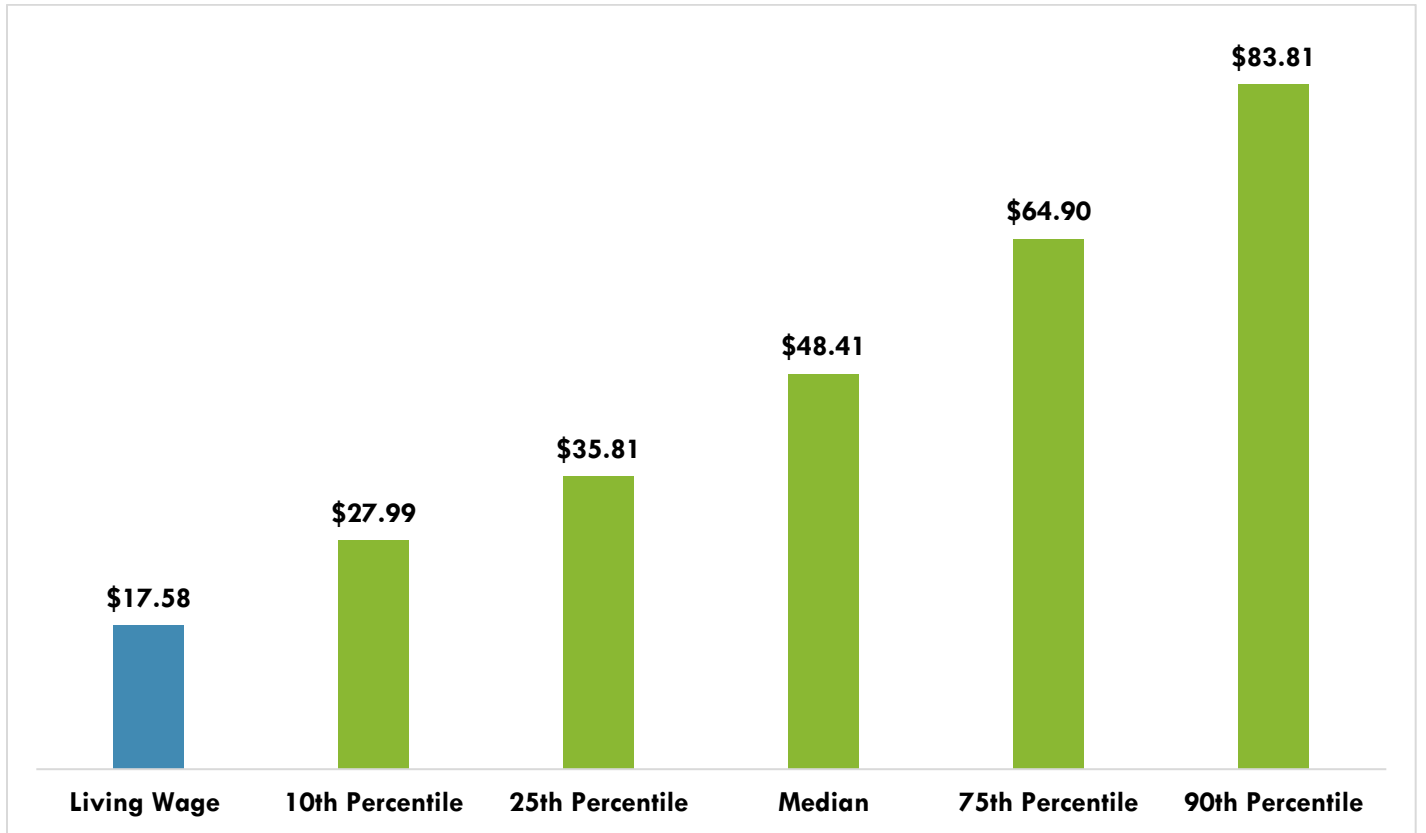
Exhibit 3 contains hourly wages and average earnings for these occupations. Entry-level hourly earnings are represented by the 25th percentile of wages, median hourly earnings are represented by the 50th percentile of wages, and experienced hourly earnings are represented by the 75th percentile of wages, demonstrating various levels of employment.

Exhibit 3 – Earnings for Applied Professional Studies in the South Central Coast Region

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
13-1199	Business Operations Specialists, All Other	\$24.05	\$35.71	\$50.43
11-2022	Sales Managers	\$31.18	\$50.44	\$78.49
13-1071	Human Resources Specialists	\$28.10	\$36.05	\$48.11
13-1082	Project Management Specialists	\$33.95	\$46.07	\$62.40
11-9151	Social and Community Service Managers	\$28.23	\$34.31	\$43.17
13-1081	Logisticians	\$33.91	\$44.00	\$51.86
11-3051	Industrial Production Managers	\$40.17	\$53.34	\$73.48
11-3012	Administrative Services Managers	\$34.45	\$48.37	\$62.83
11-3061	Purchasing Managers	\$49.43	\$63.42	\$78.88
11-2032	Public Relations Managers	\$48.83	\$64.19	\$84.60
11-3131	Training and Development Managers	\$41.60	\$56.64	\$79.63

Source: Lightcast™ Analyst 2022

Exhibit 3b – Earnings for Applied Professional Studies in the South Central Coast Region



Source: Family Needs Calculator (Living wage is based on Single Adult households with no children); Lightcast™ Analyst 2022

Employer Job Postings

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand who is looking for professionals in a given field, and what they are looking for in potential candidates. To identify job postings related to Applied Professional Studies the following standard occupational classifications were used:

13-1071	Human Resources Specialists
11-2022	Sales Managers
13-1082	Project Management Specialists
11-3051	Industrial Production Managers
13-1199	Business Operations Specialists, All Other
13-1081	Logisticians
11-2032	Public Relations Managers
11-3012	Administrative Services Managers
11-3061	Purchasing Managers
11-9151	Social and Community Service Managers
11-3131	Training and Development Managers

Top Occupations

In 2022, there were 9,443 employer postings for the occupations related to Applied Professional Studies.

Exhibit 4 – Top Occupations by Job Postings

SOC Code	Occupation	Job Postings, Full Year 2022
13-1071	Human Resources Specialists	1,926
11-2022	Sales Managers	1,900
13-1082	Project Management Specialists	1,466
11-3051	Industrial Production Managers	1,034
13-1199	Business Operations Specialists, All Other	666
13-1081	Logisticians	616
11-2032	Public Relations Managers	596
11-3012	Administrative Services Managers	426
11-3061	Purchasing Managers	352
11-9151	Social and Community Service Managers	337
11-3131	Training and Development Managers	124

Source: Lightcast™ Analyst 2022

Exhibit 4b – Top Occupations and Risk of Automation

SOC Code	Occupation	Risk of Automation
13-1071	Human Resources Specialists	Low
11-2022	Sales Managers	Low
13-1082	Project Management Specialists	Low
11-3051	Industrial Production Managers	Low
13-1199	Business Operations Specialists, All Other	Low
13-1081	Logisticians	Low
11-2032	Public Relations Managers	Low
11-3012	Administrative Services Managers	Low
11-3061	Purchasing Managers	Low
11-9151	Social and Community Service Managers	Low
11-3131	Training and Development Managers	Low

Source: Lightcast™ Analyst 2022

Top Titles

The top job titles for employers posting ads for jobs related to Applied Professional Studies are listed in Exhibit 5. Project Managers is mentioned as the job title in 12% of all relevant job postings (464 postings).

Exhibit 5 – Job Titles

Title	Job Postings, Full Year 2022
Project Managers	464
Human Resources Generalists	317
Human Resources Coordinators	172
Security Specialists	170
Sales Managers	170

Source: Lightcast™ Analyst 2022

Top Employers

Exhibit 6 lists the major employers hiring professionals with Applied Professional Studies backgrounds. The top employer posting job ads was Northrop Grumman. The top worksite cities for these occupations were Thousand Oaks, Santa Barbara, Santa Clarita, Oxnard, and San Luis Obispo.

Exhibit 6 – Top Employers (n= 3,035)

Employer	Job Postings, Full Year 2022
Northrop Grumman	377
Amgen	303
Elevance Health	154
Target	134
Robert Half	80

Source: Lightcast™ Analyst 2022

Skills

The tables in Exhibit 7 list employers' most commonly requested skills in job postings related to Applied Professional Studies. Project Management is the most sought-after specialized skill for employers, followed by Marketing and Auditing. Communications, Management, and Leadership were the most requested baseline skills. Microsoft Excel, Microsoft Office, and Microsoft PowerPoint were the most commonly requested software and programming skills.

Exhibit 7 – Specialized Skills (n= 23,252)

Skills	Job Postings, Full Year 2022
Project Management	2,436
Marketing	1,515
Auditing	1,085
Supply Chain	705
Purchasing	701
Business Development	656
Sales Management	637
Finance	607
Sales Prospecting	602
Procurement	600
Selling Techniques	574
Process Improvement	565
Customer Relationship Management	526
Accounting	492
New Product Development	461

Source: Lightcast™ Analyst 2022

Exhibit 7b – Baseline Skills (n= 59,311)

Skills	Job Postings, Full Year 2022
Communications	4,489
Management	4,279
Leadership	2,878
Sales	2,667
Operations	2,607
Planning	2,380
Customer Service	2,299
Microsoft Excel	2,021
Writing	1,834
Microsoft Office	1,789

Source: Lightcast™ Analyst 2022

Exhibit 7c – Software and Programming Skills (n= 11,222)

Skills	Job Postings, Full Year 2022
Microsoft Excel	2,021
Microsoft Office	1,789
Microsoft PowerPoint	1,347
Microsoft Outlook	864
Microsoft Word	534
Human Resources Information System (HRIS)	384
SAP Applications	343
Applicant Tracking Systems	338
Microsoft Access	308
Spreadsheets	285

Source: Lightcast™ Analyst 2022

Industry Concentration

Exhibit 8 shows the industries with the most Applied Professional Studies postings in the South Central Coast region. Note: 24% of records have been excluded because they do not include an industry. As a result, the chart below may not be representative of the full sample.

Exhibit 8 – Industries Employing the Most in the Applied Professional Studies Field, 2022

Industry	Occupation Group Jobs in Industry	% of Occupation Group in Industry
Manufacturing	1,829	25%
Professional, Scientific, and Technical Services	1,084	15%
Administrative and Support and Waste Management and Remediation Services	1,084	15%
Health Care and Social Assistance	600	8%
Retail Trade	473	7%

Source: Lightcast™ Analyst 2022

Certifications

Exhibit 9 lists the most in-demand certifications in the Applied Professional Studies field. The top requested certification in job postings was Valid Driver's License.

Exhibit 9 – Certifications (n= 3,887)

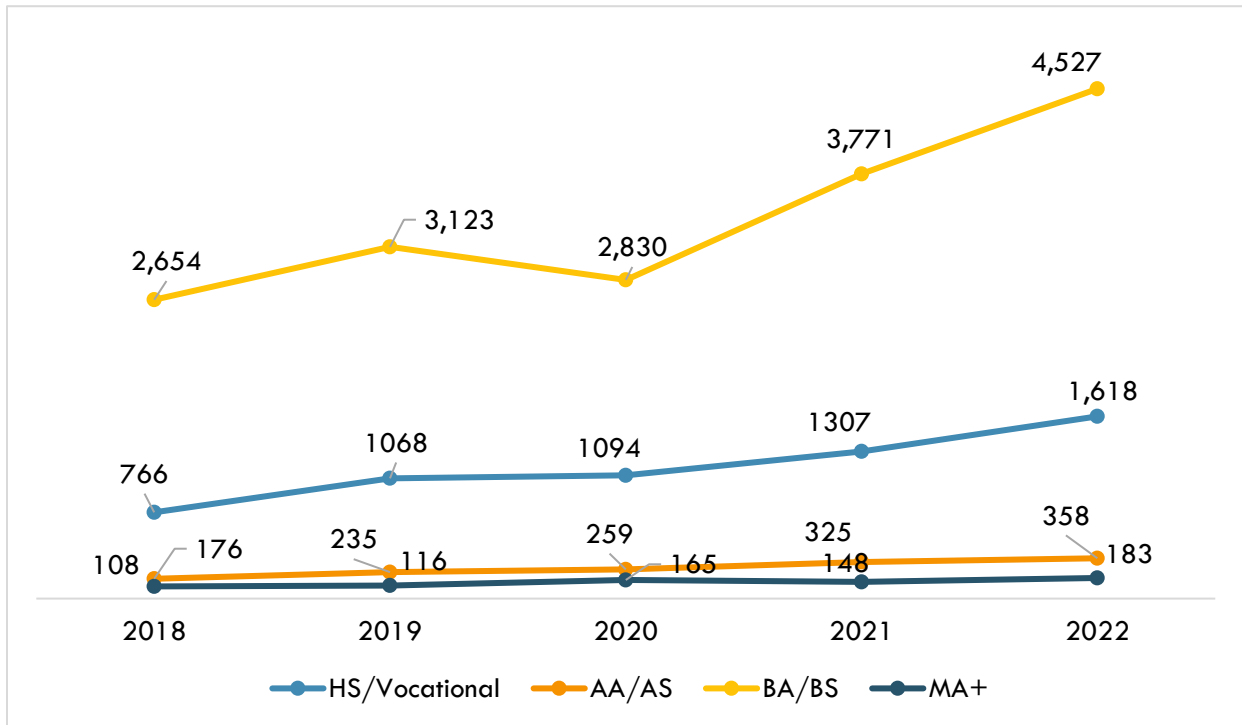
Certifications	Job Postings, Full Year 2022
Valid Driver's License	1,024
Secret Clearance	334
Project Management Professional Certification	299
Security Clearance	265
Master Of Business Administration (MBA)	230

Source: Lightcast™ Analyst 2022

Job Postings - Minimum Educational Attainment Over Time

Exhibit 10 displays the change in job advertisements over the last five years for Applied Professional Studies, according to the minimum advertised education. In 2022, there were 6,686 total job ads posted with a minimum advertised education, with 4,527 of them requiring a Bachelor’s degree.

Exhibit 10 – Educational Demand, Minimum Advertised



Source: Lightcast™ Analyst 2022

Job Postings – Proportion of Job Postings by Minimum Educational Attainment Required

To gauge employer preference for candidates with particular education levels, the proportion of job postings by minimum advertised education appears in Exhibit 11. Employers posting job ads for Applied Professional Studies have frequently sought candidates with a bachelor’s degree.

Exhibit 11 – Occupational Demand by Education, Minimum Advertised

Minimum Education Requirement	2018	2019	2020	2021	2022
HS Diploma / Vocational Training	21%	23%	25%	23%	24%
Associate Degree	5%	5%	6%	6%	5%
Bachelor’s Degree	71%	69%	65%	68%	68%
Graduate Degree	3%	3%	4%	3%	3%

Source: Lightcast™ Analyst 2022

Education and Training

Exhibit 12 shows the typical entry-level education requirement for the occupations of interest, along with the typical on-the-job training needed to attain competency in the occupation.

Exhibit 12 – Education and Training Requirements

SOC	Occupation	Typical entry-level education	Typical on-the-job training
13-1199	Business Operations Specialists, All Other	Bachelor's degree	None
11-2022	Sales Managers	Bachelor's degree	None
13-1071	Human Resources Specialists	Bachelor's degree	None
13-1082	Project Management Specialists	Bachelor's degree	None
11-9151	Social and Community Service Managers	Bachelor's degree	None
13-1081	Logisticians	Bachelor's degree	None
11-3051	Industrial Production Managers	Bachelor's degree	None
11-3012	Administrative Services Managers	Bachelor's degree	None
11-3061	Purchasing Managers	Bachelor's degree	None
11-2032	Public Relations Managers	Bachelor's degree	None
11-3131	Training and Development Managers	Bachelor's degree	None

Source: Bureau of Labor Statistics Employment Projections (Educational Attainment)

Regional Completions and Openings

There were 3,842 regional completions (2021) and 4,249 regional openings (2021) in the South Central Coast region aligned with programs related to the occupations in this report.

Exhibit 13 – Completions and Openings

16 Regional Institutions had Related Programs (2021)	3,842 Regional Completions (2021)	4,249 Annual Openings (2021)
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Source: Lightcast™ Analyst 2022

Related Programs

CIP Code	Program	Completions (2021)
52.0201	Business Administration and Management, General	2,934
52.0101	Business/Commerce, General	740
52.1801	Sales, Distribution, and Marketing Operations, General	86
44.0000	Human Services, General	68
15.1501	Engineering/Industrial Management	14
09.0909	Communication Management and Strategic Communications	0
44.0401	Public Administration	0
52.0212	Retail Management	0
52.1001	Human Resources Management/Personnel Administration, General	0

Source: Lightcast™ Analyst 2022

CCC and Non-CCC Awards

Exhibit 14 lists the number of completers from programs related to Applied Professional Studies in the South Central Coast region.

Exhibit 14 – CCC and Non-CCC Awards the South Central Coast, 2021

CCC Programs		Completers
Cuesta College		847
College of the Canyons		337
Moorpark College		282
Ventura College		242
Allan Hancock College		225
Antelope Valley Community College District		155
Santa Barbara City College		149
Oxnard College		103
Non-CCC Programs		Completers
California Polytechnic State University-San Luis Obispo		816
California State University-Channel Islands		339
California Lutheran University		203
The Master's University and Seminary		53
Laurus College		43
University of Antelope Valley		32
Antioch University-Santa Barbara		12
Ventura Adult and Continuing Education		4

Source: Lightcast™ Analyst 2022

Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the regional Applied Professional Studies Programs (Other Business and Management TOP: 0599.00) for the 2019-2020 academic year.

- Completers of Applied Professional Studies programs from the 2019-2020 academic year in the South Central Coast region had a **median annual wage upon completion of \$49,330**.
- 70% of students are **employed within a year** after completing a program.
- 69% of students **attained a living wage** within a year of completion.
- Completers experienced an average of +22% **change in earnings after exiting**.
- 74% of students were **part-time**, 8% **skill builders**, 35% **first-generation**, and 53% **economically disadvantaged**.

Sources

O*Net Online, Lightcast™ Analyst 2022, MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

Notes

Data included in this analysis represent the labor market demand for relevant positions most closely related to Applied Professional Studies. Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions. All representations have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. The most recent data available at the time of the analysis was examined; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.