

Career Education Biennial Report 2022



December 2022

Introduction.

Southwestern Community College District (SWCCD) serves students in the South Bay area of San Diego by offering a variety of credit and noncredit academic programs that are aligned to in-demand occupations in the region. Career Education (CE)* students enrolled at SWCCD can earn a degree or certificate in fields that lead to postsecondary awards and to employment in growing and high-paying industries. To ensure that students develop the skills needed to meet the demand of the job market, SWCCD periodically examines its CE programs in terms of student success and market demand. This report shows, in summary, the findings from the 2022 review of CE academic programs. The review was conducted by faculty using the latest available enrollment, awards, and labor market information. This information helps determine how each academic program is fulfilling the goal of creating a pathway to postsecondary awards and employment for students.

The main findings from the review include the following: (1) The percentage of Full Time Equivalent Students (FTES) for the district in CE programs grew from 25.51% to 28.45% over the last five years, (2) CE graduates reported an increase in their hourly earnings of \$10.00 after they received their training, a 66% increase, and (3) Twenty-nine out of the 170 programs reviewed showed strong numbers of awards (≥ 10 per year) over the last five years. The CE programs that produced the most awards include Business Administration for Transfer (A.S.), Administration of Justice for Transfer (A.S.), Preparation of Allied Health Programs (A.A.), Certified Nursing Assistant (C.P.), and Nursing (A.S.). In terms of regional labor market demand, most programs included in the analysis showed high demand for graduates in occupations related to their fields of study.

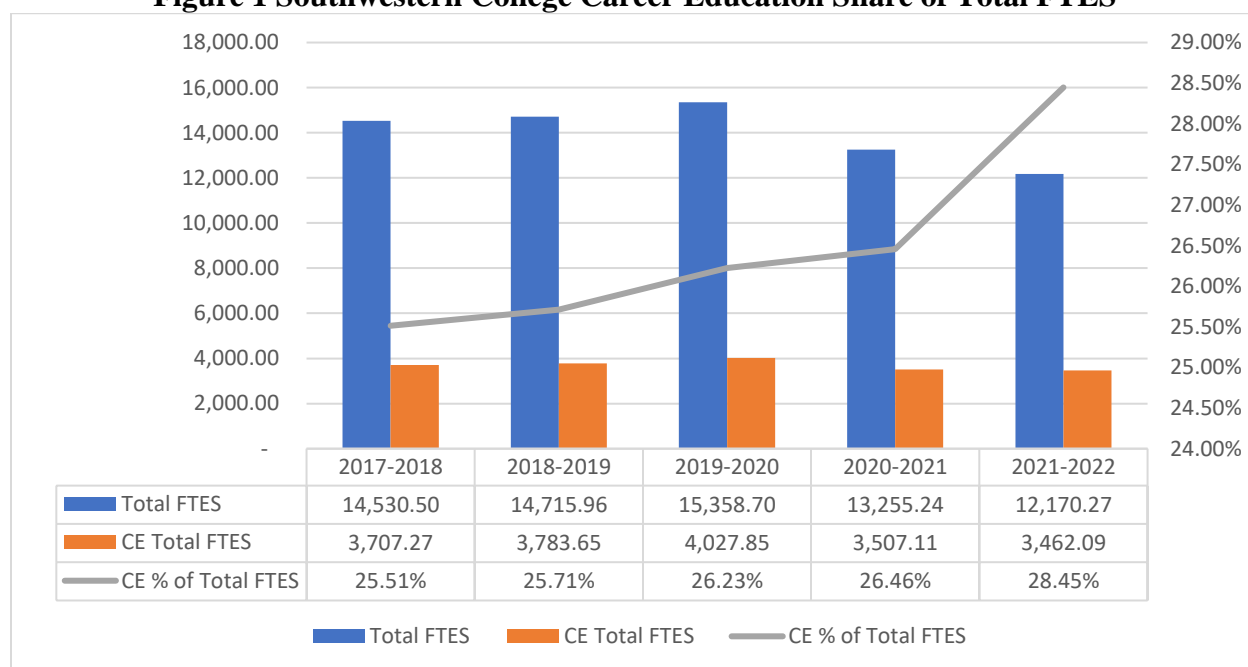
The findings noted in this report will help faculty and staff make informed decisions regarding academic program continuance/discontinuance, allocation of resources, changes in teaching and administrative processes, and data collection and analyses needs. Overall, this review of CE academic programs helps ensure that SWCCD will continue to provide students with opportunities to develop the necessary skills they will need to earn an award and to successfully integrate into lucrative occupations.

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CE Percentage of SWCCD FTES 2017-2018 to 2021-2022.

SWCCD experienced a 21% decline in total FTES in the three-years period from 2019-2020 to 2021-2022. This period includes the COVID-19 pandemic which may partially explain the decline. Over the same time, CE FTES declined by 14%. Overall, CE programs increased their share of the District's FTES from 25.51% to 28.45% from 2017-2018 to 2021-2022. As illustrated on Figure 1, this trend suggests a growing interest in CE education overtime for SWCCD students. While a decrease in FTES is not the goal for programs, the circumstances surrounding this time period are unique, and CE programs have experienced less decline than others, which is demonstrated by an increase in the percentage of District FTES in CE programs.

Figure 1 Southwestern College Career Education Share of Total FTES



Source: CCCCCO, Management Information Systems Data Mart. (2022). Full Time Equivalent Students, https://datamart.cccco.edu/Students/FTES_Summary.aspx

Career and Technical Education Employment Outcomes Survey (CTEOS).

Completer and skills-building students at SWCCD were surveyed if they met one of the following criteria in 2018-2019 and did not enroll (or were minimally enrolled) in 2019-2020:

(1) earned a certificate of 6 or more units, (2) earned a vocational degree, or (3) earned 9+ CTE units (noncredit cohorts earned a noncredit vocational/CTE award or completed at least 48 CTE hours in that year). The survey was administered in 2021-2022 by e-mail, text message (SMS),

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and telephone. The survey addressed student perceptions of their CE program, employment outcomes, and how their coursework and training relate to their current career. A total of 1,868 students were surveyed, and 456 (24%) students responded: 32% by email, 54% by phone, and 14% by SMS.

Figure 2 shows that CE students increased their hourly wages by \$10.00 after receiving training at SWCCD.

Figure 2 Southwestern CTEOS Participant Hourly Wages (N = 456)



Source: Santa Rosa Junior College (2022). Southwestern College CTEOS 2021, <https://cteos.santarosa.edu/sites/cteos.santarosa.edu/files/collegereports2021/Southwestern%20College%20CTEOS%202021.pdf>

Additional findings from the CTEOS survey suggest a favorable outlook for CE completers.

These findings include:

- 85.3% were satisfied or very satisfied with the education and training received.
- 72.3% secured a job that is closely or very closely related to their field of study.
- 65.5% secured a job in under four months.
- \$10.00 USD is the change in hourly earnings after completing training, which represents a 66% increase.
- 77% reported being employed for pay.
- 44% reported transferring to another college or university.
- 73.3% reported working 40+ hours per week, with an additional 17.2% working 20 to 40 hours per week.

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Education Code section 78016 states: Every vocational or occupational training program offered by a community college district shall be reviewed every two years by the governing board of the district to ensure that each program, as demonstrated by available sources of labor market information, does all the following:

1. Meets a documented labor market demand (DEMAND)
2. Does not represent unnecessary duplication of other manpower training programs in the area (SUPPLY)
3. Is of demonstrated effectiveness as measured by the employment and completion success of its students
4. Any program that does not meet the requirements of subdivision (a) and the standards promulgated by the governing board shall be terminated within one year.

Table 1 lists of all 170 Career Education degrees and certificates organized by each of the 69 Top Codes. Certificates and degrees are listed as being **Strong** (average 10 or more awards per year), **Could be Stronger** (average 5 to 9.9 awards per year), or **Needs Further Review** (average less than 5 awards per year) depending on their number of awards between 2017-2018 and 2021-2022. The awards are described as follows:

- A.S. = Associate of Science
- A.S.-T. = Associate of Science for Transfer
- A.A. = Associate of Arts
- A.A.-T = Associate of Arts for Transfer
- CT = Certificate of Achievement (Chancellor's Office Approved)
- CP = Certificate of Proficiency (Local Awards)

The supply of qualified professionals is determined by the number who received an award, by Top Code. Demand is determined by annual jobs, also by Top Code, in the San Diego/Imperial region. This analysis is based on the occupations identified by the Centers of Excellence TOP-CIP-SOC crosswalk. Occupations may be listed under more than one program and some jobs list the typical entry-level education as a bachelor's degree. It is important to note that, in some cases, faculty complemented the Centers of Excellence data with additional information (e.g.,

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Bureau of Labor Statistics, trade statistics shared through advisory boards). The findings noted in Table 1 reflect the conclusions reached by faculty.

The Top Codes where demand surpasses supply were identified with the symbol ★

For each of the programs listed in Table 1, the following supporting evidence is provided:

- Career Education Employment and Labor Market Information dashboard:
https://public.tableau.com/app/profile/southwesterncollege/viz/LMI_Dashboard_July_2022/Methodology
- Degree and Certificate dashboard:
<https://public.tableau.com/app/profile/southwesterncollege/viz/DegreeandCertificateDashboard/DegreesandCertificatesDashboard>
- Narrative response provided by the discipline faculty and School/Center Dean

The result from the analysis suggests that:

- 29 academic programs (majors) are considered Strong, 53 Could be Stronger, and 88 Need Further Review, based on a review of Awards over the five-year period from 2017-2018 to 2021-2022,
- 61 Top Codes demonstrate higher demand for qualified professionals than existing supply.
- 8 Top Codes will be considered for discontinuance.






Table 1 Preliminary Gap Analysis and 5-Year Average Awards

TOP Code	Regional Labor Market Demand	Strong	Could be Stronger	Needs Further Review
010910 (Landscape Design and Maintenance)	★			Environmental Horticulture-AS (02604) Landscape Architecture - A.S. (02610) Landscape Architecture-CT (02611)
010920 (Floriculture / Floristry)	★			Floral Design-AS (02821) Floral Design-CT (02823)
010930 (Nursery Technology)	★			Retail Nursery and Plant Production-CT (02824)
020100 (Architecture and Architectural Technology)	★	Architecture - A.S. (01940)		Architecture Technology - A.S.(02840) Architecture Technology-CT (A2842)
030300 (Environmental Technology)	★			Environmental Management-AS (A1971) Environmental Management-CT (A1972) Waste Technician-CP (O1975)
050100 (Business and Commerce, General)	★			Community, Economic and Urban Development-AS (01061)
050200 (Accounting)	★	Accounting - A.A (01110)	Accounting - A.S.(02011) Payroll Clerk – CP (02142) Bookkeeping/Payroll Specialist-CT (02143) Micro Technician Bookkeeper-CP (02320)	Accounting-CT (02012) Bookkeeping Technician-CT (02328)
050400 (Banking and Finance)	★		Finance-AA (01120) Financial and Investment Services Specialty-CT (B2027)	Financial Services-CP (02028)
050500 (Business Administration)	★	Business Administration for Transfer - IGETC - A.S. (01105)	Business Administration - A.A. (01100)	
050600 (Business Management)	★	Business Management-AS (A1151)	Business Management-CT (B1153)	
050630 (Management)	★	Leadership and Supervision -		Leadership and Supervision--- Intermediate-CT (01154)




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Development and Supervision)		Basic – CP (A2117)	Leadership and Supervision-AS (02114)
050640 (Small Business and Entrepreneurship)	★		Entrepreneurship and Small Business-CT (A1155)
050800 (International Business and Trade)	★		International Business Emphasis - A.A. (01101) International Business-AS (02038) International Business---Intermediate-CT (02039) International Business - Basic – CP (A2119)
050900 (Marketing and Distribution)	★		Marketing-AA (01160)
050970 (Commerce, Business Emphasis)	Suggest discontinuing		E-Business-CT (B2457)
051000 (Logistics and Materials Transportation)	★		International Logistics and Transportation - A.S. (A1141) International Logistics and Transportation---Basic-CT (A1143) International Logistics & Transportation-Intermediate-CT (A1144)
051100 (Real Estate)	★	Real Estate-CP (A1022)	Real Estate-AA (A1170) Real Estate-AS (02130)
051200 (Insurance)	★		Insurance-AS (02181) Insurance Certificate Basic-CP (02182) Insurance Advanced-CT (02183)
051400 (Office Technology/Office Computer Applications)	★		OIS: Microsoft Office Specialist (MOS)---Basic-CP (02052) Office Information Systems Professional - A.S. (02046) Office Information Systems Professional - Basic – CP (02047) Office Information Systems Professional - Bilingual - A.S. (02041) OIS: Office Information Systems

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			Professional-Advanced-CT (02048)
			OIS: Office Info Systems Professional--Bilingual--BSC-CT (02042)
			OIS: Office Info Systems Professional--Bilingual--ADV-CT (02043)
060420 (Television, including combined TV, Film, Video)		Film, Television, and Media Arts for Transfer (01281)	Film Television and Media Arts Production Specialist-ADV-CT (02534)
			Telemedia Production Specialist-Basic (02531)
061420 (Electronic Game Design)			CIS---Web and Gaming Animator-AS (A2129)
			CIS--Web and Gaming 2D and 3D Animator-CT (A2134)
			CIS—Web Flash Developer and Gaming Animator-AS (02129)
			CIS-- Web Flash Developer and Gaming Animator-CT (02134)
061430 (Website Design and Development)			Social Media Marketer-CP (01065)
			CIS—Entry Level Database Administrator-CT (02017)
			CIS---Web Database Programmer/Administrator--LAMP-CP (02107)
			CIS—Internet Web Dsg-AS (02086)
			CIS—Web Designer-CP (02108)
			CIS—Internet Web Bsc-CT (02092)
			CIS---Web Flash Designer-CP_CT (02109)
			CIS—Internet Web Adv-CT (02094)
			CIS---Web Site Designer and Developer-AS (02121)
			CIS—Multimedia Dev Using Dir-CT (02106)
			CIS---Web Site Designer and Developer-CT (02122)
			CIS--Web Shopping Cart Developer-CT (02333)
			CIS--Web Search Engine Marketer-CT (02334)
061440 (Animation)			CIS---Web and Gaming Animator-CP (A2109)
070100 (Information)			Project Management-CP (02276)











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Technology, General			
070200 (Computer Information Systems)	Suggest discontinuing (02013)		Information Systems - A.A. (01130)
070210 (Software Applications)	Discontinued (02331)		Software Quality Assurance (02013)
			CIS: Computer Programming with an Emphasis on App-BSC-CT (02274)
			Microcomputer Office and Technical Support Skills-AA (02331)
070710 (Computer Programming)	Under consideration for discontinuance (01064, 02090, 02099)		C++ Certificate-CP (01064)
			CIS---Systems Programming Emphasis-CT (02099)
			CIS: Computer Programming with Emphasis on Applicat-AS (02273)
			CIS - Systems Programming Emphasis - A.S. (02090)
070820 (Computer Support)	Under consideration for discontinuance		CIS - Operations/Pc Support Specialist Emphasis - A.S. (02079)
070910 (E-Commerce, Technology Emphasis)	Scheduled for discontinuance		CIS---Web Site eCommerce Administrator-AS (02127)
080200 (Educational Aide, Teacher Assistant)	Under consideration for discontinuance		Teacher Education Preparation-CT (01415)
083520 (Fitness Trainer)			Fitness Specialist Certification - Basic – CP (01361)
			Fitness Specialist Certification---Advanced FITNESS-ADV-CT (01362)
093410 (Computer Electronics)	Under consideration for discontinuance		Electronics---Computer Technician---Basic-CP (02908)
094800 (Automotive Technology)		Automotive Performance Systems-CT (02765)	Automotive Technology - A.S. (02870)
			Automotive Technology-CT (02871)
095300 (Drafting Technology)			Computer Aided Design and Drafting---Basic – CP (02569)

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			Computer Aided Design and Drafting - A.S. (A2571)
			Design Technology-AS (A2572)
			Computer Aided Design and Drafting---Advanced-CT (A2576)
			Design Technology-CT (A2577)
095670 (Industrial and Occupational Safety and Health)	★	Occupational Health and Safety-CT (A1974)	Occupational Health and Safety - A.S. (A1973)
095700 (Civil and Construction Management Technology)	★		Construction Management-AS (02881)
			Construction Management-CT (02883)
095720 (Construction Inspection)	★	Construction Inspection-CT (02882)	Construction Inspection-AS (02880)
100500 (Commercial Music)	★	Music---Commercial-CT (02541)	Music---Commercial-AS (02540)
100600 (Technical Theater)	★		Theatre Arts - Technical Theatre-CT (A2539)
101200 (Applied Photography)	★		Photography and Digital Imaging-AA (02350)
	★		Professional Photography-CT (01381)
103000 (Graphic Art and Design)	★	Graphic Design-AA (01090)	
120500 (Medical Laboratory Technology)	★	Medical Laboratory Technician-AS (02385)	
120800 (Medical Assisting)	★	Medical Assisting-AS (A2314)	
120810 (Clinical Medical Assisting)	★	Medical Assisting-Clinical-CT (02322)	
120820 (Administrative Medical Assisting)	★	Medical Assisting-Administrative-CT (02315)	
120900 (Hospital Central Service Technician)	★	Central Service Technology – CP (02347)	
121700 (Surgical Technician)	★	Surgical Technology-CT (02346)	Surgical Technology-AS (02345)
122310 (Health Information Coding)	★	Medical Assisting-Medical Insurance Billing and Coding-CT (02317)	






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123010 (Registered Nursing)		Nursing-AS (02360)		
123020 (Licensed Vocational Nursing)		Nursing, Vocational- CT (02392)		
123030 (Certified Nurse Assistant)		Nursing, Vocational- AS (02390)		
123030 (Certified Nurse Assistant)		Certified Nursing Assistant (CNA) – CP (02371)		
124020 (Dental Hygienist)		Dental Hygiene - A.S. (02380)		
125000 (Emergency Medical Services)		Emergency Medical Technology- CT (02342)		
125100 (Paramedic)			Emergency Medical Technology and Paramedic-CT (02341)	Emergency Medical Technology and Paramedic - A.S. (02340)
126000 (Health Professions, Transfer Core Curriculum)		Preparation of Allied Health Programs- A.A. (B1330)		
130630 (Culinary Arts)			Professional Baking and Pastry-CT (01820)	
			Professional Cooking- CT (A1824)	
			Culinary Arts-AS (A1825)	
			Culinary Arts: Cooking Essentials - Basic – CP (A1826)	
130700 (Hospitality)				Hotel Management-AS (A2991)
				Event and Convention Management-AS (A2994)
				Event and Convention Management - Advanced- CT (A2996)
				Travel and Tourism Management-AS (A2997)
				Travel and Tourism-CT (A2999)
				Restaurant and Foodservice Management- AS (B1821)
				Restaurant and Foodservice Management - Advanced-CT (B1823)

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				Hotel Operations-CT (B2993)
130800 (Family Studies)	★	Child and Adolescent Development for Transfer - CSU - A.A.T (01751) Child Development-AA (01750) Child Development Teacher-AA (B2721) Spanish-to-English Associate Teacher Certificate-CP (02723)		Family and Child Services-CP (02724)
140200 (Paralegal)	★		Paralegal Studies-AS (A2516) Paralegal Studies: Bilingual (English/Spanish) - A.S. (A2517)	Paralegal Studies-CT (A2518) Paralegal Studies: Bilingual (English/Spanish)-CT (A2519)
210200 (Public Administration)	★	Public Administration-AA (01860)		
210400 (Social Work and Human Services)	★	Social Work and Human Services for Transfer-CSU-A.A.T (01891)		Associate in Arts in Social Work and Human Services-AA (01890)
210500 (Administration of Justice)	★	Administration of Justice for Transfer - CSU - A.S. (01251) Administration of Justice---Law Enforcement Emphasis (02523)	Criminal Justice-AA (01250)	
210510 (Corrections)	★		Administration of Justice---Corrections Emphasis-AS (02521)	Administration of Justice--Corrections Emphasis-CT (02700)
210540 (Forensics, Evidence, and Investigation)	★		Forensic Studies-AS (C2705) Crime Scene Investigator-AS (B2705)	Forensic Studies-CT (C2706)

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210550 (Police Academy)		Law Enforcement Training Academy-CT (02711)	
213300 (Fire Technology)		Fire Science Technology - A.S. (02845)	Fire Science Technology-CT (02846)
213350 (Fire Academy)		Regional Fire Academy-CT (02839)	
214000 (Legal and Community Interpretation)			Legal Interpretation-- Basic (English/Spanish)-CT (02449)
			Legal Interpretation/Translation--Intermed (Eng/Span)-CT (02451)
220610 (Geographic Information Systems)			GIS---Continuing Students/Working Professionals – CP (01771)
			Geospatial Technology Technician-CT (A1772)

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