










Accounting

Labor Market Analysis for San Diego College of Continuing Education

September 2021

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
 <p>Proceed with New Program</p>	 	 	<input type="checkbox"/> Bachelor's Degree+ <input type="checkbox"/> Associate Degree <input checked="" type="checkbox"/> Some College or Certificate <input type="checkbox"/> HS Diploma or Equivalent <input type="checkbox"/> Less than a HS Diploma <input type="checkbox"/> Apprenticeship
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	
 	<p>HIGH</p> 	<p>HIGH</p> 	

This report provides labor market information for an occupation selected by San Diego College of Continuing Education for its *Accounting* program. The training provided by this program is likely to lead to employment as *Bookkeeping, Accounting, and Auditing Clerks*. According to available labor market information, *Bookkeeping, Accounting, and Auditing Clerks* in San Diego County have a labor market demand of 1,636 annual job openings (while average demand for a single occupation in San Diego County is 242 annual job openings). On average, seven institutions supply 314 for-credit awards and one institution supplies 14 noncredit awards in San Diego County for this occupation. In short, the region supplies 328 for-credit and noncredit awards for 1,636 annual job openings, suggesting that there is a supply gap in the labor market. Entry-level wages and median wages for this occupation are above the living wage. This brief recommends proceeding with a new program or program modification because 1) there is a supply gap; and 2) entry-level and median wages are above the living wage.

Introduction

This report provides labor market information in San Diego County for an occupation related to the six-digit Taxonomy of Programs (TOP)¹ code, Accounting (TOP 0502.00). The purpose of this brief is to assist noncredit program providers in the region, such as San Diego College of Continuing Education (SDCCE), with program development and review. SDCCE identified one occupation from the Standard Occupational Classification (SOC)² system for *Accounting*, which will be the focus of this report:

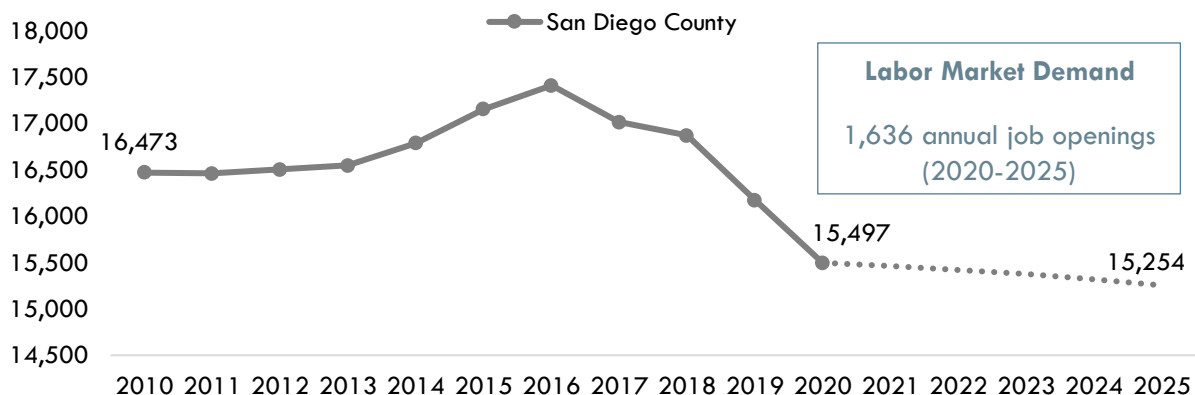
Bookkeeping, Accounting, and Auditing Clerks (SOC 43-3031): Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers. Sample reported job titles include:

- Accounts Receivable Clerk
- Accounts Payable Clerk
- Accounting Specialist
- Accounts Payable Specialist
- Accounting Technician
- Accounting Clerk
- Accounting Associate
- Accounting Assistant

Projected Occupational Demand

Between 2020 and 2025, *Bookkeeping, Accounting, and Auditing Clerks* is projected to decrease by 243 net jobs or two percent (Exhibit 1). Employers in San Diego County will need to hire 1,636 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

Exhibit 1: Number of Jobs for Bookkeeping, Accounting, and Auditing Clerks (2010-2025)³



¹ Taxonomy of Programs (TOP) is a system of codes used by the California Community Colleges for the purpose of collecting, calculating, or disseminating data about similar training programs.

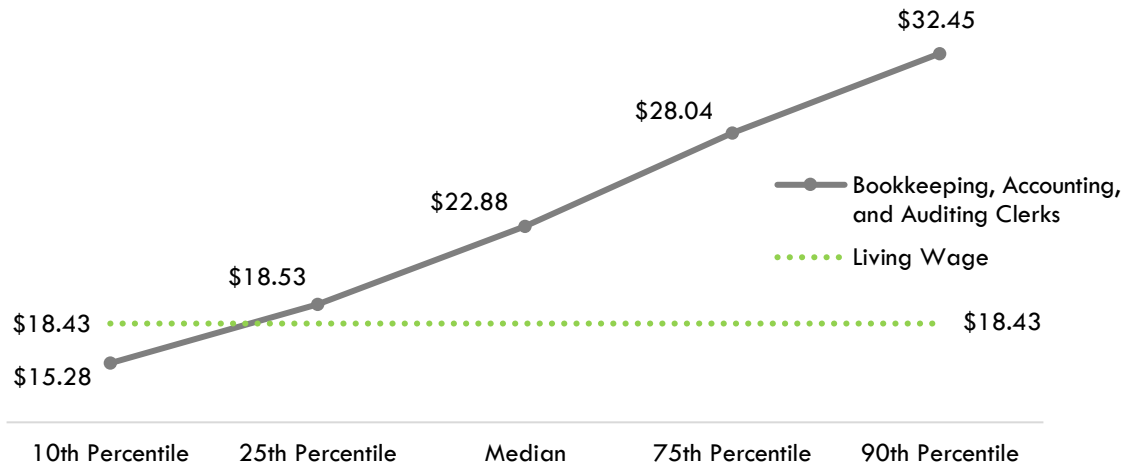
² The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc).

³ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

Earnings

Bookkeeping, Accounting, and Auditing Clerks receive entry-level hourly earnings of \$18.53; this is more than the living wage for a single adult in San Diego County, which is \$18.43 per hour (Exhibit 2).⁴

Exhibit 2: Hourly Earnings⁵ for Bookkeeping, Accounting, and Auditing Clerks in San Diego County⁶



Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.⁷ According to TOP and CIP⁸ data, seven community colleges supply the region with for-credit awards for Accounting (TOP 0502.00): Cuyamaca College, MiraCosta College, Palomar College, San Diego City College, San Diego Mesa College, San Diego Miramar College and Southwestern College (Exhibit 3a).

⁴ "Family Needs Calculator (formerly the California Family Needs Calculator)," Insight: Center for Community Economic Development, last updated 2021. insightccd.org/family-needs-calculator/.

⁵ 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

⁶ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

⁷ TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data).

⁸ There are two CIP codes related to Accounting (TOP 0502.00): Accounting (CIP 52.0301) and Accounting Technology/Technician and Bookkeeping (CIP 52.0302).

Exhibit 3a: Number of For-Credit Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Years 2017-18 through 2019-20)

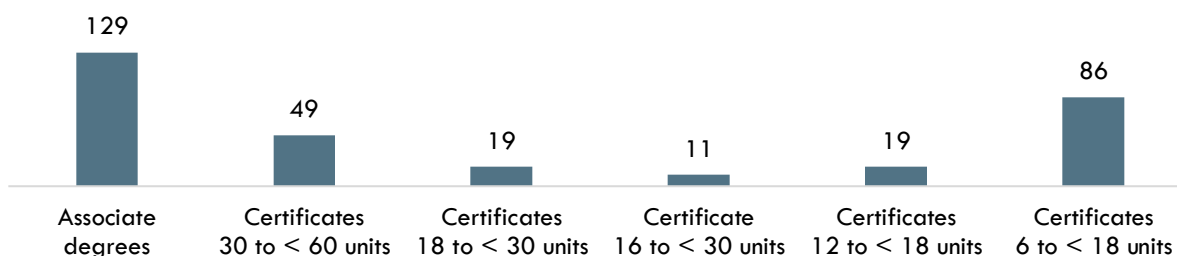
College	Award Type	PY 17-18	PY 18-19	PY 19-20	3-Yr Total Average
Cuyamaca	Associate Degree	18	6	12	12
	Certificate 30 to < 60 units	8	4	4	5
	Certificate 16 to < 30 units	1	2	0	1
	Total	27	12	16	18
MiraCosta	Associate Degree	28	24	31	28
	Certificate 30 to < 60 units	0	0	28	9
	Certificate 18 to < 30 units	10	8	0	6
	Certificate 16 to < 30 units	0	0	13	4
	Certificate 12 to < 18 units	29	29	0	19
	Certificate 6 to < 18 units	5	8	30	14
	Total	72	69	102	81
Palomar	Associate Degree	29	27	22	26
	Certificate 30 to < 60 units	40	29	26	32
	Certificate 6 to < 18 units	26	32	38	32
	Total	95	88	86	90
San Diego City	Associate Degree	5	3	7	5
	Certificate 6 to < 18 units	34	18	0	17
	Total	39	21	7	22
San Diego Mesa	Associate Degree	9	20	15	15
	Certificate 18 to < 30 units	9	7	0	5
	Certificate 16 to < 30 units	0	0	6	2
	Certificate 6 to < 18 units	3	2	0	2
	Total	21	29	21	24
San Diego Miramar	Associate Degree	11	5	11	9
	Certificate 18 to < 30 units	12	11	0	8
	Certificate 16 to < 30 units	0	0	8	3
	Certificate 6 to < 18 units	1	7	0	3
	Total	24	23	19	22

College	Award Type	PY 17-18	PY 18-19	PY 19-20	3-Yr Total Average
Southwestern	Associate Degree	37	39	29	35
	Certificate 30 to < 60 units	3	4	2	3
	Certificate 16 to < 30 units	0	0	4	1
	Certificate 6 to < 18 units	12	20	22	18
	Total	52	63	57	57
Total		330	305	308	314

Note: The numbers may not add up exactly due to rounding.

By award type, the colleges supplied the most awards for **associate degrees** based on the three-year average (program years 2017-18 through 2019-20) (Exhibit 3b).

Exhibit 3b: Total Number of For-credit Awards by Type for Accounting (TOP 0502.00) in San Diego County (3-Yr Average)



In terms of noncredit awards, only San Diego College of Continuing Education provides noncredit awards for Accounting (TOP 0502.00), with a three-year average of **14** noncredit awards (program years 2017-18 through 2019-20) (Exhibit 4).

Exhibit 4: Number of Noncredit Awards Conferred by SDCCE (Program Years 2017-18 through 2019-20)

Program Title	Award Type	PY 17-18	PY 18-19	PY 19-20	3-Yr Total Average
Account Clerk Program	Noncredit	17	13	12	14

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁹ suggests that there is a **supply gap** in San Diego County, with **1,636** annual openings and **328** for-credit and noncredit awards supplied by the region (Exhibit 5).

Exhibit 5: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

TOP6 Program	Demand (Annual Openings)	Supply (Total Annual Average Supply)		Supply Gap or Oversupply
		Noncredit	For-Credit	
Accounting (TOP 0502.00)	1,636	14	314	1,308

Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

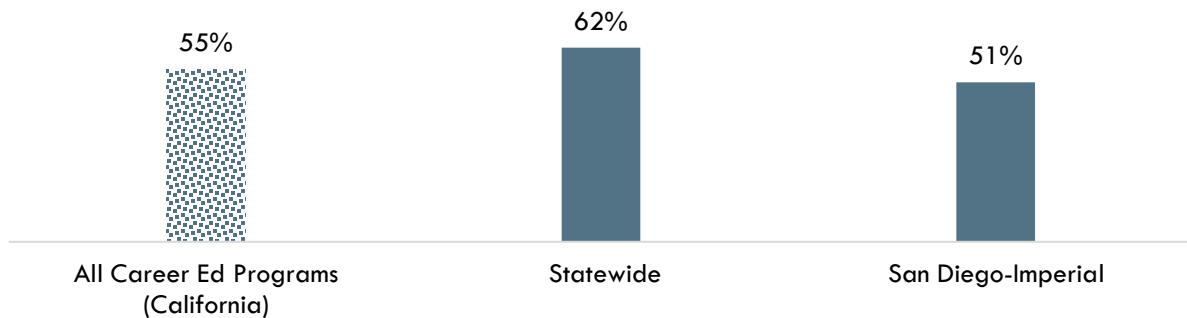
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⁹ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

Student Outcomes and Regional Comparisons

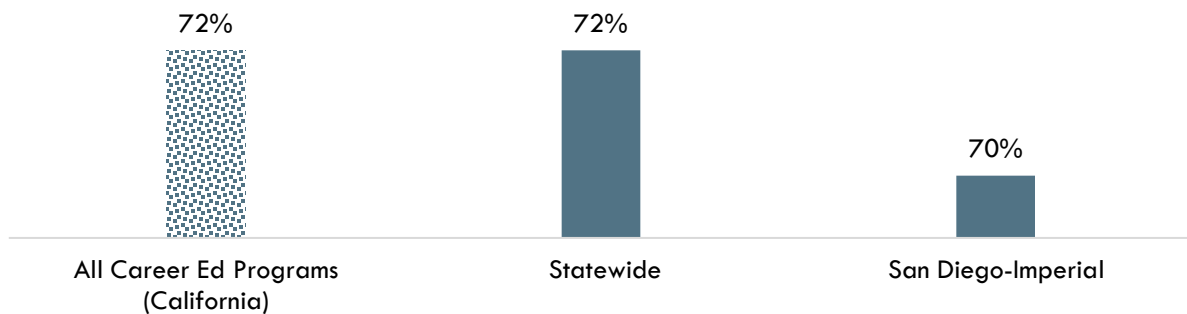
According to the California Community Colleges LaunchBoard, 51 percent of students in the San Diego-Imperial region earned a living wage after completing an Accounting (0502.00) program, compared to 62 percent statewide and 55 percent of students in Career Education programs in general across the state (Exhibit 6a).¹⁰

**Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program
(Accounting, PY 2017-18)¹¹**



According to the California Community Colleges LaunchBoard, 70 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing an Accounting (0502.00) program, compared to 72 percent statewide and 72 percent of students in Career Education programs in general across the state (Exhibit 6b).¹²

**Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program
(Accounting, PY 2016-17)¹³**



¹⁰ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹¹ Among completers and skills builders who exited, the proportion of students who attained a living wage.

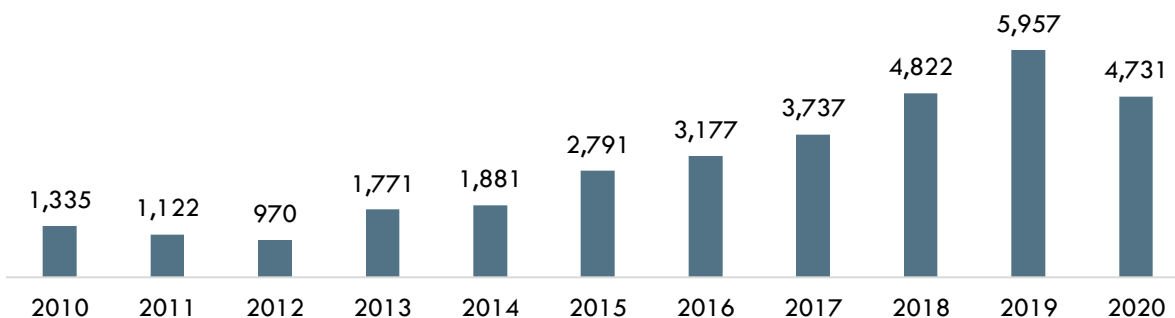
¹² "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹³ Most recent year with available data is Program Year 2016-17. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. Between 2010 and 2020, there was an average of 2,936 online job postings per year for *Bookkeeping, Accounting, and Auditing Clerks* in San Diego County (Exhibit 7). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

Exhibit 7: Number of Online Job Postings for *Bookkeeping, Accounting, and Auditing Clerks* in San Diego County (2010-2020)¹⁴



Top Employers

Between January 1, 2018 and December 31, 2020, the top five employers in San Diego County for this occupation were *General Atomics, Certified Mobile Notary Service, Sprouts Farmers Markets, University of California San Diego, and ACCA* based on online job postings (Exhibit 8).

Exhibit 8: Top Employers for *Bookkeeping, Accounting, and Auditing Clerks* in San Diego County¹⁵

Top Employers	
<ul style="list-style-type: none"> • General Atomics • Certified Mobile Notary Service • Sprouts Farmers Markets • University of California San Diego • ACCA 	<ul style="list-style-type: none"> • Intuit • Alliant Insurance Services • Suna Solutions • San Diego Community College District • El Super

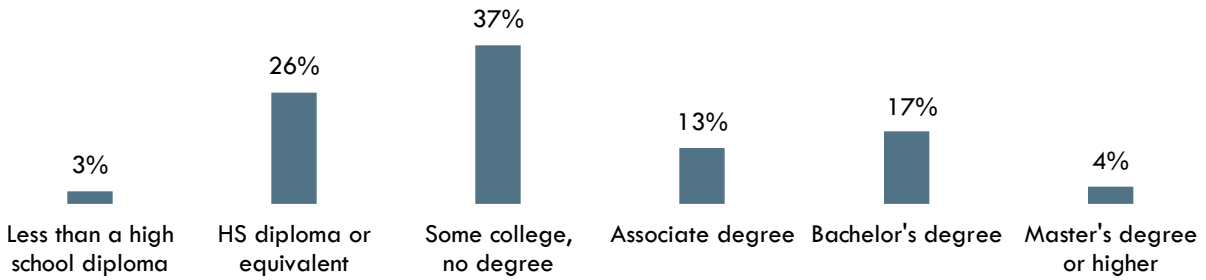
¹⁴ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2020.

¹⁵ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Education, Skills, and Certifications

Exhibit 9 indicates the educational attainment for this occupation found currently in the national labor force. The typical entry-level education is *some college, no degree*.¹⁶

Exhibit 9: National Educational Attainment of Bookkeeping, Accounting, and Auditing Clerks¹⁷



*may not total 100 percent due to rounding

¹⁶ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

¹⁷ "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified April 4, 2021. bls.gov/emp/tables/educational-attainment.htm.

Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2018 and December 31, 2020.

Exhibit 10: Top Skills for Bookkeeping, Accounting, and Auditing Clerks in San Diego County¹⁸

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Accounting • Accounts Payable / Accounts Receivable • Bookkeeping • Account Reconciliation • Data Entry • Invoice Processing • Customer Billing • General Ledger • Month-End Close Processes • Enterprise Resource Planning • Customer Checkout • Expense Reports • Spreadsheets • Customer Service • Cash Deposits and Receipts 	<ul style="list-style-type: none"> • Detail-Oriented • Communication Skills • Organizational Skills • Research • Multi-Tasking • Problem Solving • Teamwork / Collaboration • Computer Literacy • Writing • Typing • Meeting Deadlines • Written Communication • Verbal / Oral Communication • Time Management • Self-Starter 	<ul style="list-style-type: none"> • Microsoft Excel • QuickBooks • Microsoft Word • Accounting Software • Great Plains Accounting Software • SAP • Pivot Tables • Microsoft Outlook • Oracle • Microsoft PowerPoint • NetSuite • Microsoft Dynamics • Word Processing • Yardi Software • Microsoft Access

¹⁸ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Exhibit 11 lists the top certifications that appeared in online job postings between January 1, 2018 and December 31, 2020.

Exhibit 11: Top Certifications for *Bookkeeping, Accounting, and Auditing Clerks* in San Diego County¹⁹

Top Certifications in Online Job Postings

1. Security Clearance
 2. Certificate in Accounting
 3. Business License
 4. QuickBooks Certification
 5. Taxation Certification
 6. Certified Public Accountant (CPA)
 7. Medical Billing and Coding Certification
 8. Bookkeeping Certification
 9. First Aid CPR AED
 10. Business Development Certified
 11. Typing Certification
 12. Series 7
 13. Accredited ACH Professional
 14. Financial Accounting Standards Board (FASB)
 15. Certified Payroll Professional (CPP)
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¹⁹ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

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Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; 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 the report 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.

This workforce demand report uses state and federal job projection data that was developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.