










Nutrition, Foods, and Culinary Arts

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 EDUCATION FOR MAJORITY OF OCCUPATIONS ANALYZED
 Proceed with Caution	 	 	<input type="checkbox"/> Bachelor's Degree+ <input type="checkbox"/> Associate Degree <input type="checkbox"/> Some College or Certificate <input checked="" 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	
 	MEDIUM 	HIGH 	

This report provides labor market information for occupations selected by San Diego College of Continuing Education for its *Nutrition, Foods, and Culinary Arts* program. These occupations include “Chefs and Head Cooks,” “Cooks, All Other,” “Cooks, Institution and Cafeteria,” “Cooks, Restaurant,” and “First-Line Supervisors of Food Preparation and Serving Workers.” According to available labor market information, *Culinary Arts Occupations* in San Diego County have a labor market demand of 4,123 annual job openings (while average demand for a single occupation in San Diego County is 242 annual job openings). On average, three institutions supply 24 for-credit awards and one institution supplies one noncredit award in San Diego County for these occupations. In short, the region supplies 25 for-credit and noncredit awards for 4,123 annual job openings, suggesting that there is a supply gap in the labor market. Entry-level wages for these occupations are below the living wage, but median earnings are above the living wage. This brief recommends proceeding with caution when developing a new program and supports a program modification because 1) there is a supply gap; 2) a high number of annual job openings exist; and 3) entry-level earnings are below the living wage, but median wages are above the living wage. The colleges should also note that the percentage of students who complete a related program and earn a living wage is below the statewide percentage of students who complete Career Education programs in general.

Introduction

This report provides labor market information in San Diego County for occupations related to the six-digit Taxonomy of Programs (TOP)¹ code, Nutrition, Foods, and Culinary Arts (TOP 1306.00). 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 the following occupational codes from the Standard Occupational Classification (SOC)² system for *Nutrition, Foods, and Culinary Arts*, which will be the focus of this report:

- **Chefs and Head Cooks** (SOC 35-1011): Direct and may participate in the preparation, seasoning, and cooking of salads, soups, fish, meats, vegetables, desserts, or other foods. May plan and price menu items, order supplies, and keep records and accounts.
- **Cooks, All Other** (SOC 35-2019): All cooks not listed separately.
- **Cooks, Institution and Cafeteria** (SOC 35-2012): Prepare and cook large quantities of food for institutions, such as schools, hospitals, or cafeterias.
- **Cooks, Restaurant** (SOC 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.
- **First-Line Supervisors of Food Preparation and Serving Workers** (SOC 35-1012): Directly supervise and coordinate activities of workers engaged in preparing and serving food.

For the purpose of this report, these occupations are referred to as *Culinary Arts Occupations*.

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).

Projected Occupational Demand

Between 2020 and 2025, *Culinary Arts Occupations* are projected to increase by 865 net jobs or three percent (Exhibit 1a). Employers in San Diego County will need to hire 4,123 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

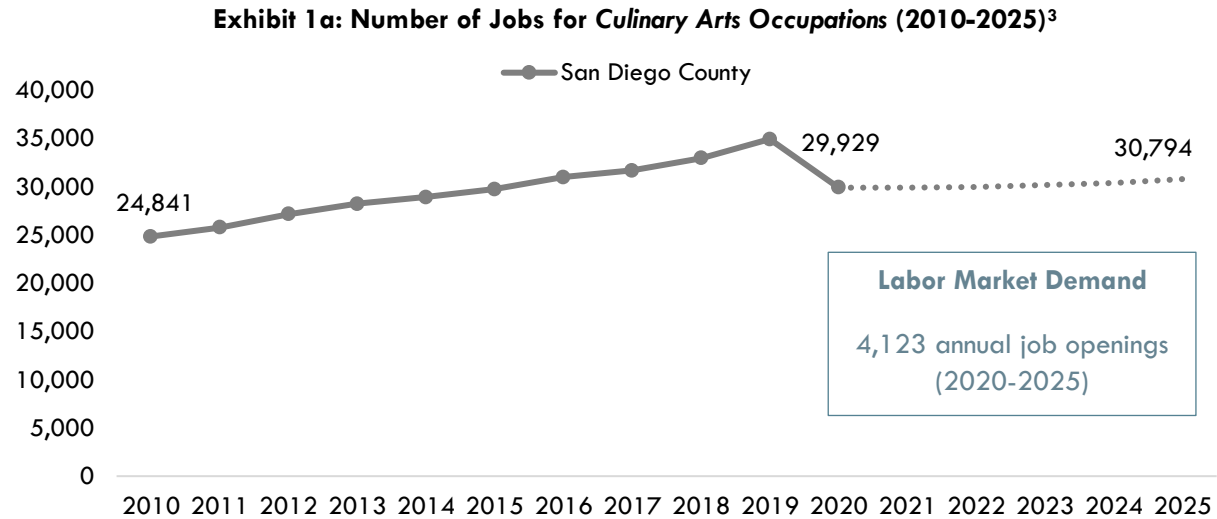


Exhibit 1b disaggregates the projected number of jobs change by occupation. “Cooks, Restaurant” are projected to have the most labor market demand between 2020 and 2025, with 2,259 annual job openings.

Exhibit 1b: Number of Jobs for Culinary Arts Occupations in San Diego County (2020-2025)⁴

Occupational Title	2020 Jobs	2025 Jobs	2020 - 2025 Net Jobs Change	2020-2025 % Net Jobs Change	Annual Job Openings (Demand)
Cooks, Restaurant	16,411	17,015	604	4%	2,259
First-Line Supervisors of Food Preparation and Serving Workers	9,158	9,305	147	2%	1,294
Cooks, Institution and Cafeteria	2,222	2,344	122	5%	318
Chefs and Head Cooks	1,857	1,841	-16	-1%	214
Cooks, All Other	281	289	8	3%	38
Total	29,929	30,794	865	3%	4,123

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

⁴ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

Earnings

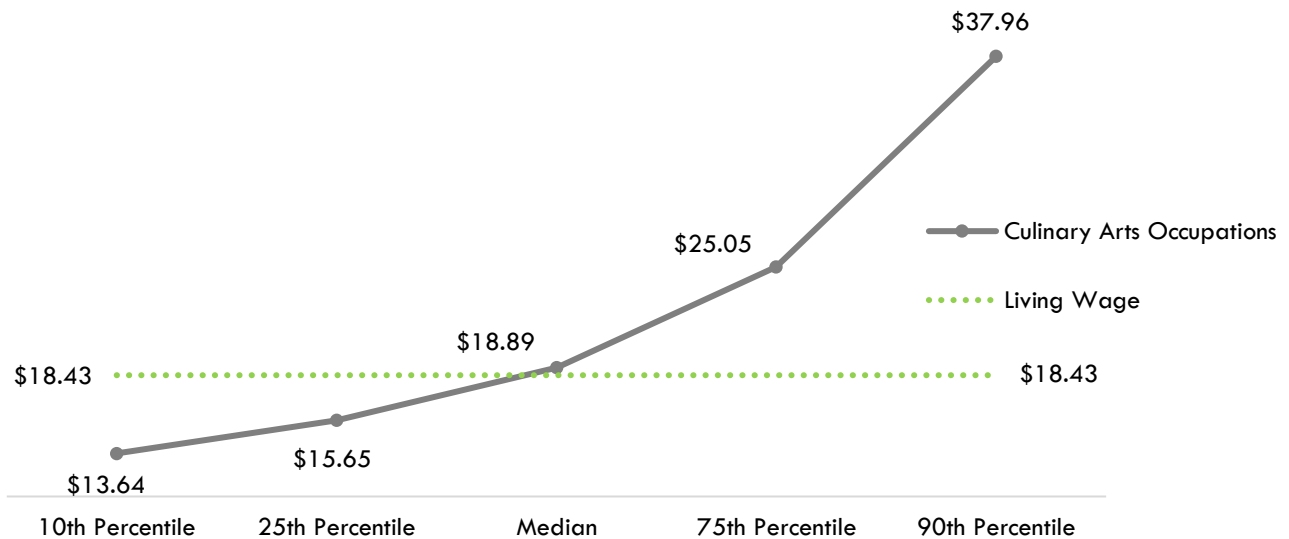
Exhibit 2a disaggregates hourly earnings by occupation. The entry-level hourly earnings for *Culinary Arts Occupations* range from \$13.61 to \$18.73.

Exhibit 2a: Hourly Earnings for Culinary Arts Occupations in San Diego County⁵

Occupational Title	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Chefs and Head Cooks	\$18.73	\$25.41	\$41.59
Cooks, All Other	\$15.92	\$18.66	\$22.31
Cooks, Institution and Cafeteria	\$15.06	\$17.50	\$20.31
First-Line Supervisors of Food Preparation and Serving Workers	\$14.91	\$17.79	\$23.46
Cooks, Restaurant	\$13.61	\$15.09	\$17.58

On average, the entry-level hourly earnings for *Culinary Arts Occupations* are \$15.65; this is less than the living wage for a single adult in San Diego County, which is \$18.43 per hour (Exhibit 2b).⁶

Exhibit 2b: Average Hourly Earnings⁷ for Culinary Arts Occupations in San Diego County⁸



⁵ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

⁶ "Family Needs Calculator (formerly the California Family Needs Calculator)," Insight: Center for Community Economic Development, last updated 2021. insightccd.org/family-needs-calculator/.

⁷ 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.

⁸ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

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.⁹ According to TOP and CIP¹⁰ data, three community colleges supply the region with for-credit awards for Nutrition, Foods, and Culinary Arts (TOP 1306.00): MiraCosta College, Palomar College, and San Diego Mesa College (Exhibit 3a).

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
MiraCosta	Associate for Transfer Degree	0	1	2	1
	Total	0	1	2	1
Palomar	Associate for Transfer Degree	0	0	3	1
	Total	0	0	3	1
San Diego Mesa	Associate Degree	12	7	9	9
	Associate for Transfer Degree	2	13	3	6
	Certificate 18 to < 30 units	12	7	0	6
	Certificate 16 to < 30 units	0	0	1	0
	Total	26	27	13	22*
Total		26	28	18	24

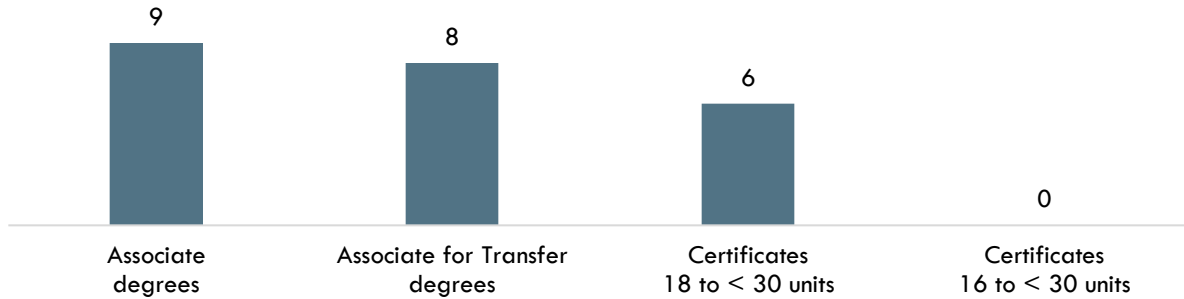
Note: The numbers may not add up exactly due to rounding.

⁹ 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).

¹⁰ There are three CIP codes related to Nutrition, Foods, and Culinary Arts (TOP 1306.00): Cooking and Related Culinary Arts, General (CIP 12.0500), Culinary Arts and Related Services, Other (CIP 12.0599), and Foods, Nutrition, and Wellness Studies, General (CIP 19.0501).

By for-credit 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 Nutrition, Foods, and Culinary Arts (TOP 1306.00) in San Diego County (3-Yr Average)



In terms of noncredit awards, only San Diego College of Continuing Education provides noncredit awards for Nutrition, Foods, and Culinary Arts (TOP 1306.00), with a three-year average of **one** noncredit award (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
Food Preparation for Health Care Professionals	Noncredit	2	1	0	1

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply¹¹ suggests that there is a **supply gap** in San Diego County, with **4,123** annual openings and **25** 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	
Nutrition, Foods, and Culinary Arts (TOP 1306.00)	4,123	1	24	4,098

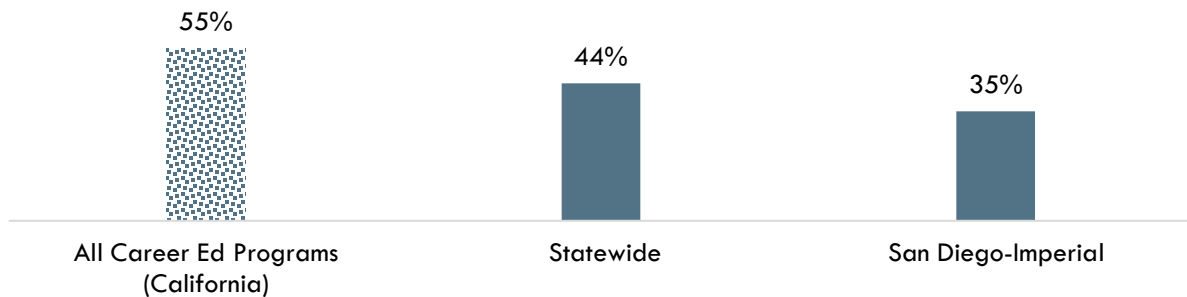
Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers;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

¹¹ 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

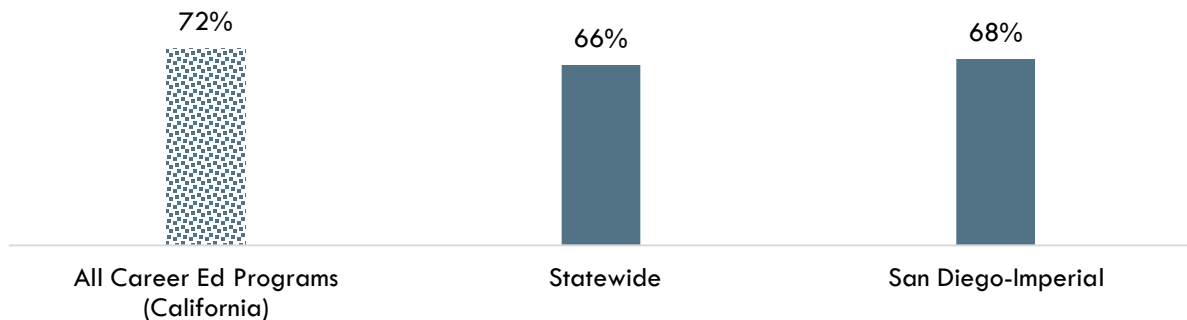
According to the California Community Colleges LaunchBoard, 35 percent of students in the San Diego-Imperial region earned a living wage after completing a Nutrition, Foods, and Culinary Arts (TOP 1306.00) program, compared to 44 percent statewide and 55 percent of students in Career Education programs in general across the state (Exhibit 6a).¹²

**Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program
(Nutrition, Foods, and Culinary Arts, PY 2017-18)¹³**



According to the California Community Colleges LaunchBoard, 68 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a Nutrition, Foods, and Culinary Arts (TOP 1306.00) program, compared to 66 percent statewide and 72 percent of students in Career Education programs in general across the state (Exhibit 6b).¹⁴

**Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program
(Nutrition, Foods, and Culinary Arts, PY 2016-17)¹⁵**



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

¹³ Among completers and skills builders who exited, the proportion of students who attained a living wage.

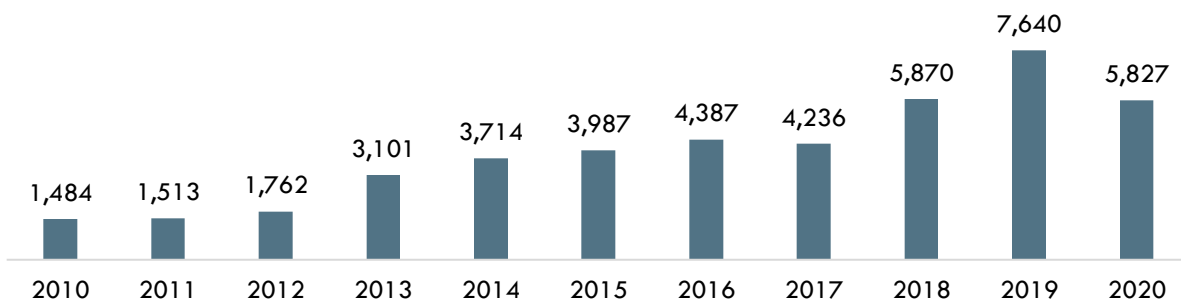
¹⁴ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹⁵ 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 3,956 online job postings per year for *Culinary Arts Occupations* 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 1b). 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 Culinary Arts Occupations in San Diego County (2010-2020)¹⁶



Top Employers

Between January 1, 2018 and December 31, 2020, the top five employers in San Diego County for *Culinary Arts Occupations* were *Marriott International*, *Starbucks Coffee Company*, *Sodexo*, *Compass Group North America*, and *Hilton Hotel Corporation* based on online job postings (Exhibit 8).

Exhibit 8: Top Employers for Culinary Arts Occupations in San Diego County¹⁷

Top Employers	
<ul style="list-style-type: none"> • Marriott International, Inc. • Starbucks Coffee Company • Sodexo • Compass Group North America • Hilton Hotel Corporation 	<ul style="list-style-type: none"> • Chili's • Omni Hotel Corporation • H&R Block • Hyatt • Rubio's Restaurants

¹⁶ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2020.

¹⁷ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Education, Skills, and Certifications

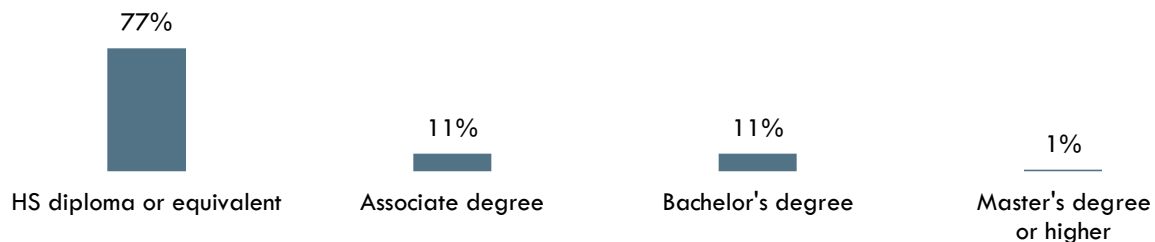
Culinary Arts Occupations have a national educational attainment ranging from no formal educational requirement to a high school diploma or equivalent (Exhibit 9a).

Exhibit 9a: National Educational Attainment for *Culinary Arts Occupations*¹⁸

Occupational Title	Typical Entry-Level Education
Chefs and Head Cooks	High school diploma or equivalent
First-Line Supervisors of Food Preparation and Serving Workers	High school diploma or equivalent
Cooks, All Other	No formal educational credential
Cooks, Institution and Cafeteria	No formal educational credential
Cooks, Restaurant	No formal educational credential

Based on online job postings between January 1, 2018 and December 31, 2020 in San Diego County, employers posted a high school diploma or equivalent as the educational requirement for *Culinary Arts Occupations* (Exhibit 9b).¹⁹

Exhibit 9b: Educational Requirements for *Culinary Arts Occupations* in San Diego County²⁰



¹⁸ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

¹⁹ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

²⁰ "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified April 9, 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 Culinary Arts Occupations in San Diego County²¹

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Cooking • Food Preparation • Scheduling • Customer Service • Cleaning • Food Safety • Cash Handling • Retail Industry Knowledge • Staff Management • Safety Training • Budgeting • Guest Services • Supervisory Skills • Cost Control • Food Service Experience 	<ul style="list-style-type: none"> • Physical Abilities • Communication Skills • Organizational Skills • Teamwork / Collaboration • English • Creativity • Detail-Oriented • Leadership • Building Effective Relationships • Work Area Maintenance • Planning • Positive Disposition • Problem Solving • Energetic • Multi-Tasking 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft Word • Facebook • Microsoft PowerPoint • Microsoft Outlook • JavaScript • Microsoft Access • Java • Python • SQL • Structured Query Reporter • Software Development • SAP • Software as a Service • AngularJS

²¹ 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 *Culinary Arts Occupations* in San Diego County²²

Top Certifications in Online Job Postings

1. Food Handler Certification
 2. ServSafe
 3. Food Service Certification
 4. Casino Gaming License
 5. First Aid CPR AED
 6. Training For Intervention Procedures (TIPS) Certification
 7. Alcohol Awareness Certification
 8. Cash Handling Certification
 9. Certified Dietary Manager
 10. Food Safety Manager Certification
 11. Certified Barista
 12. Certified Sous Chef
 13. Certified Occupational Health Nurse
 14. Security Clearance
 15. ASAP Certified
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²² 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.