

# Baking and Patisserie Occupations

*Inland Empire/Desert Region (Riverside-San Bernardino-Ontario Metropolitan Statistical Area)*

## Summary

- Employment for the baking and patisserie occupational group is expected to increase by **13% between 2017 and 2022** in the Inland Empire/Desert Region. A total of **23,948 job openings, or 4,790 annual openings** will be available over the five-year timeframe.
- The median wage for each of the baking and patisserie occupations is **above the MIT Living Wage estimate of \$12.30 per hour** for a single adult living in the Inland Empire/Desert Region.
- **There appears to be an opportunity for program growth** based on the average annual number of program completers for the selected community college program in the region (**187 annual average regional credentials; 81 average annual community college credentials, 106 other postsecondary institutions credentials**), and the annual openings for baking and patisserie occupations in the region (**4,790 annual average job openings**).

## Introduction

This report details occupations relevant to the culinary arts program. Completion of the program provides graduates with the principles and practices necessary for selection, storage, preparation, and service of food in quantity, including the culinary techniques used by chefs, institutional cooks, bakers, and catering services.<sup>1</sup> Baking is a primary component of this program. Baking and pastry chefs typically require a considerable amount of on-the-job training to move up in the ranks - a degree in culinary arts can expedite this process. Opportunities for bakers and patissiers exist at hotels, convention centers, resorts and spas, cruise lines, casinos, and all manner of restaurants.<sup>2</sup> The five occupations included in the baking and patisserie occupational group are listed below:

- Bakers
- Chefs and Head Cooks
- Cooks, Institution and Cafeteria
- Cooks, Restaurant
- First-Line Supervisors of Food Preparation and Serving Workers

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<sup>1</sup> The Taxonomy of Programs, 6<sup>th</sup> Edition, February 2004

<sup>2</sup> <https://www.culinaryschools.org/culinary-degree-types/diplomas/#context/api/listings/prefilter>

## Job Opportunities

In 2017, there were 27,743 jobs in the baking and patisserie occupational group in the Inland Empire/Desert Region. Employment in this group is expected to rise by 13% through 2022.

Employers will need to hire 23,948 workers over the projection period to fill new jobs and to backfill positions that workers are leaving –including retirements. Appendix A, Table 1 shows the projected job growth, wages, typical education, training, and work experience required for each of the occupations included in this report.

*Exhibit 1: Five-year projections for the baking and patisserie occupational group in the Inland Empire/Desert Region*

Region	2017 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Inland Empire/Desert	27,743	13%	23,948	4,790	15%

Source: EMSI 2018.3

Exhibit 2 shows the number of job ads posted during the last 12 months and the average time to fill each occupation in the region and nationally. On average, open positions for the baking and patisserie occupational group take 36 days to fill in the Inland Empire/Desert Region. This is four days faster than the national average as a whole, indicating that open positions are slightly easier to fill locally.

*Exhibit 2: Job ads and time to fill for the baking and patisserie occupational group in the Inland Empire/Desert during the last 12 months, Oct 2017 – Sep 2018*

Occupation	Job Ads	Regional Average Time to Fill (Days)	National Average Time to Fill (Days)
Cooks, Restaurants	1,689	39	43
First-Line Supervisors of Food Preparation and Serving Workers	1,112	33	37
Bakers	350	34	38
Chefs and Head Cooks	273	37	41
Cooks, Institution and Cafeteria	9	39	43
<b>Total</b>	<b>3,433</b>	<b>-</b>	<b>-</b>

Source: Burning Glass – Labor Insights

## Earnings

The median wage for each of the occupations in the baking occupational group is above the MIT Living Wage estimate of \$12.30 per hour for a single adult living in the Inland Empire/Desert Region. Exhibit 3 displays wage information for this occupational group in the Inland Empire/Desert Region.

*Exhibit 3: Earnings for the baking and patisserie occupational group in the Inland Empire/Desert Region*

Occupation	Entry to Experienced Hourly Earnings Range*	Median Wage*	Average Annual Earnings
Chefs and Head Cooks	\$12.94 to \$32.40	\$18.72	\$48,600
Cooks, Institution and Cafeteria	\$12.58 to \$19.32	\$15.38	\$33,800
First-Line Supervisors of Food Preparation and Serving Workers	\$11.94 to \$17.44	\$13.85	\$32,200
Cooks, Restaurant	\$11.52 to \$14.61	\$13.02	\$27,800
Bakers	\$11.33 to \$15.42	\$12.63	\$28,900

Source: EMSI 2018.3

\*Entry Hourly is 25th percentile wage, the median is 50th percentile wage, experienced is 75th percentile wage.

## Top Employers, Skills, Education, and Certifications

Exhibit 4 displays the top employers posting job ads from the last 12 months for the Inland Empire/Desert Region.

*Exhibit 4: The top employers posting job ads for baking and patisserie occupations in the Inland Empire/Desert Region, Oct 2017 - Sept 2018*

Occupation	Top Employers
Cooks, Restaurants (n=1,568)	<ul style="list-style-type: none"> <li>• BJ's Restaurant, Incorporated</li> <li>• Brinker International (Chili's)</li> </ul>
First-Line Supervisors of Food Preparation and Serving Workers (n=1,047)	<ul style="list-style-type: none"> <li>• Starbucks Corporation</li> <li>• Carl's Jr. Restaurants LLC</li> </ul>
Bakers (n=327)	<ul style="list-style-type: none"> <li>• Panera Bread Company</li> <li>• Bodega Latina Corporation (El Super)</li> </ul>
Chefs and Head Cooks (n=255)	<ul style="list-style-type: none"> <li>• Hilton Worldwide Holdings Incorporated</li> <li>• The Mission Inn Hotel &amp; Spa</li> </ul>
Cooks, Institution and Cafeteria (n=4)	<ul style="list-style-type: none"> <li>• Five Star Senior Living</li> <li>• Newman Leadership Academy</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 5 lists a sample of in-demand specialized and employability skills that employers are seeking when looking for workers to fill baking and patisserie positions. The skills reported in job postings may be utilized as a helpful guide for curriculum development. Specialized skills are occupation-specific skills employers are requesting for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is commonly referred to as “soft skills.”

*Exhibit 5: In-demand skills for the baking and patisserie occupational group in the Inland Empire/Desert Region, Oct 2017 - Sept 2018*

Occupation	Specialized skills	Employability skills
Cooks, Restaurants (n=928)	<ul style="list-style-type: none"> <li>• Food Preparation</li> <li>• Food Safety</li> <li>• Scheduling</li> </ul>	<ul style="list-style-type: none"> <li>• Teamwork/Collaboration</li> <li>• Work Area Maintenance</li> <li>• Communication Skills</li> </ul>
First-Line Supervisors of Food Preparation and Serving Workers (n=914)	<ul style="list-style-type: none"> <li>• Customer Service</li> <li>• Scheduling</li> <li>• Cost Control</li> </ul>	<ul style="list-style-type: none"> <li>• Communication Skills</li> <li>• Problem Solving</li> <li>• Leadership</li> </ul>
Bakers (n=191)	<ul style="list-style-type: none"> <li>• Cleaning</li> <li>• Food Preparation</li> <li>• Food Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Work Area Maintenance</li> <li>• Communication Skills</li> <li>• Time Management</li> </ul>
Chefs and Head Cooks (n=231)	<ul style="list-style-type: none"> <li>• Scheduling</li> <li>• Budgeting/Cost Control</li> <li>• Food Preparation</li> </ul>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Teamwork/Collaboration</li> <li>• Communication Skills</li> </ul>
Cooks, Institution and Cafeteria (n=6)	<ul style="list-style-type: none"> <li>• Food Preparation</li> <li>• Inventory Maintenance</li> <li>• Food Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Work Area Maintenance</li> <li>• Teamwork/Collaboration</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 6 displays the entry-level education level education typically required to enter these occupations according to the Bureau of Labor Statistics (BLS). This chart also displays educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to the U.S. Census (2015-16) and the minimum advertised education requirement requested by employers in online job ads. Less than one-third of all job postings identified a minimum level of education required, which lends support to the fact that three out of the five of these occupations typically do not require any formal education for employment. Of the employers that did list an education requirement, most indicated high school or vocational training.

*Exhibit 6: Educational attainment and online job ads with minimum advertised education requirements for baking and patisserie occupations in the Inland Empire/Desert Region, Oct 2017 - Sept 2018*

Occupations	Typical Entry-Level Education Requirement	Two-Year Postsecondary Level of Educational Attainment*	Minimum Advertised Education Requirement from Job Ads			
			Number of Job Postings (n=)	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Cooks, Restaurants	No formal educational credential	24%	353	96%	4%	-
First-Line Supervisors of Food Preparation and Serving Workers	High school diploma or equivalent	39%	462	90%	2%	8%
Bakers	No formal educational credential	29%	56	100%	-	-
Chefs and Head Cooks	High school diploma or equivalent	40%	108	56%	25%	19%
Cooks, Institution and Cafeteria	No formal educational credential	24%	1	100%	-	-

Source: EMSI 2018.3, Current Population Survey, Burning Glass – Labor Insights

\*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework

## Student Completions

Exhibit 7 shows the annual average regional community college credentials (associate degrees and certificates) conferred during the three academic years between 2014 and 2017, with the relevant TOP code as well as the program title used at each college, sourced from the Chancellor’s Office Curriculum Inventory (COCI). Credentials granted from other educational institutions from 2013 to 2016 are displayed in Exhibit 8, along with the relevant CIP code. Please note, a credential is not equivalent to a single person in search of a job opening since a student may earn more than one credential, such as an associate degree in addition to a certificate. Community College student outcome information is from the CTE LaunchBoard based on the selected TOP code and region.

*Exhibit 7: Annual average community college student completions for culinary arts programs in the Inland Empire/Desert Region*

<b>1306.30 – Culinary Arts</b>	<b>Community College Headcount (2016-17)</b>	<b>Community College Annual Average Credentials (2014-17)</b>
<b>Chaffey</b> – <i>Culinary Arts, Baking and Patisserie</i>	86	
Certificate 30 to < 60 semester units		12
<b>Copper Mountain</b> – <i>Culinary Arts</i>	25	
Certificate 30 to < 60 semester units		1
<b>Desert</b> – <i>Basic Culinary Arts, Culinary Management, Intermediate Culinary Arts</i>	187	
Associate Degree		7
Certificate 30 to < 60 semester units		5
Certificate 18 to < 30 semester units		5
<b>Riverside</b> – <i>Culinary Arts</i>	216	
Associate Degree		7
Certificate 18 to < 30 semester units		28
<b>San Bernardino</b> – <i>Baking, Baking Business, Food Preparation, Food Service, Professional Baking and Management, Restaurant Service</i>	117	
Certificate 30 to < 60 semester units		16
<b>Total community college headcount (2016-17)</b>	<b>629</b>	
<b>Total annual average community college credentials</b>		<b>81</b>

Source: LaunchBoard, IPEDS



*Exhibit 8: Annual average other educational institutions student completions for baking and pastry arts/baker/pastry chef programs in the Inland Empire/Desert Region*

<b>12.0501 – Baking and Pastry Arts/Baker/Pastry Chef</b>	<b>Other Educational Institutions Annual Average Certificates or Other Credit Credentials (2013-16)</b>
<b>Argosy University-The Art Institute of California-Inland Empire</b>	
Associate Degree	78
Award 1 < 2 academic yrs	19
<b>Coast Career Institute</b>	
Award < 1 academic yr	8
<b>Total annual average other credentials (2013-16)</b>	<b>106</b>

Source: IPEDS

**1306.30 – Culinary arts program Strong Workforce outcomes in the Inland Empire/Desert Region in the academic year 2015-16 [unless noted otherwise]:**

- Number of course enrollments: 1,229 (California median: 516) [2016-17]
- Number of students who transferred to a 4-year institution: 22 (CA: 12)
- Employed in the second fiscal quarter after exit: 78% (CA: 71%)
- Median earnings in the second fiscal quarter after exit: \$5,856 (CA: \$6,065)
- Employed in the fourth fiscal quarter after exit: 73% (CA: 70%)
- Median annual earnings: \$22,415 (CA: \$21,717)
- The percentage in a job closely related to the field of study: 74% (CA: 80%) [2014-15]
- Median change in earnings: 63% (CA: 73%)
- The proportion of students who attained a living wage: 39% (CA: 38%)

**Sources**

California Community Colleges Chancellor’s Office Management Information Systems (MIS)  
 CTE LaunchBoard  
 Center of Excellence TOP to SOC Crosswalk  
 Chancellor’s Office Curriculum Inventory (COCI 2.0)  
 Economic Modeling Specialists International (EMSI)  
 Labor Insight/Jobs (Burning Glass)  
 MIT Living Wage Calculator  
 O\*Net Online  
 Taxonomy of Programs, 6<sup>th</sup> Edition

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## Appendix A: Occupation definitions, five-year projections, and earnings for baking and patisserie occupations

### **Occupation Definitions (SOC code), Sample Job Titles, Education and Training Requirement, Community College Education Attainment**

#### **Chefs and Head Cooks (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.

**Sample job titles:** *Banquet Chef; Certified Executive Chef (CEC); Chef; Chef, Instructor; Cook; Corporate Executive Chef; Executive Chef (Ex Chef); Executive Sous Chef; Head Cook; Line Cook*

*Entry-Level Educational Requirement: High school diploma or equivalent*

*Training Requirement: None*

*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework: 40%*

#### **First-Line Supervisors of Food Preparation and Serving Workers (35-1012)**

Directly supervise and coordinate activities of workers engaged in preparing and serving food.

**Sample job titles:** *Cafeteria Manager, Dietary Supervisor, Food and Nutrition Services Supervisor, Food Production Supervisor, Food Service Director, Food Service Manager, Food Service Supervisor, Kitchen Manager, Kitchen Supervisor, Restaurant Manager*

*Entry-Level Educational Requirement: High school diploma or equivalent*

*Training Requirement: None*

*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework: 39%*



### **Cooks, Institutions and Cafeteria (35-2012)**

Prepare and cook large quantities of food for institutions, such as schools, hospitals, or cafeterias.

**Sample job titles:** Cook, Cook (Dinner), Cook (Elementary School), Dietary Cook, Dinner Cook, First Cook, Food and Nutrition Services Assistant, Food Service Specialist, Lead Cook, School Cook

*Entry-Level Educational Requirement: No formal educational credential*

*Training Requirement: Less than one month*

*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework: 24%*

### **Cooks, Restaurant (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.

**Sample job titles:** Appetizer Preparer, Back Line Cook, Banquet Cook, Breakfast Cook, Broil Cook, Cook, Fry Cook, Grill Cook, Line Cook, Prep Cook (Preparation Cook)

*Entry-Level Educational Requirement: No formal educational credential*

*Training Requirement: One to twelve months*

*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework: 24%*

### **Bakers (51-3011)**

Mix and bake ingredients to produce breads, rolls, cookies, cakes, pies, pastries, or other baked goods.

**Sample job titles:** Baker, Bakery Clerk, Bakery Manager, Cake Decorator, Dough Mixer, Machine Operator, Mixer, Pastry Chef, Processor, Scaler

*Entry-Level Educational Requirement: No formal educational credential*

*Training Requirement: More than twelve months*

*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework: 29%*



Table 1. 2017 to 2022 job growth, wages, typical education, training, and work experience required for the baking and patisserie occupational group, Inland Empire/Desert Region

Occupation (SOC)	2017 Jobs	5-Yr Change	5-Yr % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Wage*	Median Wage*	Average Annual Earnings	Entry-Level Education & On-The-Job Training	Work Experience Required
Cooks, Restaurant (35-2014)	12,022	1,486	12%	2,067	\$11.52 to \$14.61	\$13.02	\$27,800	No formal educational credential & 1 to 12 months	Less than 5 years
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	9,093	1,362	15%	1,638	\$11.94 to \$17.44	\$13.85	\$32,200	High school diploma or equivalent & none	Less than 5 years
Cooks, Institution and Cafeteria (35-2012)	2,973	340	11%	504	\$12.58 to \$19.32	\$15.38	\$33,800	No formal educational credential & less than 1 month	None
Chefs and Head Cooks (35-1011)	1,883	184	10%	279	\$12.94 to \$32.40	\$18.72	\$48,600	High school diploma or equivalent & none	5 years or more
Bakers (51-3011)	1,772	207	12%	302	\$11.33 to \$15.42	\$12.63	\$28,900	No formal educational credential & more than 12 months	None
<b>Total</b>	<b>27,743</b>	<b>3,578</b>	<b>13%</b>	<b>4,790</b>	-	-	-	-	-

Source: EMSI 2018.3

\*Entry Hourly is 25th percentile wage, the median is 50th percentile wage, experienced is 75th percentile wage.