



**Labor Market Analysis: 0113.00 – Food Processing and Related Technologies**  
**Food Chemistry – Certificate requiring 16 to fewer than 30 semester units**  
Los Angeles Center of Excellence, May 2025

<b>Program Endorsement:</b>	<b>Endorsed: All Criteria Met</b> <input type="checkbox"/>	<b>Endorsed: Some Criteria Met</b> <input checked="" type="checkbox"/>	<b>Not Endorsed</b> <input type="checkbox"/>
<b>Program Endorsement Criteria</b>			
<b>Supply Gap:</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Living Wage: (Entry-Level, 25<sup>th</sup>)</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Education:</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Emerging Occupation(s)</b>			
	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

## SUMMARY

This report analyzes whether local labor market demand is being met by community college programs aligned with the identified middle-skill occupation<sup>1</sup> or whether a shortage of workers exists. Labor market demand is measured by annual job openings while education supply is measured by the number of awards (degrees and certificates) conferred on average each year.

Based on the available data, there appears to be a supply gap for the one identified middle-skill occupation in the region. While entry-level wages are lower than the self-sufficiency standard wage in both Los Angeles and Orange counties, more than one-third of workers in the field have completed some college or an associate degree as their highest level of educational attainment.

**Recommendation:** Due to two of three program endorsement criteria being met, the Los Angeles Center of Excellence for Labor Market Research (LA COE) endorses this proposed program.

## Key Findings

### Supply Gap

- 114 annual job openings are projected in the region through 2028. This number is greater than the three-year average of 8 awards conferred by educational institutions in the region.

<sup>1</sup> Middle-skill occupations typically require some postsecondary education, but less than a bachelor’s degree. The COE classifies middle-skill jobs as the following:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor’s degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

### **Living Wage**

- \$21.15 is the typical entry-level hourly wages for *food science technicians*, which is lower than Los Angeles County’s self-sufficiency standard hourly (\$24.03/hour).<sup>2</sup>

### **Educational Attainment**

- A high school diploma is the typical entry-level education for *food science technicians*, according to the Bureau of Labor Statistics (BLS).
- 42% of workers in the field have completed some college or an associate degree, according to national educational attainment data.

### **Community college supply**

- No community college issued awards related to food science technology in the greater LA/OC region between 2022 and 2024.

### **Other postsecondary supply**

- 1 educational institution in the LA/OC region has conferred awards in programs related to food science technology over the past three years.
- 8 awards were conferred on average each year by other postsecondary institutions throughout the greater LA/OC region between 2021 and 2023.

## **TARGET OCCUPATION**

LA COE prepared this report to provide regional labor market and postsecondary supply data related to one middle-skill occupation. [For full occupation descriptions, please see Appendix.](#)

- **Food Science Technicians (19-4013)** Work with food scientists or technologists to perform standardized qualitative and quantitative tests to determine physical or chemical properties of food or beverage products. Includes technicians who assist in research and development of production technology, quality control, packaging, processing, and use of foods.<sup>3</sup>

## **OCCUPATIONAL DEMAND**

Exhibit 1 shows the five-year occupational demand projections for *food science technicians*. In the greater Los Angeles/Orange County region, the number of jobs related to this occupation is projected to increase by less than 1% through 2028. There will be more than 100 job openings per year through 2028 due to job growth and replacements. The majority of jobs in 2023 for *food science technicians* (75%) were located in Los Angeles County.

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<sup>2</sup> Center for Women’s Welfare, University of Washington. (2024). *The self-sufficiency standard for California 2024*. <http://selfsufficiencystandard.org/California>.

<sup>3</sup> [Agricultural and Food Science Technicians \(bls.gov\)](https://www.bls.gov/occupations/agricultural-and-food-science-technicians)

### Exhibit 1: Current employment and occupational demand, Los Angeles and Orange counties<sup>4</sup>

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	634	625	(8)	(1%)	84
Orange	206	216	10	5%	30
<b>Total</b>	<b>840</b>	<b>841</b>	<b>1</b>	<b>0%</b>	<b>114</b>

### Detailed Occupation Data

Exhibit 2 displays the current employment and projected occupational demand for the target occupation in Los Angeles County. Positive scores for automation resilience<sup>5</sup> reflect a lower-than-average threat of the occupation(s) being replaced by automation, while negative scores reflect a greater-than-average risk of automation. The average percentage of workers aged 55+ across all occupations in the Los Angeles/Orange County region is 26%; occupations with a larger share of workers aged 55 and older typically have greater replacement needs to offset the amount of impending retirements. On average, 81% of workers across all occupations in California are employed full-time.

### Exhibit 2: Detailed employment and occupational demand, Los Angeles County<sup>6</sup>

Occupation	2023 Jobs	2028 Jobs	5-Yr % Change	Annual Openings	Auto-mation Resilience	% Aged 55 and older	% Full Time Workers
Food Science Technicians	634	625	(1%)	84	5.2	28%	100%

## WAGES

The labor market endorsement in this report considers the entry-level hourly wages for *food science technicians* in Los Angeles County as they relate to the county's self-sufficiency standard wage. Orange County wages are included below in order to provide a complete analysis of the greater Los Angeles/Orange County region.

### Los Angeles County

The typical entry-level hourly wages for *food science technicians* are \$21.15, which is below the self-sufficiency standard wage for one adult (\$24.03 in Los Angeles County). Experienced workers can expect to earn wages of \$30.18, which is higher than the self-sufficiency standard (Exhibit 3).

<sup>4</sup> Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

<sup>5</sup> Automation risk is calculated based on the percentage of time spent on high-risk compared to low-risk work, the number of high-risk jobs in compatible occupations, and the overall industry automation risk.

<sup>6</sup> Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

### Exhibit 3: Earnings for occupation in Los Angeles County

Occupation	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)	Median Annual Earnings*
Food Science Technicians	\$21.15	\$24.27	\$30.18	\$50,500

\*Rounded to the nearest \$100

### Orange County

The typical entry-level hourly wages for *food science technicians* are \$20.77, which is below the self-sufficiency standard wage for one adult (\$27.13 in Orange County). Experienced workers can expect to earn wages of \$29.65, which is higher than the self-sufficiency standard (Exhibit 4).

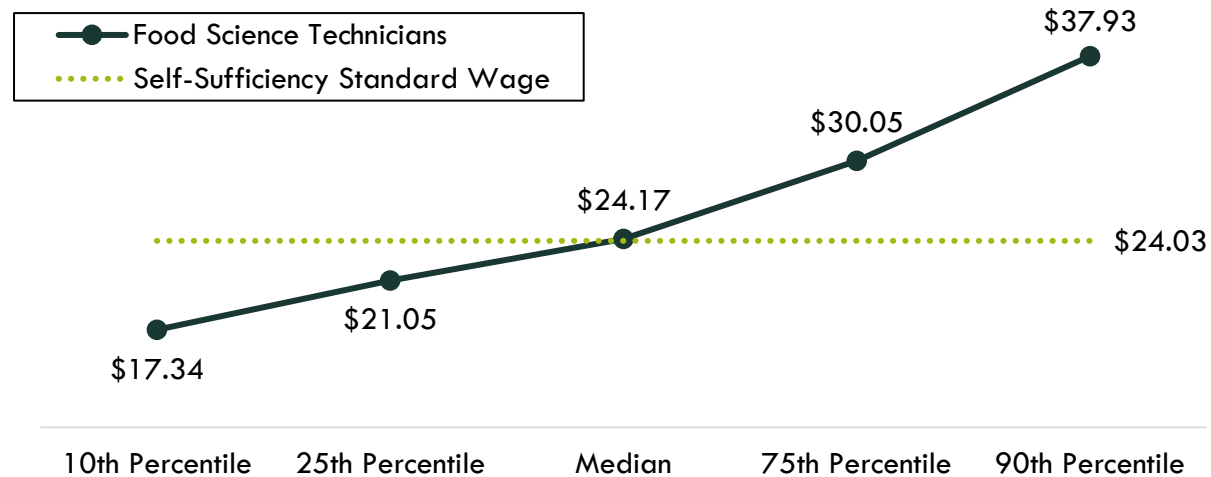
### Exhibit 4: Earnings for occupation in Orange County

Occupation	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)	Median Annual Earnings*
Food Science Technicians	\$20.77	\$23.84	\$29.65	\$49,600

\*Rounded to the nearest \$100

Across the greater Los Angeles and Orange County region, the average entry-level hourly earnings for the occupation in this report are \$21.05; this is below the living wage for one single adult in Los Angeles County (\$24.03). Exhibit 5 shows the average hourly wage for the occupation in this report, for entry-level to experienced workers.

### Exhibit 5: Average hourly earnings for food science technicians, Los Angeles and Orange counties



## JOB POSTINGS

There were 57 online job postings related to *food science technicians* listed in the past 12 months in Los Angeles and Orange counties. Job postings were analyzed for the most common job titles, skills, and employers associated with the target occupation in this report (Exhibit 6).

**Exhibit 6: Most commonly requested job titles, skills and employers in job postings, Los Angeles and Orange counties**

Top Job Titles	Top Skills	Top Employers
<ul style="list-style-type: none"> <li>• Food technicians</li> <li>• Quality assurance lead technicians</li> <li>• Food safety technicians</li> <li>• Food safety quality assurance technicians</li> <li>• Quality assurance technicians</li> <li>• Lead quality control technicians</li> </ul>	<ul style="list-style-type: none"> <li>• Food safety and sanitation</li> <li>• Auditing</li> <li>• Food manufacturing</li> <li>• Hazard analysis and critical control points (HACCP)</li> <li>• Good manufacturing practices</li> </ul>	<ul style="list-style-type: none"> <li>• Astrix Technology Group*</li> <li>• Actalent*</li> <li>• Bento Sushi</li> <li>• IntelliSource*</li> <li>• Activ8 Recruitment &amp; Solutions*</li> <li>• Felbro Food Products</li> <li>• Flying Food Products</li> </ul>

\*Staffing company

In the greater Los Angeles/Orange County region, 56% of the *food science technician* job postings listed a minimum educational requirement. Exhibit 7 details the number and percentage of job postings by educational level.

**Exhibit 7: Education levels requested in job postings for food science technicians, Los Angeles and Orange counties**

Education Level	Job Postings	% of Job Postings
Bachelor's degree	5	16%
Associate degree	3	9%
High school diploma or vocational training	24	75%

**EDUCATIONAL ATTAINMENT**

The Bureau of Labor Statistics (BLS) lists a high school diploma as the typical entry-level education for *food science technicians* (Exhibit 8). However, the national-level data indicates 42% of workers in the field have completed some college or an associate degree as their highest level of educational attainment. The Bureau of Labor Statistics (BLS) lists the following typical entry-level education levels for the occupation in this report:

**Exhibit 8: Entry-level education preferred by employers nationally, Bureau of Labor Statistics**

Occupation	Education Level
Food science technicians	Associate degree

## EDUCATIONAL SUPPLY

### Community College Supply

Over the last three years, there have been no awards conferred by community colleges in the related TOP code: Food Processing and Related Technologies (0113.00).

### Other Postsecondary Supply

For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that provide training programs for *food science technicians*. Exhibit 9 shows the number of awards conferred by this institution in relevant programs. Due to different data collection periods, the most recent data is from 2021 to 2023. Between 2021 and 2023, other postsecondary college institutions in the region conferred an average of 8 bachelor's awards.

**Exhibit 9: Other regional postsecondary awards, 2021-2023**

CIP Code	Program	Postsecondary Institution	2020-21 Awards	2021-22 Awards	2022-23 Awards	3-Year Average
01.1002	Food Technology and Processing	CSU-Los Angeles	8	8	7	8
<b>Supply Total/Average</b>			<b>8</b>	<b>8</b>	<b>7</b>	<b>8</b>

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#### DATA SOURCES

- O\*NET Online
- Lightcast (formerly Emsi)
- Bureau of Labor Statistics (BLS)
- California Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- Self-Sufficiency Standard at the Center for Women's Welfare, University of Washington
- Chancellor's Office Curriculum Inventory (COCI 2.0)



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