



Fire Company Officer (Fire Technology TOP: 2133.00)

January 2021

Prepared by the South Central Coast Center of Excellence for
Labor Market Research

Program Recommendation

This report was compiled by the South Central Coast¹ Center of Excellence to provide regional labor market data for the program recommendation – Fire Technology. This report can help determine whether there is demand in the local labor market that is not being met by the supply from programs of study (CCC and non-CCC) that align with this occupation.

Key Findings

- In the South Central Coast region, the number of jobs related to Fire Technology are expected to **remain steady** for First-Line Supervisors of Firefighting and Prevention Workers.
- Fire Technology is anticipated to experience a **low risk of automation** for First-Line Supervisors of Firefighting and Prevention Workers.
- In 2019 there were 216 regional completions in programs related to the occupation identified as aligned with Fire Technology and 15 openings, indicating an **oversupply**.
- Typical entry-level education is a **postsecondary nondegree award** for the related occupation.
- Completers of regional Fire Technology programs from the 2017-2018 academic year had a **median annual wage upon completion of \$62,438**.
- 67% of students are **employed within a year** after completing a program.
- 69% of students **attained a living wage** within a year of completion.
- Completers experienced an average of **+59% change in earnings** after exiting.
- 89% of students were **part time**, 23% **skill builders**, 17% **first-generation**, and 48% **economically disadvantaged**.

¹ The South Central Coast Region consists of San Luis Obispo County, Santa Barbara County, Ventura County, and the following cities from North Los Angeles County: Canyon Country, Castaic, Lake Hughes, Lancaster, Littlerock, Llano, Newhall, Palmdale, Pearblossom, Santa Clarita, Stevenson Ranch, and Valencia.

Occupation Codes and Descriptions

There is one occupation in the standard occupational classification (SOC) system that was identified as related to Fire Technology for this analysis. The occupation title and description, as well as reported job titles are included in Exhibit 1.

Exhibit 1 – Occupation, description, and sample job titles

SOC Code	Title	Description	Sample of Reported Job Titles
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	Directly supervise and coordinate activities of workers engaged in firefighting and fire prevention and control.	--

Source: O*NET Online

Current and Future Employment

In the South Central Coast region, the number of jobs related to Fire Technology are expected to remain steady for First-Line Supervisors of Firefighting and Prevention Workers.

Exhibit 2 – Five-year projections for Fire Technology in the South Central Coast region

SOC	Occupation	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	244	248	4	2%

Source: Economic Modeling Specialists International (EMSI)

Earnings

In the South Central Coast region, the average wage for the listed occupation is \$63.78 per hour.

Exhibit 3 contains hourly wages and annual average earnings for these occupations. Entry-level hourly earnings are represented by the 25th percentile of wages, median hourly earnings are represented by the 50th percentile of wages, and experienced hourly earnings are represented by the 75th percentile of wages, demonstrating various levels of employment.

Exhibit 3 – Earnings for Fire Technology in the South Central Coast region

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	\$40.56	\$63.78	\$87.27

Source: Economic Modeling Specialists International (EMSI)

Employer Job Postings

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand who is looking for first-line supervisors of firefighting and prevention workers and what they are looking for in potential candidates. To identify job postings related to Fire Technology the following standard occupational classification was used:

33-1021 First-Line Supervisors of Firefighting and Prevention Workers

Top Occupations

In 2019, there were 18 employer postings for the occupation related to Fire Technology.

Exhibit 4 – Top occupations in job postings and risk of automation tables

SOC Code	Occupation	Job Postings, Full Year 2019
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	18

Source: Labor Insight/Jobs (Burning Glass)

SOC Code	Occupation	Risk of Automation
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	Low

Source: Labor Insight/Jobs (Burning Glass)

Top Titles

The top job titles for employers posting ads for jobs related to Fire Technology are listed in Exhibit 5. Deputy Fire Chief is mentioned as the job title in 22% of all relevant job postings (4 postings).

Exhibit 5 –Job titles

Title	Job Postings, Full Year 2019
Deputy Fire Chief	4
Chief Deputy Clerk of the Board	3
Campus Fire Marshal	2
Coordinator-Prevention	2
Battalion Chief	1

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 6 lists the major employers hiring professionals in the Fire Technology field. The top employer posting job ads was the University of California. The top worksite cities in the region for these occupations were Santa Barbara, San Luis Obispo, Santa Maria, Camarillo, and Atascadero.

Exhibit 6 – Top employers (n=16)

Employer	Job Postings, Full Year 2019
University of California	3
Ventura County Office of Education	2
City of San Luis Obispo	1
City of Santa Maria	1
County of Santa Barbara	1

Source: Labor Insight/Jobs (Burning Glass)

Skills

Fire Protection and budgeting are the most sought after skills for employers hiring for jobs related to Fire Technology.

Exhibit 7 –Job skills (n=13)

Skills	Job Postings, Full Year 2019
Budgeting	7
Fire Protection	7
Staff Management	5
Strategic Planning	4
Budget Development	3
Employee Relations	3
Employee Training	3

Source: Labor Insight/Jobs (Burning Glass)

Industry Concentration

Exhibit 8 shows the industries with the most Fire Technology postings in the South Central Coast. Note: 22% of records have been excluded because they do not include an industry. As a result, the chart below may not be representative of the full sample.

Exhibit 8 – Industries employing the most in the Fire Technology field, 2019

Industry	Occupation Group Jobs in Industry	% of Occupation Group in Industry
Public Administration	7	50.0%
Educational Services	5	35.7%
Health Care and Social Assistance	1	7.1%
Manufacturing	1	7.1%

Source: Labor Insight/Jobs (Burning Glass)

Education and Training

Exhibit 9 shows the typical entry-level education requirement for the occupation of interest, along with the typical on-the-job training needed to attain competency in the occupation.

Exhibit 9 – Education and training requirements

SOC	Occupation	Typical entry-level education	Typical on-the-job training
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	Postsecondary nondegree award	Moderate-term on-the-job training

Source: Bureau of Labor Statistics Employment Projections (Educational Attainment)

Regional Completions and Openings

There were 216 regional completions (2019) and 15 regional openings (2019) in the South Central Coast region in programs related to the occupation identified as related to Fire Technology.

Exhibit 10 – Completions and Openings

3 Regional Institutions had Related Programs (2019)	216 Regional Completions (2019)	15 Annual Openings (2019)
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Source: Economic Modeling Specialists International (EMSI)

Related Programs

CIP Code	Program	Completions (2019)
43.0201	Fire Prevention and Safety Technology/Technicians	207
43.0299	Fire Protection, Other	9
43.0202	Fire Services Administration	0

Source: Economic Modeling Specialists International (EMSI)

Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of Fire Technology Programs (TOP: 2133.00) in the South Central Coast region for the 2017-18 academic year.

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- 67% of students are **employed within a year** after completing a program.
- 69% of students **attained a living wage** within a year of completion.
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Source: CTE LaunchBoard

Sources

O*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

Notes

Data included in this analysis represent the labor market demand for relevant positions most closely related to Fire Technology. Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions. All representations have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. The most recent data available at the time of the analysis was examined; 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 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.