

Aviation Maintenance and Powerframe (Aeronautical and Aviation Technology TOP 0950.00)

August 2021

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

Program Recommendation - South Central Coast Region and Los Angeles County

This report was compiled by the South Central Coast¹ Center of Excellence to provide labor market data for the program recommendation – Aeronautical and Aviation 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 group.

Key Findings

- In the South Central Coast Region and Los Angeles County, the number of jobs related to Aeronautical and Aviation Technology are expected to remain steady for Aircraft Mechanics and Service Technicians.
- Aeronautical and Aviation Technology is anticipated to experience a medium risk of automation for Aircraft Mechanics and Service Technicians.
- In 2019 there were 583 completions, regional and Los Angeles County, in programs related to the
 occupation identified as aligned with Aircraft Fabrication and 573 openings, indicating supply is being
 met.
- Typical entry-level education is a postsecondary nondegree award for Aircraft Mechanics and Service Technicians.
- Completers of Aeronautical and Aviation Technology programs in the South Central Coast Region, from the 2017-2018 academic year, had a median annual wage upon completion of \$49,482.
- 85% of students are **employed within a year** after completing a program.
- 79% of students attained a living wage within a year of completion.
- +75% change in earnings for completers.
- 56% of students were part time, 16% skill builders, 51% first-generation, and 89% 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 were identified as related to Aeronautical and Aviation 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
49-3011	Aircraft Mechanics and Service Technicians	Diagnose, adjust, repair, or overhaul aircraft engines and assemblies, such as hydraulic and pneumatic systems.	Aircraft Maintenance Technician (Aircraft Maintenance Tech), Aircraft Mechanic, Aircraft Restorer, Aircraft Technician, Airframe and Powerplant Mechanic (A&P Mechanic), Aviation Maintenance Technician (AMT), Aviation Mechanic, Helicopter Mechanic

Source: O*NET Online

Current and Future Employment

In the South Central Coast Region and Los Angeles County, the number of jobs related to Aeronautical and Aviation Technology are expected to remain steady for Aircraft Mechanics and Service Technicians.

Exhibit 2 – Five-year projections for Aeronautical and Aviation Technology in the South Central Coast and Los Angeles County

soc	Occupation	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change
49-3011	Aircraft Mechanics and Service Technicians	6,243	6,1 <i>7</i> 9	-64	-1%

Source: Economic Modeling Specialists International (EMSI)

Earnings

In the South Central Coast Region and Los Angeles County, the average wage for the listed occupation is \$35.84 per hour. Exhibit 3 contains hourly wages and annual average earnings for these occupations. Entry-level hourly earnings are represented by the 25^{th} percentile of wages, median hourly earnings are represented by the 50^{th} percentile of wages, and experienced hourly earnings are represented by the 75^{th} percentile of wages, demonstrating various levels of employment.

Exhibit 3 – Earnings for Aeronautical and Aviation Technology in the South Central Coast and Los Angeles County

soc	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
49-3011	Aircraft Mechanics and Service Technicians	\$27.32	\$35.84	\$43.96

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 those in Aeronautical and Aviation Technology, and what they are looking for in potential candidates. To identify job postings related to Aeronautical and Aviation Technology the following standard occupational classification was used:

49-3011

Aircraft Mechanics and Service Technicians

Top Occupations

In 2019, there were 509 employer postings for the occupation related to Aeronautical and Aviation Technology.

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

SOC Code	Occupation	Job Postings, Full Year 2019
49-3011	Aircraft Mechanics and Service Technicians	509

Source: Labor Insight/Jobs (Burning Glass)

SOC Code	Occupation	Risk of Automation
49-3011	Aircraft Mechanics and Service Technicians	Medium

Source: Labor Insight/Jobs (Burning Glass)

Top Titles

The top job titles for employers posting ads for jobs related to Aeronautical and Aviation Technology are listed in Exhibit 5. Service Expert is mentioned as the job title in 4% of all relevant job postings (67 postings).

Exhibit 5 - Job Titles

Title	Job Postings, Full Year 2019
Service Expert	67
Service Expert Seasonal	32
A And P Mechanic	28
Aircraft Mechanic	20
Gse Mechanic	15

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 6 lists the major employers hiring professionals in the Aeronautical and Aviation Technology field. The top employer posting job ads was Northrop Grumman. The top worksite cities in the region for these occupations were Los Angeles, Palmdale, Long Beach, Oxnard, and Burbank.

Exhibit 6 - Top Employers (n=414)

Employer	Job Postings, Full Year 2019
Northrop Grumman	73
Lockheed Martin Corporation	25
Gulfstream Aerospace	18
General Dynamics	14

Source: Labor Insight/Jobs (Burning Glass)

Skills

Repair is the most sought after skill for employers hiring for jobs related to Aeronautical and Aviation Technology.

Exhibit 7 - Job Skills (n=1,275)

Skills	Job Postings, Full Year 2019
Repair	324
Aircraft Maintenance	85
Quality Assurance and Control	69
Hand Tools	57
Forklift Operation	52
Micrometers	48
Calipers	43
Avionics	43
Customer Service	40
Product Sales	38

Source: Labor Insight/Jobs (Burning Glass)

Industry Concentration

Exhibit 8 shows the industries with the most Aeronautical and Aviation Technology postings in the South Central Coast Region and Los Angeles County. Note: 24% 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 Aeronautical and Aviation Technology field, 2019

Industry	Occupation Group Jobs in Industry	% of Occupation Group in Industry
Manufacturing	164	42%
Transportation and Warehousing	33	9%
Professional, Scientific, and Technical Services	24	6%
Public Administration	22	6%

Source: Labor Insight/Jobs (Burning Glass)

Education and Training

Exhibit 9 shows the typical entry-level education requirement for the occupations 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
49-3011	Aircraft Mechanics and Service	Postsecondary	None
	Technicians	Nondegree Award	None

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

Regional Completions and Openings

There were 583 regional completions (2020) and 573 regional openings (2020) in the South Central Coast Region and Los Angeles County in programs related to the occupations identified as related to Aeronautical and Aviation Technology.

Exhibit 10 - Completions and Openings

3 Regional Institutions had Related Programs (2020)	583 Regional Completions (2020)	573 Annual Openings (2020)
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Source: Economic Modeling Specialists International (EMSI)

Related Programs

CIP Code	Program	Completions (2020)
47.0607	Airframe Mechanics and Aircraft Maintenance Technology/Technician	534
47.0608	Aircraft Powerplant Technology/Technician	49

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 current students and exiters of regional Aeronautical and Aviation Technology programs (TOP: 0950.00) for the 2017-18 academic year in the South Central Coast Region.

- Completers of Aeronautical and Aviation Technology programs in the South Central Coast Region, from the 2017-2018 academic year, had a median annual wage upon completion of \$49,482.
- 85% of students are **employed within a year** after completing a program.
- 79% of students **attained a living wage** within a year of completion.
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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 Aeronautical and Aviation 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.