



ACE (Automotive Career Education) Automotive Technology (TOP 0948.00)

May 2022

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 – Automotive 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, **the number of jobs related to Automotive Technology are expected to remain steady** for Automotive Service Technicians and Mechanics, Automotive and Watercraft Service Attendants, and Transportation, Storage, and Distribution Managers.
- Automotive Technology is anticipated to experience **a low risk of automation** for transportation managers while all other occupations are at a **high risk for automation**.
- In 2020 there were 387 regional completions in programs related to the occupations identified as aligned with Automotive Technology and 534 openings, indicating an **undersupply**.
- Typical entry-level education ranges from a **high school diploma or equivalent** for Transportation, Storage, and Distribution Managers, to a **Postsecondary Nondegree Award** for Automotive Service Technicians and Mechanics and **No Formal Education Credential** for Automotive and Watercraft Service Attendants.
- Completers of Automotive Technology programs from the 2018-2019 academic year in the South Central Coast region had a **median annual wage upon completion of \$29,246**.
- 69% of students are **employed within a year** after completing a program.
- 30% of students **attained a living wage** within a year of completion.
- Completers experienced an average of **+67%** change in earnings after exiting.
- 75% of students were **part-time**, 12% **skill builders**, 48% **first-generation**, and 84% **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

Three occupations in the standard occupational classification (SOC) system were identified as related to Automotive Technology for this analysis. The occupation title and descriptions, 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
11-3071	Transportation, Storage, and Distribution Managers	Plan, direct, or coordinate transportation, storage, or distribution activities in accordance with organizational policies and applicable government laws or regulations. Includes logistics managers.	--
49-3023	Automotive Service Technicians and Mechanics	Diagnose, adjust, repair, or overhaul automotive vehicles.	--
53-6031	Automotive and Watercraft Service Attendants	Service automobiles, buses, trucks, boats, and other automotive or marine vehicles with fuel, lubricants, and accessories. Collect payment for services and supplies. May lubricate vehicle, change motor oil, refill antifreeze, or replace lights or other accessories, such as windshield wiper blades or fan belts. May repair or replace tires.	Attendant, Dock Attendant, Dock Hand, Fuel Attendant, Fuel Dock Attendant, Gas Attendant, Gas Pumper, Marine Fuel Dock Attendant, Service Station Attendant

Source: O*NET Online

Current and Future Employment

In the South Central Coast region, the number of jobs related to Automotive Technology are expected to remain steady for Automotive Service Technicians and Mechanics, Automotive and Watercraft Service Attendants, and Transportation, Storage, and Distribution Managers.

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

SOC	Occupation	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change
11-3071	Transportation, Storage, and Distribution Managers	846	865	19	2%
49-3023	Automotive Service Technicians and Mechanics	4,081	3,924	-157	-4%
53-6031	Automotive and Watercraft Service Attendants	484	468	-16	-3%

Source: Economic Modeling Specialists International (EMSI)

Earnings

In the South Central Coast region, the average wage for the listed occupations is \$24.28 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 Automotive Technology in the South Central Coast region

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
11-3071	Transportation, Storage, and Distribution Managers	\$33.92	\$46.48	\$61.60
49-3023	Automotive Service Technicians and Mechanics	\$16.36	\$23.32	\$30.56
53-6031	Automotive and Watercraft Service Attendants	\$13.50	\$14.65	\$16.64

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 auto workers, and what they are looking for in potential candidates. To identify job postings related to Automotive Technology the following standard occupational classifications were used:

11-3071.01	Transportation Managers
49-3023.01	Automotive Master Mechanics
49-3023.02	Automotive Specialty Technicians
53-6031	Automotive and Watercraft Service Attendants

Top Occupations

In 2019, there were 1,726 employer postings for the occupations related to Automotive Technology.

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

SOC Code	Occupation	Job Postings, Full Year 2019
49-3023.02	Automotive Speciality Technicians	1,439
53-6031	Automotive and Watercraft Service Attendants	102
49-3023.01	Automotive Master Mechanics	93
11-3071.01	Transportation Managers	92

Source: Labor Insight/Jobs (Burning Glass)

SOC Code	Occupation	Risk of Automation
49-3023.02	Automotive Speciality Technicians	High
53-6031	Automotive and Watercraft Service Attendants	High
49-3023.01	Automotive Master Mechanics	High
11-3071.01	Transportation Managers	Low

Source: Labor Insight/Jobs (Burning Glass)

Top Titles

The top job titles for employers posting ads for jobs related to Automotive Technology are listed in Exhibit 5. Automotive Technician is mentioned as the job title in 5% of all relevant job postings (94 postings).

Exhibit 5 –Job Titles

Title	Job Postings, Full Year 2019
Automotive Technician	94
Lube Technician	49
Automotive Mechanic	44
Service Technician	31
Auto Mechanic	29

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 6 lists the major employers hiring professionals in the Automotive Technology field. The top employer posting job ads was Carmax. The top worksite cities in the region for these occupations were Oxnard, Santa Clarita, Thousand Oaks, Lancaster, and Ventura.

Exhibit 6 – Top Employers (n=1,276)

Employer	Job Postings, Full Year 2019
Carmax	54
Chrysler	40
Pep Boys	37
Bridgestone/Firestone	25
United Parcel Service Inc	24

Source: Labor Insight/Jobs (Burning Glass)

Skills

Repair is the most sought-after skill for employers hiring for jobs related to Automotive Technology.

Exhibit 7 –Job Skills (n=1,260)

Skills	Job Postings, Full Year 2019
Repair	906
Auto Repair	507
Customer Service	325
Automotive Services Industry Knowledge	233
Scheduling	166
Customer Contact	140

Source: Labor Insight/Jobs (Burning Glass)

Industry Concentration

Automotive Technology Jobs in the South Central Coast region are most often found in the Other Services industry. Exhibit 8 shows the industries where most from the field of Automotive Technology are employed.

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

Industry	Occupation Group Jobs in Industry	% of Occupation Group in Industry
Other Services (except Public Administration)	373	31.5%
Retail Trade	267	22.6%
Manufacturing	203	17.2%
Transportation and Warehousing	65	5.5%
Public Administration	61	5.2%

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
11-3071	Transportation, Storage, and Distribution Managers	High school diploma or equivalent	None
49-3023	Automotive Service Technicians and Mechanics	Postsecondary Nondegree awards	Short-term on-the-job training
53-6031	Automotive and Watercraft Service Attendants	No formal education credential	Short-term on-the-job training

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

Regional Completions and Openings

There were 387 regional completions (2020) and 534 regional openings (2020) in the South Central Coast region in programs related to the occupations identified as aligned with Automotive Technology.

Exhibit 10 – Completions and Openings

7 Regional Institutions had Related Programs (2020)	387 Regional Completions (2020)	534 Annual Openings (2020)
---	---	--------------------------------------

Source: Economic Modeling Specialists International (EMSI)

Related Programs

CIP Code	Program	Completions (2020)
47.0604	Automobile/Automotive Mechanics Technology/Technician	182
52.0101	Business/Commerce, General	140
47.0603	Autobody/Collision and Repair Technology/Technician	44
47.0605	Diesel Mechanics Technology/Technician	21

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 the Automotive Technology Program (TOP: 0948.00) in the South Central Coast region for the 2018-19 academic year.

- Completers of Automotive Technology programs from the 2018-2019 academic year in the South Central Coast region had a **median annual wage upon completion of \$29,246.**
- 69% of students are **employed within a year** after completing a program.
- 30% of students **attained a living wage** within a year of completion.
- Completers experienced an average of **+67%** change in earnings after exiting.
- 75% of students were **part-time**, 12% **skill builders**, 48% **first-generation**, and 84% **economically disadvantaged.**

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 Automotive 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.