



Automotive Technology (0948.00)
ACE (Automotive Career Education)
September 2018
Prepared by the South Central Coast Center of Excellence for Labor Market Research

Labor Market Information

This report was compiled by the South Central Coast¹ Center of Excellence to provide regional labor market data for 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 that align with this occupation group.

Overview

- The number of jobs related to Automotive Technology is expected to remain steady over the next five years.
- In 2017 there were 7 regional institutions with programs related to Automotive Technology with 146 annual completions, 510 annual openings.
- Typical entry level education for occupations related to Automotive Technology ranges from Postsecondary nondegree award to no formal educational credential.
- Median Earnings for Students after Exit - \$22,960
- 41% of students are earning a living wage.
- 69% of students are employed after a year.

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

Currently, there are four occupations in the standard occupational classification (SOC) system that are related to the proposed certificate/program under Automotive Technology. The occupation titles 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
49-3023.01	Automotive Master Technicians	Repair automobiles, trucks, buses, and other vehicles. Master mechanics repair virtually any part on the vehicle or specialize in the transmission system.	ASE Master Mechanic (Automotive Service Excellence Master Mechanic), Auto Technician, Automotive Drivability Technician, Automotive Mechanic (Auto Mechanic), Automotive Service Technician, Certified ASE Master Automotive Technician (Certified Automotive Service Excellence Master Automotive Technician), Master Automotive Technician, Master Technician, Mechanic, Transmission Rebuilder
49-3023.02	Automotive Specialty Technicians	Repair only one system or component on a vehicle, such as brakes, suspension, or radiator.	A/C Technician (Air Conditioning Technician), Automobile Mechanic (Auto Mechanic), Automobile Technician, Automotive Technician (Auto Technician), Drivability Technician, Heavy Line Technician, Lube Technician, Oil Bay Technician, Quick Service Technician, Service Technician
11-3071.01	Transportation Managers	Plan, direct, or coordinate the transportation operations within an organization or the activities of organizations that provide transportation services.	Director of Operations, Fleet Manager, Freight Coordinator, Global Transportation Manager, Traffic Manager, Train Operations Manager, Trainmaster, Transportation Director, Transportation Manager, Transportation Supervisor
53-6031.01	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, install antifreeze, or replace lights or other accessories, such as windshield wiper blades or fan belts. May repair or replace tires.	Attendant, Boat Operator, 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 jobs related to Automotive Technology is expected to remain steady over the next five years. Exhibit 2 contains detailed employment projection data for these occupations.

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

SOC	Occupation	2017 Jobs	2022 Jobs	2017-2022 Change	2017-2022% Change	Annual Openings
49-3023	Automotive Service Technicians and Mechanics	4,906	5,041	135	3%	491
11-3071.01	Transportation, Storage, and Distribution Managers	703	725	22	3%	59
53-6031.01	Automotive and Watercraft Service Attendants	359	379	20	6%	64

Source: Economic Modeling Specialists International (EMSI)

*Total Jobs (2017), Average Change (2017-2022), and Median Hourly Earnings for Selected Occupations

5,968 Jobs (2017) 5% below National average	+2.9% % Change (2017-2022) Nation: +4.9%	\$17.55/hr Median Hourly Earnings Nation: \$17.54/hr
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Earnings

Exhibit 3 contains hourly wages and annual average earnings for these occupations. Entry-level hourly earnings is represented by the 10th percentile of wages, median hourly earnings is represented by the 50th percentile of wages, and experienced hourly earnings is represented by the 90th percentile of wages, demonstrating various levels of employment.

Exhibit 3 – Earnings for Automotive Technology related occupations in the South Central Coast region

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
49-3023	Automotive Service Technicians and Mechanics	\$11.87	\$16.46	\$23.69
11-3071.01	Transportation, Storage, and Distribution Managers	\$33.30	\$45.40	\$59.81
53-6031.01	Automotive and Watercraft Service Attendants	\$11.41	\$12.90	\$15.04

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 the occupation relevant to the field of study. Employer job postings are consulted to understand who is employing in the Automotive Technology field, and what they are looking for in potential candidates.

Top Occupations

In 2017, there were 682 employer postings for the occupations selected for Automotive Technology.

Top Titles

The top job titles for employers posting ads for Automotive Technology are listed in Exhibit 5. Auto Technician is mentioned as the job title in 17% of all relevant job postings (682 postings).

Exhibit 5 –Job Titles (n=682)

Title	Job Postings, Full Year 2017
Auto Technician	113
Mechanic	57
Service Technician	31
Technician	27
Lube Technician	26

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 6 lists the major employers hiring professionals in this area of the Automotive Technology field. Top employers posting job ads included Autonation, Pep Boys, Lithia Motors Inc, Bridgestone/Firestone, and Simi Valley Ford. The top worksite cities in the region for these occupations were Santa Clarita, Oxnard, Simi Valley, Thousand Oaks, and San Luis Obispo.

Exhibit 6 – Top Employers (n=581)

Employer	Job Postings, Full Year 2016
Autonation	55
Pep Boys	30
Lithia Motors Inc	26
Bridgestone/Firestone	22
Simi Valley Ford	19

Source: Labor Insight/Jobs (Burning Glass)

Top Job Skills

Repair is the most sought after skill for employers hiring for Automotive Technology. The other top job-specific skills desired by employers relate to Industry Knowledge, Customer Service, Scheduling, and Predictive/Preventative Maintenance.

Exhibit 7 – Top Job Skills (n=531)

Skills	Job Postings, Full Year 2016
Auto Repair/Repair	516
Automotive Services	
Industry Knowledge	154
Customer Service	107
Scheduling	65
Predictive/Preventative Maintenance	65

Source: Labor Insight/Jobs (Burning Glass)

Industry Concentration

Automotive Technology jobs in the South Central Coast region are most often found in the Retail Trade industry. Exhibit 9 shows the industries where most from the field of Automotive Technology are employed.

Exhibit 9 – Industries employing from the field of Automotive Technology, 2017 (n=594)

Industry	Occupation Group Jobs in Industry	% of Occupation Group in Industry
Retail Trade	180	30%
Manufacturing	94	16%
Other Services (except Public Administration)	94	16%
Transportation and Warehousing	52	9%
Professional, Scientific, and Technical Services	51	9%

Education and Training

Exhibit 10 shows the typical entry-level education requirement for the occupations of interest, along with the typical on-the-job training.

Exhibit 10 – Education and Training Requirements (2016)

SOC	Occupation	Typical entry-level education	Typical on-the-job training
49-3023	Automotive Service Technicians and Mechanics	Postsecondary nondegree award	Short-term on-the-job training
11-3071.01	Transportation, Storage, and Distribution Managers	High school diploma or equivalent	None
53-6031.01	Automotive and Watercraft Service Attendants	No formal educational credential	Short-term on-the-job training

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

Currently, seven community colleges in the South Central Coast region train students in programs related to the field of Automotive Technology. Exhibit 11 displays the headcount for each of the colleges training in this field. Headcount is the actual number of students enrolled, regardless of credit hours.

Exhibit 11 – Headcounts - 2016-17 (by TOP and College)

TOP Code	Program	College	CCC Headcount
0702	Automotive Technology	Allan Hancock	311
		Antelope Valley	214
		Canyons	185
		Cuesta	506
		Moorpark	-
		Oxnard	252
		Santa Barbara	269
		Ventura	312
			2,043

Source: CTE LaunchBoard

In 2017 there were 146 annual completions, 510 annual openings, for the program – Automobile/ Automotive Mechanics Technology/Technician, (CIP 47.0604).

7	146	510
Institutions (2017)	Completions (2017)	Openings (2017)

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 (TOP Code: 0948.00) in the South Central Coast region for the 2015-16 academic year.

- Median Earnings for Students after Exit - \$22,960
- 41% of students are earning a living wage
- 69% of students are employed after a year
- Most common middle-skills jobs for this program area are:
 - Automotive Service Technicians and Mechanics
 - Electronic Equipment Installers and Repairers, Motor Vehicles

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 represents the labor market demand for positions most closely related to Automotive Technology. Standard occupational classification (SOC) codes were chosen based on the training goals of the proposed certificates. 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.