



# Automotive Service Technicians and Service Technicians

SOC Code 49-3023 • Projected Growth (2020) 10 %

## Description

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### What Automotive Service Technicians and Service Technicians Do

Automotive service technicians and mechanics, often called *service technicians* or *service techs*, inspect, maintain, and repair cars and light trucks.

### Duties

- Test parts and systems to ensure that they are working properly
- Identify mechanical problems, often by using computerized diagnostic equipment
- Follow checklists to ensure that all critical parts are examined
- Test and lubricate the vehicle's engine and other major components
- Perform basic care and maintenance, including oil changes, tuneups, and tire rotations
- Repair or replace worn parts, such as brake pads and wheel bearings
- Disassemble and reassemble parts
- Use testing equipment to ensure that repairs and maintenance are effective
- Explain to clients their automotive problems and the repairs done on their vehicles

## Training Opportunities Linked to Those Jobs

(Degree Types and Colleges/Universities)

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### How to Become an Automotive Service Technician and Mechanic

Because automotive technology is becoming increasingly sophisticated, some employers prefer service technicians who have completed a formal training program in a postsecondary institution. Industry certification is usually required once the person is employed.

### Education and Training

High school courses in automotive repair, electronics, computers, mathematics, and English provide a good background for prospective service technicians. However, high school graduates often need further training to become fully qualified.

Completing a vocational or other postsecondary training program in automotive service technology is considered the best preparation for entry-level positions. Programs usually last 6 months to a year and provide intensive career preparation through classroom instruction and hands-on practice. Short-term certificate programs in a particular skill are also available.

Some service technicians get a 2-year associate's degree. Courses usually include basic mathematics, computers, electronics, and automotive repair. Some programs have recently added classes in customer service, English, and other necessary skills.

Various automobile manufacturers and dealers sponsor 2-year associate's degree programs. Students in these programs typically spend alternating periods attending classes full time and working full time in service shops under the guidance of an experienced technician.

Most service technicians must complete on-the-job training, often as part of a formal education program.

Depending on a new service technician's educational background, it typically takes 2 to 5 years of experience to become a fully qualified service technician. It then takes an additional 1 to 2 years of experience for service technicians to become familiar with all types of repairs.

New workers generally start as trainee technicians, technicians' helpers, or lubrication workers and gradually acquire and practice their skills by working with experienced mechanics and technicians.

## Certification

Certification from the [National Institute for Automotive Service Excellence](#) is the standard credential for service technicians. Certification demonstrates competence and usually brings higher pay. Many employers require their service technicians to become certified.

Certification is available in eight different areas, including: automatic transmission/transaxle, brakes, electrical/electronic systems, engine performance, engine repair, heating and air conditioning, manual drive train and axles, and suspension and steering.

For each area, technicians must have at least 2 years of experience (or relevant schooling and 1 year of experience) and pass an exam. To become a Master Automobile Technician, technicians must pass all 8 exams.

## Licenses

The U.S. Environmental Protection Agency (EPA) requires all technicians who buy or work with refrigerants to be licensed in proper refrigerant handling. Formal test preparation is not required, but many trade schools, unions, and employer associations offer training programs designed for the EPA exam.

## Important Qualities

**Customer-service skills.** Service technicians must discuss automotive problems—along with options to fix them—with their customers. Because self-employed workers depend on repeat clients for business, they must be courteous, good listeners, and ready to answer customers' questions.

**Detail oriented.** Mechanical and electronic malfunctions are often due to misalignments or other easy-to-miss reasons. Service mechanics must, therefore, account for such details when inspecting or repairing engines and components.

**Dexterity.** Many tasks that service technicians do, such as disassembling engine parts, connecting or attaching components, and using handtools, require a steady hand and good hand–eye coordination.

**Mechanical skills.** Service technicians must be familiar with engine components and systems and know how they interact with each other. They must often take apart major parts for repairs and be able to put them back together properly.

**Technical skills.** Service technicians use sophisticated diagnostic equipment on engines, systems, and components. They must be familiar with electronic control systems and the appropriate tools needed to fix and maintain them.

**Troubleshooting skills.** Service technicians must be able to identify and fix problems in increasingly complicated mechanical and electronic systems.

## Postsecondary Education

Texas Southmost College	South Texas College	Texas State Technical College	The University of Texas at Brownsville	The University of Texas - Pan American
<a href="#">Associates of Applied Science in Automotive Technology</a>	<a href="#">Associates of Applied Science in Automotive Technology</a>	<a href="#">Associates of Applied Science in Automotive Technology</a>		
<a href="#">Certificate of Proficiency in Auto Mechanics Technology – Line Specialist</a>		<a href="#">Certificate of Completion in Automotive Technology – Automotive Mechanic</a>		
<a href="#">Certificate of Proficiency in Auto Mechanics Technology – Parts Specialist</a>		<a href="#">Certificate of Completion in Automotive Technology – Automotive Technician</a>		

<a href="#">Certificate of Proficiency in Auto Mechanics Technology</a>				
<a href="#">– Repair Specialist</a>				

### Local Employers

<a href="#">77 Express Lube</a>	Harlingen		<a href="#">Mr B Motor CO</a>	Brownsville
<a href="#">Fusion Automotive</a>	Harlingen		<a href="#">O'Reilly Auto Parts</a>	Los Fresnos
<a href="#">Lt Boswell</a>	San Benito		<a href="#">Solis &amp; Sons Garage</a>	San Benito

### Career Options

(Specific Job Types)

- Automotive Technician
- Mechanic
- Automotive Service Technician
- Shop Foreman
- Master Technician
- Truck Technician
- Technician
- Trim Technician
- Certified ASE Master Automotive Technician
- Alignment Specialist
- Brake Technician

### Salary Ranges

Wages for **Automotive Service Technicians and Mechanics**

Location	Pay Period	2012				
		10%	25%	Median	75%	90%
United States	Hourly	\$10.01	\$13.06	\$17.60	\$23.19	\$28.88
	Yearly	\$20,800	\$27,200	\$36,600	\$48,200	\$60,100
Texas	Hourly	\$9.18	\$12.10	\$16.53	\$22.56	\$28.25
	Yearly	\$19,100	\$25,200	\$34,400	\$46,900	\$58,800
Brownsville-Harlingen, TX MSA	Hourly	\$9.01	\$12.27	\$16.47	\$21.85	\$29.01
	Yearly	\$18,700	\$25,500	\$34,300	\$45,400	\$60,300

## Professional Associations linked to the Careers

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For more details about work opportunities, contact local automobile dealers and repair shops or local offices of the state employment service. The state employment service also may have information about training programs.

For information about careers, education, and training programs, visit

[Automotive Youth Educational Systems](#)

[National Institute for Automotive Service Excellence](#)

[Auto Careers Today](#)

[Auto Career Development Center](#)

[National Automotive Technicians Education Foundation](#)

[Accrediting Commission of Career Schools and Colleges](#)

## Sources

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The information provided in this document was collected from the following sources:

- Occupational Outlook Handbook ([bls.gov/ooh/](http://bls.gov/ooh/))
- O\*NET OnLine ([onetonline.org/](http://onetonline.org/))
- Texas CARES ([texascaresonline.com/](http://texascaresonline.com/))
- CareerOneStop ([careeronestop.org/](http://careeronestop.org/))



**Course Overview:** Focuses on careers in the planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water, and related professional and technical support services.

# Automotive Service Technicians and Service Technicians

**Career Goal (O\*NET Code):** (49-3023) - Automotive service technicians and mechanics, often called service technicians or service techs, inspect, maintain, and repair cars and light trucks.

**Student Name:** \_\_\_\_\_  
**Grade:** \_\_\_\_\_  
**School:** \_\_\_\_\_

## SUGGESTED COURSEWORK

## EXTENDED LEARNING EXPERIENCES

Middle School	8th	HS Courses:	Exploring Careers	<i>Curricular Experiences:</i> <a href="#">Business Professionals of America</a> <a href="#">Future Business Leaders of America</a> <a href="#">SkillsUSA</a> <a href="#">Technology Student Association</a>	<i>Extracurricular Experiences:</i> Language Immersion Programs School Newspaper Student Government UIL Academic Competitions Yearbook	
High School	9th	<b>Core Courses*:</b>	English I Algebra I or Geometry Biology			World Geography Foreign Language I Physical Education
		<b>Career-Related Electives:</b>	Principles of Transportation, Distribution and Logistics			
	10th	<b>Core Courses:</b>	English II Geometry or Algebra II Chemistry	World History Foreign Language II Elective		
		<b>Career-Related Electives:</b>	Energy, Power and Transportation Systems or Aircraft Technology			
	11th	<b>Core Courses:</b>	English III Algebra II Physics/Principles of Technology	United States History Foreign Language III** Professional Communications or Speech		
		<b>Career-Related Electives:</b>	Transportation Systems Management or Logistics, Planning and Management Systems or Advanced Aircraft Technology			
12th	<b>Core Courses:</b>	English IV AP Calculus 4th Science	Government/Economics Fine Arts Elective			
	<b>Career-Related Electives:</b>	Advanced Aircraft Technology or Advanced Electronics or Practicum in Transportation, Distribution and Logistics				
<b>How to Become a Automotive Service Technician and Service Technician</b> Because automotive technology is becoming increasingly sophisticated, some employers prefer service technicians who have completed a formal training program in a postsecondary institution. Industry certification is usually required once the person is employed.				<b>COLLEGE CREDIT OPPORTUNITIES -- High School</b> Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated credit courses, if possible. List those courses that count for college credit on your campus.		
Postsecondary	<a href="#">Texas Southmost College</a> <a href="#">South Texas College</a> <a href="#">Texas State Technical College</a>			<b>Career Options:</b>		
	<a href="#">Associates of Applied Science in Automotive Technology</a> <a href="#">Certificate of Proficiency in Auto Mechanics Technology – Line Specialist</a> <a href="#">Certificate of Proficiency in Auto Mechanics Technology – Parts Specialist</a> <a href="#">Certificate of Proficiency in Auto Mechanics Technology – Repair Specialist</a>			<ul style="list-style-type: none"> <li>• Automotive Technician</li> <li>• Mechanic</li> <li>• Shop Foreman</li> <li>• Trim Technician</li> <li>• Certified ASE Master Automotive Technician</li> <li>• Automotive Service Technician</li> <li>• Master Technician</li> <li>• Truck Technician</li> <li>• Technician</li> <li>• Alignment Specialist</li> <li>• Brake Technician</li> </ul>		
	<a href="#">University of Texas at Brownsville</a> <a href="#">University of Texas - Pan American</a>			<b>Professional Associations:</b> <a href="#">Automotive Youth Educational Systems</a> <a href="#">National Institute for Automotive Service Excellence</a> <a href="#">Auto Careers Today</a> <a href="#">Auto Career Development Center</a> <a href="#">National Automotive Technicians Education Foundation</a> <a href="#">Accrediting Commission of Career Schools and Colleges</a>		

\*Students must meet local & state graduation requirements. \*\* Required coursework for Distinguished Graduation Plan (In addition to other measures). \*\*\* Based on campus availability. Students may select other elective courses for personal enrichment purposes.

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2012. All plans meet high school graduation requirements as well as college entrance requirements.