



Automotive Maintenance & Light Repair

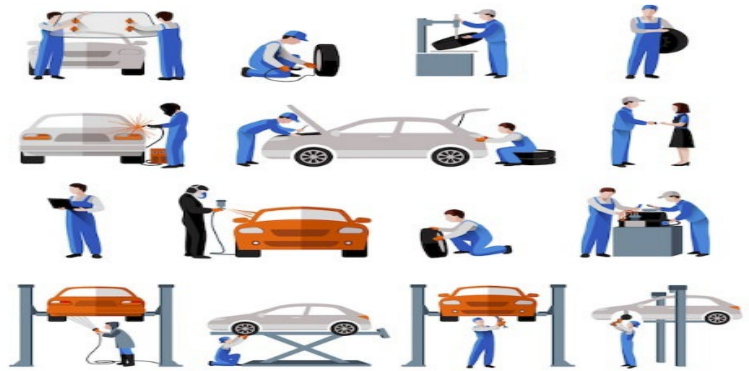
Transportation

JOB OUTLOOK

The number of vehicles already in use is expected to continue to rise, and some service technicians will be needed to perform basic maintenance and repair tasks, such as replacing brake pads and changing oil. Increasingly, however, new vehicles are being built with interconnected sensors, cameras, and instruments that allow for predictive maintenance and remote diagnosis, thus reducing maintenance workhours. Additionally, the increasing prevalence of electric vehicles in the marketplace may limit future demand for automotive service technicians and mechanics, because these vehicles require less maintenance and repair.

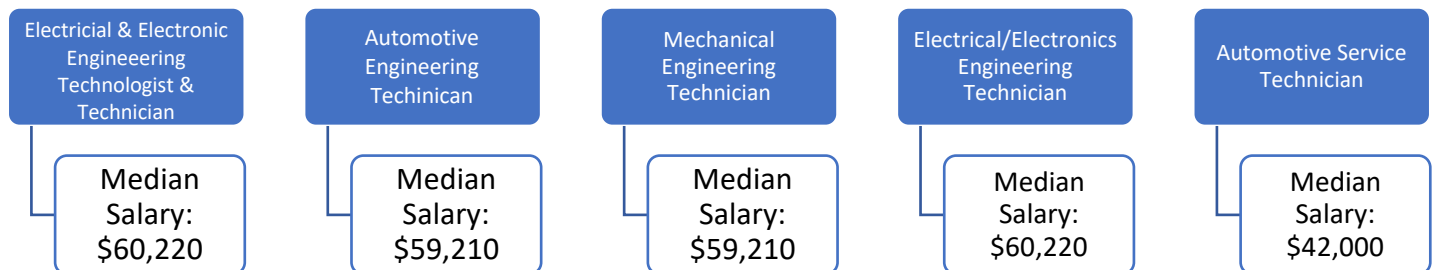
OCCUPATION PROFILE

Automotive service technicians and mechanics, often called service technicians or service techs, inspect, maintain, and repair cars and light trucks. Although service technicians work on traditional mechanical systems, such as engines, transmissions, and drivebelts, they also must be familiar with a growing number of electronic systems. Braking, transmission, and steering systems, for example, are controlled primarily by computers and electronic components.



Other integrated electronic systems, such as accident-avoidance sensors, are becoming common as well. In addition, a growing number of technicians are required to work on vehicles that use electricity or alternative fuels, such as ethanol.

Service technicians use many different tools, including computerized diagnostic tools and power tools such as pneumatic wrenches, lathes, welding torches, and jacks and hoists. These tools usually are owned by their employers.





ROAD MAP TO SUCCESS

PROGRAM OF STUDY PROFILE

The Automotive Maintenance and Light Repair program of study prepares students for entry into the automotive service industry with an ASE Student Certification. Students study and service automotive HVAC systems, engine performance systems, automatic and manual transmission/transaxle systems, and practice workplace soft skills. Upon completion of this program of study, students will be equipped with the knowledge and skills to be a successful automotive service technician, have satisfied course requirements to meet the National Automotive Technicians Education Foundation (NATEF) standards, and be prepared to pursue further study at a Tennessee College of Applied Technology or other postsecondary institution.

CAREER PATHWAY

CERTIFICATES

- * Automotive Mechanics/Automotive Technology
- * Automotive Service Technology
- * Mechanical Maintenance Fundamentals
- * Mechanical Systems
- * Hybrid & Electric Vehicle

ASSOCIATES

- * A.S. Automotive Service Technology
- * A.S. Mechanical Engineering Technology
- * A.S. Electrical Engineering Technology

SECONDARY EDUCATION

- * Maintenance & Light Repair I
- * Maintenance & Light Repair II
- * Maintenance & Light Repair III
- * Maintenance & Light Repair IV

BACHELORS

- * B.S. Mechanical or Electrical Engineering

MSCS PARTICIPATING SCHOOLS: Bolton HS, Cordova HS, Craigmont HS, Germantown HS, Kingsbury HS, Trezevant CTC, Whitehaven HS

DUAL ENROLLMENT: Automotive Technology - Germantown HS, Kingsbury CTC + Tennessee College of Applied Technology (TCAT)

LOCAL EMPLOYERS: AutoNation, Carvana, First Student, Ford, Gossett Kia, Honda, Nissan, Stanley Black & Decker, Tesla