



Career Opportunities in
Automotive Technology
AUTOMOTIVE TECHNICIAN
(Certificate Programs)



Nature of the Occupation:

The work of automotive technicians has evolved dramatically during the past two decades from mechanical machines to high technology vehicles. Automotive service technicians have developed into highly trained and skilled problem solvers. They use computerized test equipment to inspect, maintain, diagnose and repair automobiles and light trucks. Frequent use of complicated technical manuals is required. Good reasoning ability and a positive work ethic is a must. Other duties include:

- performing service procedures such as routine periodic maintenance.
- utilizing a variety of testing equipment, power tools, and hand tools to complete tasks quickly and efficiently.
- specializing in various areas such as automatic transmissions, drive-ability, electrical/electronic, suspension or brake systems.

Education and Training:

The Automotive Technology program at Tyler Junior College provides the graduate with the basic and advanced technical knowledge needed to repair and service automobiles. The graduates learn troubleshooting, computer diagnosis, parts matching, and repair of automobile components. The laboratory is designed and operated in a manner similar to that of an actual automotive repair business. The Associate in Applied Science degree and certificate programs provide a sound theoretical background in major automotive repair areas, balanced with an equal amount of hands-on training.

Certification and advancement:

ASE certification has become a standard credential for automotive service technicians. While not mandatory for work in automotive service, certification is common for all non entry-level technicians in large, urban areas. Certification is available in one or more of eight different areas of automotive service, such as electrical systems, engine repair, brake systems, suspension and steering, and heating and air-conditioning. For certification in each area, technicians must have at least two years of experience and pass the examination. Completion of an automotive training program in high school, vocational or trade school, or community or junior college may be substituted for one year of experience. For ASE certification as a Master Automobile Technician, technicians must be certified in all eight areas.

Salary Range:

\$24,000 - \$40,000 per year.

Employment Outlook:

Demand for technicians will grow as the number of vehicles in operation increases, reflecting the continued growth in the number of multi-car families. As alternative fuel and advanced technology vehicle sales increase, the need for qualified entry-level technicians will continue to grow. Overall, employment is expected to increase 9 to 21% through the year 2016.

Note: Information and data obtained from Occupational Outlook Handbook and TWC Tracer.

The Career Clusters icons are being used with permission of the:



States' Career Clusters Initiative, 2008, www.careerclusters.org

TYLER JUNIOR COLLEGE 2008-2009 CATALOG AUTOMOTIVE TECHNOLOGY

(Certificate Programs)

Certificate of Proficiency, General Service Technician – AUTO-GS_CERT (THEA/TASP Waived)

SEMESTER I

AUMT	1257	Theory of Automotive Brake Systems
AUMT	1310	Automotive Brake Systems Lab
AUMT	1253	Theory of Automotive Electrical Systems
AUMT	1307	Automotive Electrical Systems Lab

SEMESTER II

AUMT	2215	Theory of Automotive Engine Performance Analysis I
AUMT	2317	Automotive Engine Performance Analysis I Lab
AUMT	2231	Theory of Automotive Engine Performance Analysis II
AUMT	2334	Automotive Engine Performance Analysis II Lab

SUMMER SESSION I

AUMT	1213	Theory of Automotive Suspension & Steering Systems
AUMT	1316	Automotive Suspension & Steering Systems Lab

SUMMER SESSION II

AUMT	2421	Automotive Electrical Lighting & Accessories
------	------	--

Total Semester Hours – 29

Certificate of Proficiency, Advanced Service Technician – AUTO-AS_CERT (THEA/TASP Waived)

SEMESTER I

AUMT	2209	Theory of Automotive Drive Train & Axles
AUMT	2313	Automotive Drive Train & Axles Lab
AUMT	2223	Theory of Auto Automatic Transmission & Transaxle
AUMT	2325	Automotive Automatic Transmission & Transaxle Lab

SEMESTER II

AUMT	2205	Theory of Automotive Engine
AUMT	1319	Automotive Engine Repair Lab
AUMT	1241	Theory of Automotive Heating & Air Conditioning
AUMT	1345	Automotive Heating & Air Conditioning Lab

Total Semester Hours – 20

- Please refer to course descriptions for AUMT prerequisites.
- Applicants must meet the admission requirements for TJC and achieve minimum scores on tests for Bennett Mechanical comprehension and reading.
- All new students are required to attend automotive orientation.
- Department specific courses must be taken in sequence and may have a prerequisite course. Exceptions must be approved in writing by the department chair.
- Students are required to furnish their own tools. (See and academic advisor, program instructor, or the department chair for required tool list.

FOR MORE INFORMATION, CONTACT:

Jeff Parks
Department Chair
AUTOMOTIVE TECHNOLOGY
Tyler Junior College
P.O. Box 9020
Tyler, TX 75711
Phone: (903) 510-2153
West Campus – TJC Skills Training Center (Automotive)
E-mail: jpar2@tjc.edu