

# AUTOMOTIVE TECHNICIAN (AUTO)

---

**AUTO 1130 Credits: 1.5**

**Workplace Safety Total Hours: 37.5**

This course studies the Worker's Compensation Act outlined in the Occupational Health and Safety Regulations, and its applicability to the automotive service technician's workplace. Topics include the Workplace Hazardous Materials Information System (WHMIS), Material Safety Data Sheets (MSDS), WHMIS labels, shop emergency equipment, fire control, and implementation of specific safety protocols for hybrid and electric vehicles.

**AUTO 1131 Credits: 1**

**Employability Skills Total Hours: 25**

This course covers effective methods of shop management and recycling programs. Topics include the career path of an automotive technician, the use of trade terminology, effective methods for shop management, and the use of written reports. This course is part of the full-time Automotive Service Technician Foundation Program.

**AUTO 1132 Credits: 5.5**

**Tools and Equipment Total Hours: 137.5**

This course covers principles of selection and use of technician hand tools. Topics include measuring instruments, air and electric power tools, threaded and non threaded fasteners, removing and replacing fasteners, and aspects of the maintenance of shop tools and equipment, including lubricants, fluids, belts, and hoses. Students will also learn welding safety procedures and basic welding.

**AUTO 1133 Credits: 3**

**General Automotive Maintenance Total Hours: 75**

This course covers general automotive maintenance. Topics include lubricants and fluids, belts, hoses, wheels, tires, bearings, spindles and hubs. Types of exterior lamps will also be discussed.

**AUTO 1134 Credits: 3**

**General Automotive Practices Total Hours: 75**

This course covers diagnostic processes and procedures used for troubleshooting vehicle malfunctions, diagnosis of fuel delivery systems, internal combustion principles, replacement of gaskets and seals, and basic vehicle emissions.

**AUTO 1235 Credits: 6**

**Brake Systems Total Hours: 150**

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems. This course is part of the full-time Automotive Service Technician Foundation Program.

**AUTO 1236 Credits: 6.5**

**Steering Systems Total Hours: 162.5**

This course covers principles of operation, diagnosis, service, and repair of steering and passenger restraint systems. Topics include steering gears, power steering systems, passenger restraint systems, wheel alignment, and four wheel steering systems. This course is part of the full-time Automotive Service Technician Foundation Program.

**AUTO 1237 Credits: 3.5**

**Suspension Systems Total Hours: 87.5**

This course covers principles of operation, diagnosis, service and repair of suspension systems and frames. Topics include frame types, suspension geometry, suspension components, and electronic suspension systems. This course is part of the full-time Automotive Service Technician Foundation Program.

**AUTO 1238 Credits: 7**

**Electrical/Electronic Systems Total Hours: 175**

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, service, and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams and diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

**AUTO 1239 Credits: 2**

**Drive-line Systems Total Hours: 50**

This course covers the operation, diagnosis, and repair of drive and axle shafts. Topics include types, components, operation, safety, inspection, testing and component service. Upon completion students should be able to properly and safely describe and service front wheel drive and rear wheel drive shafts and axle assemblies.

**AUTO 1240 Credits: 1**

**Body Components,Accessors&Trim Total Hours: 25**

This course covers common areas of concern for wind noise, rattles and water leaks. Diagnosis and repair of interior and exterior components, accessories,trim, latches, locks, regulators, sensors, switches, movable glass, mirrors,roof racks, seats, dashboards, running boards, and bug shields. Topics include use proper use of diagnostic equipment such as smoke machines, chassis ears, and water hoses. To be competent in this area, the individual must be able to repair interior and exterior components and trim.