

Automotive Technician

Program Overview

The Automotive Technology (AUMT) program provides students with comprehensive, hands-on training in the diagnosis, repair, and maintenance of modern automotive systems. The curriculum is designed to align with current industry standards and prepares students for entry-level employment in the automotive service industry.

Instruction progresses from foundational knowledge of automotive systems, safety, and tools to advanced training in electrical, mechanical, and computerized vehicle systems. Students gain practical experience using industry-standard diagnostic equipment, service manuals, and shop procedures. Emphasis is placed on safety, professionalism, and real-world application. Manufacturer-specific training may be incorporated to ensure alignment with evolving automotive technologies.

Student Learning Outcomes (SLOs)

Graduates of the Automotive Technology program will be able to:

Safety & Professionalism

- Demonstrate proper shop safety procedures and hazardous material handling.
- Exhibit professional behavior, ethical responsibility, and effective communication skills.

Tools, Equipment & Service Information

- Properly use automotive tools, equipment, and diagnostic devices.
- Interpret service manuals, technical bulletins, and electrical schematics.

Basic Automotive Service

- Perform routine maintenance and entry-level automotive service procedures.
- Maintain and inspect shop equipment in accordance with industry standards.

Mechanical Systems

- Diagnose and repair engine components including inspection, measurement, and reassembly.
- Service drivetrain components such as clutches, transmissions, and differentials.

Suspension, Steering & Brake Systems

- Diagnose and repair suspension and steering systems, including alignments and electronic components.
- Analyze and repair braking systems including hydraulic, drum, disc, and anti-lock brake systems.

Electrical & Electronic Systems

- Diagnose and repair automotive electrical systems including starting, charging, and accessories.
- Apply electronic principles to modern vehicle systems and onboard computers.

Climate Control Systems

- Diagnose and repair heating and air conditioning systems.
- Apply EPA guidelines for refrigerant handling and understand refrigeration cycles.

Engine Performance

- Diagnose and repair ignition, fuel delivery, and emissions systems.
- Utilize diagnostic equipment to analyze drivability concerns and computerized engine controls.