

AUTOMOTIVE TECHNOLOGY

Learning Outcomes

1. Students will create technical reports explaining automotive service completed on vehicles (e.g. work orders), which include customer concerns, diagnosis, repair procedure, and verification of work completed.
2. Students will communicate effectively with customers regarding customer vehicular concerns, and have basic computer skills needed to produce work orders for service technicians.
3. Students will understand the internal combustion engine's theory and operation, and perform necessary diagnostics and repairs of various components using industry standard equipment and techniques.
4. Students will understand a vehicle's braking system theory and operation, and perform necessary diagnostics and repairs of various sub-systems using industry standard equipment and techniques.
5. Students will understand a vehicle's drivetrain (automatic and/or manual transmission) theory and operation, along with performing necessary diagnostics, repair, and maintenance using industry standard equipment and techniques.
6. Students will understand a vehicle's suspension, steering, and alignment theory and operation, as well as performing diagnostic routines and repairs using industry standard equipment and procedures.
7. Students will understand engine performance (ignition systems, fuel delivery systems, and emissions control devices) theory and operation, along with performing diagnostic and repair procedures using industry standard equipment and techniques.
8. Students will understand vehicle electrical theory, as well as application of various components. Perform diagnostic and repair procedures of various electrical systems using industry standard equipment and techniques.