

Motive Power Technician

Program Learning Outcomes

Learning outcomes represent culminating demonstrations of learning and achievement. In addition, learning outcomes are interrelated and cannot be viewed in isolation of one another. As such, they should be viewed as a comprehensive whole. They describe performances that demonstrate that significant integrated learning by graduates of the program has been achieved.

The graduate has reliably demonstrated the ability to

- 1. analyse, diagnose, and solve various motive power system problems by using problem-solving and critical thinking skills and strategies and by applying fundamental knowledge of motor vehicle operation, components, and their interrelationships.
- 2. diagnose and repair climate control systems in compliance with manufacturers' recommendations.
- 3. diagnose and repair engine systems in compliance with manufacturers' recommendations.
- 4. diagnose and repair electrical, electronic, personal safety, and emission components and systems in compliance with manufacturers' recommendations.
- 5. diagnose and repair drive train components and systems in compliance with manufacturers' recommendations.
- 6. diagnose and repair suspension, steering, and brake components and systems in compliance with manufacturers' recommendations.
- 7. disassemble and assemble components to required specifications by applying workshop skills and knowledge of basic shop practices.
- 8. select and use a variety of troubleshooting techniques and test equipment to assess electronic circuits, vehicle systems, and subsystems.
- 9. apply knowledge of hydraulics and pneumatics to the testing and analysis of motive power systems and subsystems.
- 10. communicate information effectively, credibly, and accurately by producing supporting documentation to appropriate standards.
- 11. use information technology and computer skills to support work in a motive power environment.
- 12. prepare, support, maintain, and communicate data from log, record, and documentation systems.
- 13. apply business practices, project management skills, and communication skills to improve customer service.
- 14. assist in quality-control and quality-assurance programs and procedures.
- 15. develop and use personal and professional strategies and plans to improve professional growth, job performance, and work relationships.
- 16. complete all assigned work in compliance with occupational, health, safety, and environmental law; established policies and procedures; codes and regulations; and in accordance with ethical principles.