## ATEC 212: AUTOMOTIVE HEATING AND AIR CONDITIONING

Theory and operation of automotive heating and air-conditioning systems. Methods for service and repair of heating and air conditioning and troubleshooting techniques.

## **Course Student Learning Outcomes**

- 1. Describe the fundamentals of operation of automotive heating and air conditioning systems.
- 2. List and define the major components of the automotive heating and air conditioning system.
- 3. List and define proper repair procedures for the automotive and air conditioning system.
- 4. Demonstrate correct and safe repair and troubleshooting procedures for the automotive heating and air conditioning system.
- 5. List and identify the types of heating and air conditioning systems used by the various major automotive manufactures.
- 6. List and identify faults, and factory specifications using the NATEF worksheet.
- 7. Read with understanding in order to perform competently as an Automotive Technician.
- 8. Convey ideas in writing in order to perform competently as an Automotive Technician.
- 9. Communicate effectively to perform competently as an Automotive Technician.
- 10. Use math & science to solve problems and to communicate findings to fulfill Automotive Technician responsibilities.
- 11. Understand the expectations of the workplace, the responsibilities of an Automotive Technician and the methods of securing employment within the field.
- 12. Demonstrate the ability to use technology effectively in the workplace.
- 13. Demonstrate professionalism in workplace appropriate dress and conduct.
- 14. Demonstrate the ability to work as a productive member of a team.

## Credits: 6

Prerequisites: 2.0 or higher in ATEC 100 and be in the second year of the program, or instructor permission. Program: Automotive Technology