COURSES

TRANSPORTATION

TRN-110   **Introduction to Transport Technology**   **Lec 1**   **Lab 2**   **Clinic 0**   **Credit 2**

This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.

Co-Requisites: None
Pre-Requisites: None

TRN-120   **Basic Transportation Electricity**   **Lec 4**   **Lab 3**   **Clinic 0**   **Credit 5**

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair 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, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

Co-Requisites: None
Pre-Requisites: None

TRN-140   **Transportation Climate Control**   **Lec 1**   **Lab 2**   **Clinic 0**   **Credit 2**

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis and repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to diagnose and repair vehicle climate control systems.

Co-Requisites: None
Pre-Requisites: None

TRN-140A   **Transportation Climate Control Lab**   **Lec 1**   **Lab 2**   **Clinic 0**   **Credit 2**

This course provides experiences for enhancing student skills in the diagnosis and repair of transportation climate control systems. Emphasis is placed on reclaiming, recovery, recharging, leak detection, climate control components, diagnosis, air conditioning equipment, tools and safety. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

Co-Requisites: TRN-140
Pre-Requisites: None

TRN-170   **Pc Skills for Transportation**   **Lec 1**   **Lab 2**   **Clinic 0**   **Credit 2**

This course introduces students to personal computer literacy and Internet literacy with an emphasis on the transportation service industry. Topics include service information systems, management systems, computer-based systems, and PC-based diagnostic equipment. Upon completion, students should be able to access information pertaining to transportation technology and perform word processing.

Co-Requisites: None
Pre-Requisites: None

TRN-180   **Basic Welding for Transportation**   **Lec 1**   **Lab 4**   **Clinic 0**   **Credit 3**

This course covers the terms and procedures for welding various metals used in the transportation industry with an emphasis on personal safety and environmental health. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, cutting processes and other related issues. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standard

Co-Requisites: None
Pre-Requisites: None