COURSE DESCRIPTIONS BY COURSE DISCIPLINE PREFIX

TRN TRANSPORTATION TECHNOLOGY

TRN-110 Intro to Transport Tech 2 (1-2) Fall Spring

Prerequisites: None
Corequisites: None
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.(2013 FA)

TRN-112 Powertrain Maint/Light Repair 4 (2-6) Fall

Prerequisites: None
Corequisites: None
This course covers maintenance and light repair of transportation engines, automatic and manual transmission/transaxles, engine performance systems, and HVAC systems. Topics include general servicing and inspection procedures of engines, engine lubrication and cooling systems, automatic and manual transmission/transaxles, HVAC components, and fuel, air induction, and exhaust systems. Upon completion, students should be able to perform maintenance and light repair of transportation engines, automatic and manual transmission/ transaxles, engine performance systems, and HVAC systems.(2015 SU)

TRN-120 Basic Transp Electricity 5 (4-3) Fall Spring

Prerequisites: None
Corequisites: None
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.(2013 FA)

TRN-140 Transp Climate Control 2 (1-2) Spring Summer

Prerequisites: None
Corequisites: None
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.(2013 FA)

TRN-140A **Transp Climate Cont Lab** **2 (1-2)** **Spring Summer**

Prerequisites: None
Corequisites: TRN-140[S]

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.(2013 FA)

TRN-180 **Basic Welding for Transp** **3 (1-4)** **AND**
Prerequisites: None
Corequisites: None

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(2013 FA)