

Training for Alternative Fuels

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How did we get here?

- The Baby Boomer exit was sped up by Covid *
- Unemployment is low due to lack of workers and the “Great Resignation” ^
- The Enrollment Cliff will also affect the workforce due to the low birth rates of 15-20 years ago. This will be 10-15 % fewer graduates #

Today's workforce

- Rising workers are Generation Z (mid 1990's to 2010)
- Technology attracts these individuals
- Students are not lazy, just after a greater work life balance
- Benefits are a great attraction for these individuals

How do I attract?

- Apprenticeships
- Internships
- Incentives
- Pay is not enough!

Skilled Trades

- Current push in the High Schools is toward Skilled Trades
 - College debt is not accrued
 - Loss of skills in these areas
 - Immediate job placement
- Immigrant and refugee populations
 - Programs in place for education
 - High School education is not needed for Continuing Ed programs

Classes in the NC Community College system

- ATT-115 Green Trans Safety & Service
- ATT-125 Hybrid-Electric Transpiration Systems
- ATT-130 Biofuels for Transportation
- ATT-135 Gaseous Fuels for Transportation
- ATT-140 Emerging Transportation Tech
- ATT-150 Sustainable Transportation Tech

Class Description

- ATT 115 Green Trans and Safety

This course covers workplace safety, hazardous material and environmental regulation relevant to electric, hybrid and alternative fueled vehicles.

Vehicles used are all electric and hybrid vehicles

Taught in the Automotive program

Class Descriptions

- ATT 125 Hybrid Electric Transportation Systems

This course covers the theory and operation of hybrid-electric drive vehicles. Topics include maintenance, diagnostics, repair and safety procedures for electrically propelled and hybrid vehicles.

Students in this class disassemble, test and rebuild Hybrid transmissions. Electric motor theory and propulsion systems are studied.

Can be taken in either program

ATT 130 Biofuels, ATT 135 Gaseous Fuels

These classes are taught in our Diesel and Heavy Duty program.

Biofuel includes Bio Diesel, Refined Diesel, Ethanol, and Green generated fuels (Hydrogen by renewable sources, Propane by landfills)

Gaseous Fuels includes CNG and LPG safety and operation, Hydrogen combustion and fuel cell operation. How the fuel is created is also covered.

This course is taught in the Heavy Equipment and Truck program.

ATT 140 Emerging Transportation Tech

This course covers emerging technologies in the automotive industry and diagnostic procedures associated with those technologies. Topics include exploring new technologies, diagnostic tools, methods and repairs.

Idle stop technology and idle reduction techniques, low rolling resistance tires, super conductors, controller assemblies and resolver circuits are covered.

This class is taught in the Automotive program.

ATT-150 Sustainable Transportation Tech

This course introduces fuel neutral technologies used on all classes of transportation equipment. Topics include idle stop technology and idle reduction techniques, low rolling resistance tires, super capacitors, exhaust heat regeneration and diagnostics of hydrogen fuel cell and electrical 6 and 9 phase operation.

This course is taught in the Heavy Equipment and Truck program.

Continuing Education Classes

Currently we are working with our community to offer safety classes for those working on EV and Hybrid vehicles.

Immigrant and refugee populations

We work with First Responders and technicians

We are planning on running additional classes in diagnostics and repair coming late fall/spring of next year.

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