

HYEV2603 - Electric Platform Technologies

Credits:	3 (2/1/0)
Description:	This class will focus on electric plug-in platforms, batteries, electric drive motors and modules that are unique to plug-in vehicles. This course will also cover vehicle diagnostics. Charging stations and charging diagnostics unique to this platform will be covered, as well as service and diagnosis.
Prerequisites:	
Corequisites:	<ul style="list-style-type: none"> • HYEV2601 • HYEV2602
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"> 1. Exhibit and demonstrate all safety precautions. 2. Demonstrate knowledge of unique operation of electric vehicles vs. internal combustion vehicles. 3. Correctly perform complex vehicle diagnostics unique to electric vehicles. 4. Demonstrate knowledge and perform tests on the heating and air conditioning systems unique to electric vehicle platforms. 5. Correctly perform diagnostics and repairs to high voltage batteries. 6. Correctly diagnose and make repairs to 3-phase electric drive motors. 7. Demonstrate understanding and diagnosis of power inverter and converters unique to electric vehicle platforms. 8. Correctly perform insulation testing and diagnosis. 9. Conduct a proper diagnosis of charging-related concerns.
MnTC goal areas:	None

*Can be taking as a Prerequisite or Corequisite.