

HYEV2606 - Electric Platform Technologies

Credits:	2 (1/1/0)
Description:	This course focuses on electric plug-in platforms, batteries, electric drive motors and modules unique to plug-in vehicles. It also covers vehicle diagnostics, charging stations and charging diagnostics specific to this platform, as well as service and diagnosis.
Prerequisites:	<ul style="list-style-type: none"> • AMST1101 • AMST1112
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"> 1. Exhibit and demonstrate all safety precautions. 2. Demonstrate knowledge of the unique operation of electric vehicles compared to 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 diagnose and repair three-phase electric drive motors. 6. Demonstrate understanding and diagnosis of power inverters and converters unique to electric vehicle platforms. 7. Correctly perform insulation testing and diagnosis. 8. Conduct a proper diagnosis of charging-related concerns.
MnTC goal areas:	None

*Can be taking as a Prerequisite or Corequisite.