HYEV2605 - Hybrid Vehicle Technologies

Credits:	2 (1/1/0)
Description:	This course covers hybrid engines, high voltage safety, batteries and drive trains unique to the hybrid chassis. Regenerative braking is also covered, along with module communications classes necessary and unique to hybrid vehicles.
Prerequisites:	• AMST2212
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Demonstrate knowledge of SAE (Society of Automotive Engineers) standards as they apply to hybrid/electric platforms. 2. Demonstrate an understanding of high voltage safety and demonstrate high voltage safety procedures. 3. Demonstrate the use of category 0 tools and category 3 electrical meters. 4. Demonstrate knowledge of the principals of regenerative braking. 5. Articulate the unique differences within or of hybrid engines. 6. Demonstrate knowledge of power flow as it relates to hybrid vehicles. 7. Articulate the operating principles of 3-phase electric motor operation. 8. Perform electrical tests using a lab scope on high voltage systems. 9. Perform diagnostic testing on hybrid engine platforms.
MnTC goal areas:	None

**Can be taking as a Prerequisite or Corequisite.*