

AMST2221 - Electronic Powertrain Control II

Credits:	4 (2/2/0)
Description:	Fuel delivery, fuel injection and control, crankcase emissions, exhaust gas recirculation, evaporative emissions and catalytic converters are covered in this course. Emphasis is on different monitors and on-board diagnostic strategies for fuel, ignition and emissions systems. The class covers powertrain diagnostics and root cause analysis.
Prerequisites:	<ul style="list-style-type: none"> • AMST2219
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"> 1. Understand, diagnose and repair fuel injection systems. 2. Use and interpret a five gas analyzer. 3. Understand, diagnose and repair forced air induction systems. 4. Perform analysis and demonstrate the uses of different fuel grades and ethanol blends. 5. Understand and locate mode six data. 6. Understand, diagnose and repair evaporative emissions control systems. 7. Understand, diagnose and repair exhaust gas recirculation systems. 8. Understand, diagnose and repair evaporative emissions systems. 9. Perform catalytic converter tests for functionality and restrictions. 10. Understand, diagnose and repair positive crankcase ventilation systems. 11. Perform fuel system pressure, volume and injector tests. 12. Perform testing and repairs on gas direct injection systems. 13. Diagnose and perform testing on start-stop systems.
MnTC goal areas:	None

*Can be taking as a Prerequisite or Corequisite.