

## AMST2221 - Electronic Powertrain Control II

Credits:	4 (2/2/0)
Description:	Fuel delivery, fuel injection and control, crankcase emissions, exhaust gas re-circulation, 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:	
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"> <li>1. Understand, diagnose and repair fuel injection systems.</li> <li>2. Use and interpret a five gas analyzer.</li> <li>3. Understand, diagnose and repair forced air induction systems.</li> <li>4. Perform analysis and demonstrate the uses of different fuel grades and ethanol blends.</li> <li>5. Understand and locate mode six data.</li> <li>6. Understand, diagnose and repair evaporative emissions control systems.</li> <li>7. Understand, diagnose and repair exhaust gas re-circulation systems.</li> <li>8. Understand, diagnose and repair evaporative emissions systems.</li> <li>9. Perform catalytic converter tests for functionality and restrictions.</li> <li>10. Understand, diagnose and repair positive crankcase ventilation systems.</li> <li>11. Perform fuel system pressure, volume and injector tests.</li> <li>12. Perform testing and repairs on gas direct injection systems.</li> <li>13. Diagnose and perform testing on start-stop systems.</li> </ol>
MnTC goal areas:	None

\*Can be taking as a Prerequisite or Corequisite.