

## AMST2212 - Advanced Automotive Electrical Systems

Credits:	3 (2/1/0)
Description:	This course covers the principles of networks and Binary Unit Systems (BUS). Students learn the use of an oscilloscope, the testing of high voltage systems, and high voltage safety.
Prerequisites:	
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"><li>1. Exhibit safety and professionalism by maintaining a clean and safe work environment, following OSHA and manufacturer guidelines.</li><li>2. Perform electrical system tests with the use of a multi-channel oscilloscope.</li><li>3. Interpret and demonstrate knowledge of data network systems.</li><li>4. Diagnose and test multiple communication networks.</li><li>5. Diagnose and repair electrical accessories using a variety of scan tools.</li><li>6. Demonstrate the use of electric multi-meters and voltage measuring devices.</li><li>7. Demonstrate knowledge of SAE (Society of Automotive Engineers) standards as they apply to hybrid/electric platforms.</li><li>8. Perform electrical tests using a lab scope on high voltage systems.</li><li>9. Diagnose and test electrical accessories using diagnostic flow charts and electronic service information.</li></ol>
MnTC goal areas:	None

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