

## AMST1111 - Automotive Electronics

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| Credits:           | 3 (2/1/0)  |
| Description:       | This course involves understanding Ohm's law, multimeter usage, schematic reading, electrical circuit operation and electronic components. The student will perform electrical tests and repairs on training boards and on various vehicles. This course is a prerequisite for all second-year automotive courses.   |
| Prerequisites:     |  |
| Corequisites:      | • AMST1101   |
| Pre/Corequisites*: |  |
| Competencies:      | <ol style="list-style-type: none"> <li>1. Exhibit safety precautions and professionalism.</li> <li>2. Interpret service information</li> <li>3. Apply the principles of Ohm's law.</li> <li>4. Demonstrate proper use of a multimeter measuring voltage, resistance and current.</li> <li>5. Apply electrical diagrams to explain, diagnose and repair electrical problems.</li> <li>6. Perform electrical repairs involving soldering, connector replacement, heat shrinking and corrosion repair.</li> <li>7. Perform electrical tests on various vehicles to determine problems.</li> <li>8. Perform electrical tests involving duty cycle, frequency and peak voltages.</li> <li>9. Perform electrical tests using a lab scope.</li> </ol> |
| MnTC goal areas:   | None   |

\*Can be taking as a Prerequisite or Corequisite.