

# Course Outcome Guide (COG)

Approved April 13, 2015

<b>Course: DTEC 107</b>	<b>Title: Basic Electrical Systems</b>	<b>Credits:</b>	4	<b>Instructor:</b>	
<b>Course Description:</b>	This course covers electrical theory principles, electrical component identification, function and testing procedures of basic DC electrical systems.				
Concepts and Issues	Process Skills	Assessment Tasks	Intended Outcomes		
			Course	General Education or Program	Institutional
<ul style="list-style-type: none"> <li>For the student to develop a basic understanding of electrical components and their function</li> <li>Develop skills for proper procedures for use of DVOM meters</li> <li>Develop skills for troubleshooting of starting and charging systems</li> <li>Develop knowledge of basic electrical systems used in modern engines</li> </ul>	<ul style="list-style-type: none"> <li>Identify and describe the function of electrical components</li> <li>Demonstrate proper procedure in the use of DVOM meters</li> <li>Demonstrate knowledge of basic testing of starting and charging systems</li> <li>Perform volt, amp, draw and load tests on electrical systems</li> </ul>	<ul style="list-style-type: none"> <li>Weekly testing</li> <li>Shop performance</li> <li>Demonstration of course specific skills</li> </ul>	<ol style="list-style-type: none"> <li>Demonstrate procedures used in troubleshooting basic electrical systems</li> <li>Demonstrate the ability to test electrical components for proper function</li> <li>Perform skills on the proper use of DVOM meters</li> <li>Demonstrate knowledge of basic electronic systems used in modern vehicles</li> </ol>	<ol style="list-style-type: none"> <li>Make troubleshooting decisions and complete repairs using the proper tools and equipment based on concepts and processes learned in the Transportation program.</li> <li>Be prepared to take NATEF Certification tests.</li> <li>Apply the knowledge acquired for future employment.</li> <li>Apply the knowledge of safety procedures and handling of hazardous material processes to their training and future</li> </ol>	<ol style="list-style-type: none"> <li>Students will demonstrate effective communication skills.</li> <li>Students will use reasoning skills to analyze and solve problems.</li> </ol>

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