

1. Title	Identify general properties of different types of typical electrical and mechanical engineering materials
2. Code	EMCUDE109A
3. Range	Capable to identify the general properties and range of application of different types of typical electrical and mechanical engineering materials for electrical and mechanical design, installation, repair and maintenance.
4. Level	1
5. Credit	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1      General properties of typical electrical and mechanical engineering materials</p> <ul style="list-style-type: none"> <li>◆ Understand the general properties of typical electrical and mechanical engineering materials including metals and non-metals: <ul style="list-style-type: none"> <li>• Mechanical properties such as strength, hardness, resilience, etc.</li> <li>• Density</li> <li>• Electric conductivity</li> <li>• Thermal conductivity</li> <li>• Melt ability</li> </ul> </li> </ul> <p>6.2      Identify properties and range of application of typical electrical and mechanical engineering materials</p> <ul style="list-style-type: none"> <li>◆ Capable to identify different types of typical electrical and mechanical engineering materials, including metal type: steel, copper, aluminium, iron, etc., and non-metal type: wood, plastic, resin, etc.</li> <li>◆ Capable to identify basic range of application of different types of typical electrical and mechanical engineering materials</li> <li>◆ Capable to perform simple design, installation, repair and maintenance engineering works according to the general properties and range of application of different types of typical electrical and mechanical engineering materials</li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i)      Capable to identify the general properties and range of application of different types of typical electrical and mechanical engineering materials.</p>
8. Remarks	This unit of competency is applicable to new entrants of electrical and mechanical engineering services.