

1. Title	Select general electrical materials and electrical equipment
2. Code	EMCUDE204A
3. Range	Select general electrical materials and electrical equipment to perform electrical installation work.
4. Level	2
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Functions, properties and application conditions of general electrical materials and electrical equipment and devices</p> <ul style="list-style-type: none"> <li>◆ Understand the functions, properties and application conditions of general electrical materials and electrical equipment and devices, including: <ul style="list-style-type: none"> <li>• General electrical materials <ul style="list-style-type: none"> <li>▸ Basic configuration, colour code, types, nominal, current-carrying capacity and skin effect of different cables</li> <li>▸ Electrical materials generally used in wiring systems, such as switch, switch box, distribution board, metallic and non-metallic conduits, conduit accessories, trunking and trunking accessories, etc.</li> <li>▸ Electrical materials generally used for motor control, such as electromagnetic switch, relay, timer, push-button switch, travel switch, overload protector, limit switch and water level controller, etc.</li> <li>▸ Limitations of materials in voltage, current and temperature</li> </ul> </li> <li>• General electrical equipment and devices <ul style="list-style-type: none"> <li>▸ General power supply and distribution equipment such as transformer, distribution board, busbar system and rising main</li> <li>▸ General electrical equipment for buildings, such as electric pump and lighting, etc.</li> </ul> </li> </ul> </li> </ul> <p>6.2 Select general electrical materials and electrical equipment and devices</p> <ul style="list-style-type: none"> <li>◆ Capable to select general electrical materials and electrical equipment correctly for electrical installation work according to the application requirements as well as the functions, properties and limitations of the materials and equipment</li> <li>◆ Capable to select and check the materials and equipment in order to ensure that they comply with the safety standards and specifications</li> </ul>

7. Assessment Criteria	The integrated outcome requirement of this unit of competency is:  (i) Capable to select general electrical materials and electrical equipment and devices correctly for general power distribution systems for buildings and building services installations according to the application requirements and ensure that they comply with the safety specifications.
8. Remarks	This unit of competency is applicable to electrical and mechanical practitioners in general.