

1. Title	Understand the basic concepts of operating, repairing and maintaining general neon installations
2. Code	EMELOR103A
3. Range	Understand the concepts of operating, repairing and maintaining neon installations, including the arrangement and protection of electrical installations, the functions and application of various kinds of neon materials, electrical equipment, tools and instruments.
4. Level	1
5. Credit	4
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Concepts of the operation, repair and maintenance of general neon installations, and the arrangement and protection of power supply systems; functions and application of various kinds of neon materials, tools and instruments</p> <ul style="list-style-type: none"> <li>◆ Understand the operation of general neon installations, routine inspection, safety procedures for replacing components, inspection of high voltage and low voltage installations, inspection of the bearing capacity and rust corrosion of signboards</li> <li>◆ Understand the arrangement and protection of power supply systems for the repair and maintenance of general neon installations including: <ul style="list-style-type: none"> <li>• High voltage wiring and low voltage wiring arrangements</li> <li>• Arrangements of safety devices and power supply circuits</li> <li>• Basic requirements on protection and control circuits</li> </ul> </li> <li>◆ Understand the application of various kinds of neon materials for repairing and maintaining general neon installations, including neon tube materials, step-up transformers, accessories for surface wiring, metal conduits, various kinds of cables, cable ducts and accessories commonly used in fixed electrical installations, fire switches, etc.</li> <li>◆ Understand the functions and application of various kinds of tools and instruments including ammeter/clamp meter, multi-meter, insulation/continuity tester, neon gas injector, heating facilities, etc.</li> </ul>

	<p>6.2 Understand the concepts of the arrangement and protection of power supply systems of general neon installations, the functions and application of various kinds of neon materials, tools and instruments, tools and instruments according to the manuals of operation, repair and maintenance of neon installations</p> <p>◆ Understand the following according to the manuals of operation, repair and maintenance of neon installations:</p> <ul style="list-style-type: none"> <li>• Operation of general neon installations, routine inspection, safety procedures for replacing components, inspection of high voltage and low voltage installations, inspection of the bearing capacity and rust corrosion of signboards</li> <li>• Arrangement and protection of power supply system of general neon installations</li> <li>• Application of materials of general neon installations</li> <li>• Functions and application of general tools and instruments</li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to understand the concept of operating, repairing and maintaining general neon installations;</p> <p>(ii) Capable to understand the arrangement and protection of power supply systems for general neon installations and</p> <p>(iii) Capable to understand the functions and application of various kinds of neon materials, tools and instruments for general neon installations.</p>
8. Remarks	<p>This unit of competency is applicable to new entrants of the neon installation services.</p>