1. Title	Inspect, test and commission low voltage distribution network system installations
2. Code	EMELIT410A
3. Range	Applicable to the inspection, testing and commissioning of low voltage distribution network and associated installations. Master various technical requirements for the low voltage power supply network system directly fed by several transformers, its associated installations, control equipment and protection devices; perform the inspection, testing and commissioning.
4. Level	4
5. Credit	9
6. Competency	Performance Requirements
	<ul> <li>6.1 Master client's requirements and the inspection, testing and commissioning specifications specified by international standards</li> <li>Master the requirements of the Safety Rules (Electrical) on inspection, testing and commissioning</li> <li>Master the characteristics of low voltage power supply network system and associated installations directly fed by several transformers including various kinds of switches, transformers, cables, protection and control devices, etc.</li> <li>Master the details of various kinds of inspection, testing and commissioning items including insulation resistance test, high voltage withstand test, primary injection test for inverter, secondary injection test for various kinds of protection relays, etc.</li> </ul>
	<ul> <li>6.2 Implement inspection, testing and commissioning on low voltage power supply network system and associated installations</li> <li>Inspect the operation of various types of low voltage power supply network system and associated installations and control devices, earthing systems, lightning protection system, etc.</li> <li>Implement various types of inspection, testing and commissioning such as: primary and secondary injection test, insulation resistance test, high voltage withstand test, etc.</li> <li>Implement integrated operational test on various types of protection and control circuits such as protection plan, interaction and interlocking control plan, etc.</li> <li>Analyze the inspection, testing and commissioning results of low voltage power supply network system and associated installations inspected are qualified</li> </ul>

	<ul> <li>6.3 Professionalism in inspecting, testing and commissioning low voltage power supply network system and associated installations</li> <li>Follow the regulations and safety guidelines for the industry to ensure that the inspection, testing and commissioning of low voltage power supply network system and associated installations</li> <li>Follow the regulations and safety guidelines for the industry to ensure that the inspection, testing and commissioning of low voltage power supply network system and associated installations</li> </ul>
7. Assessment Criteria	<ul> <li>The integrated outcome requirements of this unit of competency are:</li> <li>(i) Capable to inspect the operation of low voltage power supply network system and associated installations;</li> <li>(ii) Capable to follow the regulations and safety guidelines for the industry to test and adjust low voltage power supply network system and associated installations, and complete the test report; and</li> <li>(iii) Capable to judge whether the low voltage power supply network system inspected, tested and commissioned are qualified.</li> </ul>
8. Remarks	