1. Title	Master the basic design concept of neon installations
2. Code	EMELDE211A
3. Range	Applicable to neon installation work. Master the design concept of power system from the power supply to the neon installation, and understand the operating principles and characteristics of single-phase and three-phase step-up transformers and neon gas under high voltage.
4. Level	2
5. Credit	3
6. Competency	Performance Requirements 6.1 Know about the basic design concept of neon installations ♦ Know about the design concept of power system from the power supply to the neon installation ♦ Know about the operating principles and characteristics of single-phase and three-phase step-up wound transformers ♦ Know about the operating principles and characteristics of single-phase and three-phase step-up electronic transformers ♦ Understand the effect of high voltage on colour temperature and brightness of neon gas ♦ Understand the operating principles and characteristics of neon gas under high voltage ♦ Understand the colour and brightness generated by individual gas or chemical powder and the mixtures of gases or powders 6.2 Master the design concept and keypoints of the power systems of neon installations according to relevant electricity regulations and power circuit design drawings ♦ Master the design concept and keypoints of the circuit diagram from the power supply to the neon installation circuit, including the overcurrent protection equipment and control circuits, according to relevant electricity regulations and power circuit design drawings
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: (i) Capable to understand the basic operating principles and characteristics of neon installations; and (ii) Capable to master the design concept and keypoints of the power systems of neon installations, and assist in the basic design of the power systems of neon installations under instruction.
8. Remarks	