

1. Title	Test and commission non-water-based fire system's electrical and mechanical installations	
2. Code	EMFSIT402A	
3. Range	Lead the testing and commissioning of non-water-based fire system's electrical and mechanical installations at systems' installation points.	
4. Level	4	
5. Credit	6	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of non-water-based fire system's electrical and mechanical installation testing and commissioning</p> <ul style="list-style-type: none"> ◆ Understand the operating principles and performance requirements of various types of non-water-based fire service electrical and mechanical installations, including: <ul style="list-style-type: none"> • Carbon dioxide system • FM200 system • NAFSIII system • Other similar gas extinguishing systems ◆ Understand requirements of codes on fire service installations and equipment, design and installation specifications, and approved standards on various types of non-water-based fire system and installations for testing and commissioning ◆ Understand the content of testing and commissioning documents (checklist, testing report form, etc.) <p>6.2 Methods and procedures of non-water-based fire system's electrical and mechanical installation testing and commissioning</p> <ul style="list-style-type: none"> ◆ Know the methods and procedures of testing and commissioning non-water-based fire system's electrical and mechanical installations, including conducting inspection, calibration and testing independently ◆ Lead the testing and commissioning of non-water-based fire system's electrical and mechanical installations, including: <ul style="list-style-type: none"> • Static check of system • Functional test of system • Calibration of components to ensure normal operation of system • Measurement of operation data ◆ Analyze abnormal testing results and troubleshoot the problems ◆ Use relevant tools and equipments safely and effectively to test and calibrate non-water-based fire system and installations <p>6.3 Professionalism in testing and commissioning non-water-based fire system and installations</p> <ul style="list-style-type: none"> ◆ Conduct testing and commissioning of non-water-based fire system and installations according to legal requirements, codes of practice and standards of the trade ◆ Record, analyze and report on the testing and commissioning results of non-water-based fire system and installations 	

7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to use the expertise to complete the testing and commissioning of non-water-based fire system's electrical and mechanical installations.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses knowledge of installing and testing general non-water-based fire system's electrical and mechanical installations.