

1. Title	Test and commission chiller plant	
2. Code	EMACIT403A	
3. Range	Apply specialized knowledge and skills to test and commission chiller plants at chiller plant machine rooms.	
4. Level	4	
5. Credit	12	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of testing and commissioning chiller plants</p> <ul style="list-style-type: none"> ◆ Understand the details and importance of testing and commissioning chiller plants ◆ Understand the regulations and code of practice on testing and commissioning chiller plants <p>6.2 Methods and procedures of testing and commissioning chiller plants</p> <ul style="list-style-type: none"> ◆ Test and commission reciprocating chiller plants, including: <ul style="list-style-type: none"> • Perform air tight test for compressors and refrigeration pipes of the reciprocating chiller plant • Perform vacuuming test for compressors and refrigeration pipes of the reciprocating chiller plant • Charge the reciprocating chiller plant with refrigerant • Check for the defects of all reciprocating chiller plant equipment and accessories • Test that all reciprocating chiller plant equipment run properly • Perform test run for the reciprocating chiller plant • Adjust the operating parameters of the reciprocating chiller plant to meet the design requirements ◆ Test and commission screw chiller plants, including: <ul style="list-style-type: none"> • Check for the defects of all screw chiller plant equipment and accessories • Perform running test for all screw chiller plant equipment • Perform test run for the screw chiller plant • Adjust the operating parameters of the screw chiller plant to meet the design requirements ◆ Test and commission centrifugal chiller plants, including: <ul style="list-style-type: none"> • Check for the defects of all centrifugal chiller plant equipment and accessories • Perform running test for all centrifugal chiller plant equipment • Perform test run for the centrifugal chiller plant • Adjust the operating parameters of the centrifugal chiller plant to meet the design requirements 	

	<p>6.3 Professionalism in testing and commissioning chiller plants</p> <p>◆ Perform testing and commissioning of chiller plants according to legal requirements and codes of practice</p>
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to apply specialized knowledge and skills to complete the testing and commissioning of chiller plants.</p>
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses general knowledge of various types of chiller plants.</p>