

1. Title	Operate central air-conditioning systems	
2. Code	EMACOR308A	
3. Range	Perform tasks of operating central air-conditioning systems at central air-conditioning system machine rooms or air-conditioned areas.	
4. Level	3	
5. Credit	9	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of central air-conditioning system operation</p> <ul style="list-style-type: none"> ◆ Understand the construction and working principles of all central air-conditioning system equipment ◆ Understand the work flow of chilled water and condensing water systems ◆ Understand the work flow of air distribution system ◆ Understand the work flow of control system <p>6.2 Methods and procedures of central air-conditioning system operation</p> <ul style="list-style-type: none"> ◆ Perform pre-starting inspection for the central air-conditioning system ◆ Measure and adjust the operating parameters of the central air-conditioning system ◆ Start the central air-conditioning system, including: <ul style="list-style-type: none"> • Pre-starting preparations for the fan coil unit • Pre-starting preparations for the air-handling unit • Pre-starting preparations for the cooling tower • Pre-starting preparations for the chiller plant • Start all central air-conditioning system equipment ◆ Operate central air-conditioning systems, including: <ul style="list-style-type: none"> • Record the operating parameters of central air-conditioning systems • Check the operating condition of central air-conditioning systems • Adjust the operating parameters of central air-conditioning and refrigeration unit • Handle typical problems for central air-conditioning systems during operation ◆ Shut down the operation of central air-conditioning systems, including: <ul style="list-style-type: none"> • Normal shut down • Emergency shut down 	

	<p>6.3 Professionalism in central air-conditioning system operation</p> <ul style="list-style-type: none"> ◆ Follow the operational manual instructions to perform operation of the central air-conditioning systems independently ◆ Understand the safety guidelines as required by the law and the code of practice to undertake the operation of central air-conditioning systems
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to operate central air-conditioning systems systematically and efficiently; and (ii) Capable to follow the operational manual safely to undertake the operation of central air-conditioning systems.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses elementary knowledge of central air-conditioning systems.</p>