

1. Title	Perform energy audits of air-conditioning systems	
2. Code	EMACDE402A	
3. Range	Apply specialized knowledge and techniques to perform energy audits for air-conditioning systems at sites with such systems so as to save energy.	
4. Level	4	
5. Credit	9	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of performing energy audits of air-conditioning systems</p> <ul style="list-style-type: none"> ◆ Understand the energy efficiency of different types of air-conditioning systems ◆ Understand the purpose of energy audits ◆ Understand the working principles of typical methods of heat recovery ◆ Understand the typical methods of reducing energy consumption in air-conditioning systems <p>6.2 Methods and procedures of performing energy audits of air-conditioning systems</p> <ul style="list-style-type: none"> ◆ Assess the energy efficiency of air-conditioning systems, including: <ul style="list-style-type: none"> • Assessing the impact of building design on the energy consumption of air-conditioning systems • Assessing whether the air-conditioning system design is highly energy-efficient and propose improvements if necessary • Estimating the energy consumption of air-conditioning systems • Using recognized benchmarks for energy consumption (kwh/m²) to assess the performance of air-conditioning systems ◆ Perform energy audits of air-conditioning systems, including: <ul style="list-style-type: none"> • Performing energy audits of air-conditioning systems • Proposing ways to improve the energy efficiency of air-conditioning systems according to audit results ◆ Assess the heat recovery methods used in air-conditioning systems and the ways to reduce energy consumption; propose improvements in these two aspects <p>6.3 Professionalism in performing energy audits of air-conditioning systems</p> <ul style="list-style-type: none"> ◆ Perform energy audits of air-conditioning systems according to legal requirements and codes of practice 	

7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to apply specialized knowledge and techniques to complete energy audits of air-conditioning systems.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses general knowledge of air-conditioning and refrigeration.