

1. Title	Select appropriate AC/DC motors for electrical and mechanical installations
2. Code	EMELDE207A
3. Range	Applicable to AC/DC motors design. Apply basic operating principles of simple AC/DC motors to assess general operation performance of the motors for general electrical and mechanical work, such as water pumps of buildings.
4. Level	2
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Understand simple AC/DC motor principles</p> <ul style="list-style-type: none"> ◆ Understand basic operating principles of single-phase and three-phase AC motors ◆ Understand the relationship between speed and torque of AC/DC motors ◆ Understand the current difference between star connection and delta connection of three-phase AC motors ◆ Understand the relationship between starting methods of DC motors and current <p>6.2 Select appropriate AC/DC motors for electrical and mechanical installations</p> <ul style="list-style-type: none"> ◆ Calculate the power, current and voltage of AC/DC motors ◆ Assess general operation performance of AC/DC motors, such as the relationship between speed and torque, efficiency and power factor ◆ Assess the performance of general starting methods for AC/DC motors, such as direct starting, star-delta starting, etc. ◆ Select appropriate AC/DC motors for electrical and mechanical installations
7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to select appropriate type of motors for electrical and mechanical installations.
8. Remarks	