

1. Title	Master the performance requirements for power generation or transmission and distribution network to perform design work
2. Code	EMELDE503A
3. Range	Applicable to design work for power generation or transmission and distribution network equipment. Implement the design techniques, conceptual requirements, abstract theories and skills for various types of different installations of various levels of transmission and distribution network, and analyze, re-organize and assess performance information of various types of power systems to perform design work.
4. Level	5
5. Credit	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Understand the performance requirements on different design techniques, operation, repair and maintenance, etc. for various levels of generation installations and transmission and distribution network, and the operation of the Safety Rules (Electrical)</p> <ul style="list-style-type: none"> <li>◆ Understand the design performance requirements on operation, testing, repair, remote control and protection system, etc. of various levels of generation installations and transmission and distribution network such as: active power and non-active power control, voltage regulation control, stability, safety, synchronous speed control, transmission and distribution network operation monitoring, etc.</li> <li>◆ Master the operation of the Safety Rules (Electrical) including: operation, testing, repair, etc.</li> </ul> <p>6.2 Implement design tasks for various levels of generation installations and transmission and distribution network</p> <ul style="list-style-type: none"> <li>◆ Master the operation of the Safety Rules (Electrical) including: operation, testing, repair, etc. to implement transmission and distribution network equipment system design</li> <li>◆ Master generation installations and transmission and distribution network design performance requirements to implement various levels of generation installations and transmission and distribution network equipment design</li> </ul> <p>6.3 Professionalism in designing power network</p> <ul style="list-style-type: none"> <li>◆ Follow the regulations and safety guidelines for the industry to ensure that power network design is implemented safely and the power generation or transmission and distribution network are safe and reliable to use</li> </ul>

7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: (i) Capable to master the operation of the Safety Rules (Electrical) in order to design transmission and distribution network; and (ii) Capable to implement design tasks for the specified generation installations or transmission and distribution network installations according to different design techniques for various levels of generation installations or transmission and distribution network, the performance requirements on operation, repair and maintenance, etc..
8. Remarks	