

1. Title	Implement the design of high voltage generation or transmission and distribution network
2. Code	EMELDE502A
3. Range	Applicable to the design work of high voltage generation or transmission and distribution network equipment. Critically analyze and assess with evidence all the terms and conditions, contract specifications, design drawings, etc. in client's tender specifications; implement design items for generation or various levels of transmission and distribution network and associated installations.
4. Level	5
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Understand various design requirements for high voltage generation or transmission and distribution network</p> <ul style="list-style-type: none"> ◆ Understand engineering contract requirements for high voltage generation or transmission and distribution network, including contract's general specifications, contract's particular specifications, relevant international standards, project schedules, details of work procedures, engineering quotation checklist, tender drawings, etc. ◆ Understand technical requirements on the design of high voltage generation or transmission and distribution network installations and associated equipment, including manufacturer's technical specifications, system arrangement for electrical installations, protection system plan, etc. <p>6.2 Implement the design of high voltage generation or transmission and distribution network according to engineering contract requirements</p> <ul style="list-style-type: none"> ◆ Implement the design of high voltage generation or transmission and distribution network according to engineering contract requirements. Design works include: <ul style="list-style-type: none"> • Consider the characteristics and constraints of the work site to select power facilities and devices that meet the technical requirements such as assembly, operation, testing and repair, etc. • Consider the characteristics and constraints of the work site to select materials that meet the technical requirements, such as insulated tile bottles, stainless steel materials, overhead lines materials, etc. • Draw high voltage generation or transmission and distribution network system single-line diagrams and floor configuration plans for the installations • Consider the operational requirements for generation equipment or transmission and distribution network to select appropriate computer control system software and hardware control and protection circuit • High voltage generation equipment or transmission and distribution network design arrangement

	<p>6.3 Professionalism in designing high voltage generation or transmission and distribution network system and associated installations</p> <ul style="list-style-type: none"> ◆ Follow the regulations and safety guidelines for the industry to ensure that the designs of high voltage generation or transmission and distribution network system and associated installations are safe and reliable to use
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to implement design tasks for the specified generation equipment or transmission and distribution network according to the engineering contract requirements for high voltage generation equipment or transmission and distribution network.</p>
8. Remarks	