

1. Title	Distinguish various high voltage equipment		
2. Code	111487L2		
3. Range	Applicable to the design of high voltage system, which involves understanding the structure, type, working principles and application of different equipment using in high voltage system.		
4. Level	2		
5. Credit	2		
6. Competency			<u>Performance Requirements</u>
	6.1	Understand the structure, type, working principles and application of different equipment using in high voltage system	◆ Understand the structure, type, working principles and application of different equipment using in high voltage system, e.g.: ➤ High-voltage overhead line - insulators, lightning arrestor, damper, etc. ➤ High-voltage cables - types of cable, structure of cable, materials of insulation and conductor. ➤ Basic features and types of power switchgear and transformers, e.g. gas-insulated, dry-type, oil-insulated, class of insulation, ratings, vector groups, tap-changer, forced-cooling radiator, safety devices, temperature sensors, earthing resistor, etc., used in the power generation, transmission and distribution substations. ➤ Basic concepts and usage of reactors and capacitor banks. ➤ Basic concepts and construction of High-voltage insulators. ➤ Types of current transformers, e.g. Protection Current Transformer (PCT) & Measurement Current Transformer (MCT), and voltage transformers, e.g. Potential Transformer (PT) & Capacity Voltage Transformer (CVT). ➤ General types of protective relays, e.g. mechanical, electronic, numerical, etc., used for high-voltage equipment.

	6.2	Distinguish various equipment for high voltage system	◆ Distinguish various equipment used in high voltage system design for different purpose, e.g. generation, transmission, distribution and protection etc.
	6.3	Exhibit professionalism in application of high voltage equipment in high voltage installation	◆ Follow the Code of Practice for the Electricity (Wiring) Regulations and relevant standards in application of high voltage equipment in high voltage installation.
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: (i) Capable to distinguish various equipment used in high voltage system and understand the structure, type, working principles and application of different equipment using in high voltage system.		
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic electrical and mechanical knowledge.		