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| 1. Title               | Design safe and efficient control, interlocking and protection systems for power supply system  |
| 2. Code                | EMCUDE503A  |
| 3. Range               | With regard to electrical and mechanical engineering design, understand the working principles of the power supply system (including transmission and distribution systems), and its protection devices, of an electricity company in order to design efficient, effective and reliable control, interlocking and protection systems.   |
| 4. Level               | 5   |
| 5. Credit              | 6   |
| 6. Competency          | <p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Working principles of power supply systems(from transmission to distribution) in Hong Kong</p> <ul style="list-style-type: none"> <li>◆ Understand the working principles of power supply systems (including supply, transmission, distribution), and their protection devices, in Hong Kong</li> <li>◆ Understand the operating principles of protection device of different voltages and zones in a power supply system, such as protection relay, etc.</li> </ul> <p>6.2 Design safe and efficient control, interlocking and interlocking systems</p> <ul style="list-style-type: none"> <li>◆ Calculate data of different protection device in order to set the safe current value and cut-off time</li> <li>◆ Design control, interlocking and protection systems for power supply system</li> </ul> |
| 7. Assessment Criteria | <p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to calculate correctly safe data for protection device of different circuits of the power supply system in order to design efficient, effective and reliable control, interlocking and protection systems.</p>  |
| 8. Remarks             | The credit value of this unit of competency is set on the presumption that the person already possesses knowledge of power supply system.   |