

1. Title	Formulate installation instructions for railway overhead feeder system equipment and electricity quality improvement devices
2. Code	EMRAIN504A
3. Range	Formulate installation instructions for the switching devices, control circuits, protection devices and electricity quality improvement devices of the railway overhead feeder system by referring to their installation guidelines, and considering the overall design of the railway overhead power supply system.
4. Level	5
5. Credits	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Design and installation principles of railway overhead feeder system equipment</p> <ul style="list-style-type: none"> ◆ Be familiar with the structure and design of railway overhead feeder system equipment ◆ Apply the installation guidelines provided by the manufacturer ◆ Master the standard for installing railway overhead feeder system equipment ◆ Be familiar with the applications of instruments and tools commonly used for installing railway overhead feeder system equipment ◆ Design and arrange special tools for installation <p>6.2 Method and procedures of formulating installation instructions for railway overhead feeder system equipment</p> <ul style="list-style-type: none"> ◆ By referring to the design of railway overhead feeder system equipment and devices and the installation guidelines provided by the manufacturer, and considering the overall railway design, capable to draft installation instructions for the railway overhead feeder system equipment and devices, including: <ul style="list-style-type: none"> • Installation procedures • Installation standards • Adjustments and preliminary function tests • Points to note during installation ◆ Capable to test the draft installation instructions ◆ Capable to amend and formulate installation instructions for railway overhead feeder system equipment ◆ Capable to draft, test and formulate installation instructions for the power switching devices, circuit breakers, interlock devices and protection devices of the overhead feeder system ◆ Capable to draft, test and formulate installation instructions for the electricity quality improvement devices

	<ul style="list-style-type: none"> ◆ Capable to draft, test and formulate installation instructions for the control circuits and devices including PLC control units, and control and display circuits ◆ Capable to draft, test and formulate installation instructions for the protection circuits and devices including distance and district overcurrent and earthing fault protection devices <p>6.3 Professionalism in formulating installation instructions for railway overhead feeder system equipment</p> <ul style="list-style-type: none"> ◆ Capable to formulate installation instructions and standards for railway overhead feeder system equipment according to the standards and requirements for work safety, health, environmental protection and quality management of railway works ◆ Understand the safety guidelines as required by the law and codes of practice in formulating installation instructions for railway overhead feeder system equipment
<p>7. Assessment Criteria</p>	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to draft installation instructions for railway overhead feeder system equipment in a particular region, including switching devices, control circuits, protection devices and electricity quality improvement devices, in compliance with the installation requirements for railway overhead feeder system; and</p> <p>(ii) Capable to test the effectiveness of the draft installation instructions and make amendments effectively.</p>
<p>8. Remarks</p>	<p>The credit value of this unit of competency is set on the presumption that the person already possesses professional knowledge of overhead feeder systems.</p>