

1. Title	Formulate instructions and plans for the overall inspection, testing and commissioning of railway overhead feeder systems
2. Code	EMRAIT602A
3. Range	Refer to the overall design of railway overhead feeder systems and review the scope of instructions for inspection, testing and commissioning of overhead line and switch room devices of overhead feeder systems to formulate instructions and plans for the overall inspection, testing and commissioning of railway overhead feeder systems.
4. Level	6
5. Credits	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Overall design, performance requirements and overall commissioning of railway overhead feeder systems</p> <ul style="list-style-type: none"> ◆ Master the techniques of reviewing, assessing, integrating and developing performance requirements and overall design guidance information for railway overhead feeder systems ◆ By applying specialized power supply engineering knowledge, integrate and develop the requirements for the overall design of railway overhead feeder systems into performance standards for various component system equipment ◆ Master the techniques of designing overall testing of railway overhead feeder systems according to performance standards <p>6.2 Methods and procedures of formulating instructions and plans for the overall inspection, testing and commissioning of railway overhead feeder systems</p> <ul style="list-style-type: none"> ◆ Capable to formulate the following testing instructions for railway overhead feeder systems by referring to the overall railway design and the overall design of railway overhead feeder systems: <ul style="list-style-type: none"> • Full load test • Special loaded test when a particular power supply breaks down • Immunization test • Harmonic test ◆ Capable to perform full load tests, and loaded tests, immunization tests and harmonic tests under special conditions according to testing instructions ◆ Capable to analyze testing data ◆ Capable to formulate commissioning procedures and verification reports required for railway overhead feeder systems, including <ul style="list-style-type: none"> • Various system inspection, testing and commissioning reports • Comprehensive testing reports for overhead feeder systems ◆ Capable to use the inspection instruments and tools for overhead feeder system effectively, including some high voltage testing instruments

	<p>6.3 Professionalism in formulating instructions and plans for the overall inspection, testing and commissioning of railway overhead feeder systems</p> <ul style="list-style-type: none"> ◆ Formulate instructions and plans for the inspection, testing and commissioning of railway overhead feeder systems according to the standards and requirements for 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 instructions and plans for the inspection, testing and commissioning of railway overhead feeder systems
<p>7. Assessment Criteria</p>	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> (i) Capable to draft an overall testing instruction for overhead feeder systems that complies with the commissioning requirements for power supply systems; and (ii) Capable to perform overall testing for railway overhead feeder systems and analyze testing data effectively, and capable to formulate requirements for overall commissioning procedures and verification reports for railway overhead feeder systems effectively.
<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 engineering and railway operation.</p>