

1. Title	Formulate installation instructions for railway signal and control system equipment
2. Code	EMRAIN505A
3. Range	Formulate installation instructions for the various equipment and secondary systems of the railway signal and control system by referring to their design, and considering the overall installation of the railway signal and control 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 signal and control system equipment</p> <ul style="list-style-type: none"> ◆ Be familiar with the structure and design of railway signal and control system equipment ◆ Apply the installation guidelines provided by the manufacturer ◆ Master the standard for installing railway signal and control system equipment ◆ Be familiar with the applications of instruments and tools commonly used for installing railway signal and control system equipment <p>6.2 Method and procedures of formulating installation instructions for railway signal and control system equipment</p> <ul style="list-style-type: none"> ◆ By referring to the design of railway signal and control system equipment and devices and the installation guidelines provided by the manufacturer, and considering the work safety of the installation workers, capable to draft installation instructions for the system equipment, including: <ul style="list-style-type: none"> • Installation procedures • Installation standards • Adjustments and preliminary function tests of the equipment • Safety precautions during installation ◆ Capable to test, amend and formulate installation instructions for the traffic management system ◆ Capable to draft, test and formulate installation instructions for the railway signal interlock system ◆ Capable to draft, test and formulate installation instructions for the trackside equipment of railway signal and control systems including points and the SCADA system ◆ Capable to draft, test and formulate installation instructions for the automatic train control (ATC) system equipment on the train

	<p>6.3 Professionalism in formulating installation instructions for railway signal and control system equipment</p> <ul style="list-style-type: none"> ◆ Capable to formulate installation instructions and standards for railway signal and control 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 signal and control system equipment
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> (i) Capable to draft installation instructions for railway signal and control system equipment including the trackside equipment and the ATC system of trains in compliance with the installation requirements for railway signal and control system; and (ii) Capable to test the effectiveness of the draft installation instructions and make amendments effectively.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses professional knowledge of electronic control circuit and railway signal system engineering.</p>