

1. Title	Formulate installation instructions for mechanical equipment of trains
2. Code	EMRAIN501A
3. Range	Formulate installation instructions for mechanical equipment of trains by referring to their design and the installation guidelines provided by the manufacturer, and considering the overall installation of trains.
4. Level	5
5. Credits	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Design and installation principles of mechanical equipment of trains</p> <ul style="list-style-type: none"> ◆ Be familiar with the structure and design of mechanical equipment of trains ◆ Apply the installation guidelines provided by the manufacturer ◆ Master the standard for installing mechanical equipment of trains ◆ Be familiar with the applications of instruments and tools commonly used for installing mechanical equipment of trains ◆ Design and arrange special tools for installation <p>6.2 Method and procedures of formulating installation instructions for mechanical equipment of trains</p> <ul style="list-style-type: none"> ◆ By referring to the design of train bogies, gangways and couplers and the installation guidelines provided by the manufacturer, and considering the overall installation of trains, capable to draft installation instructions for the train bogies, gangways and couplers, 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 train bogies, gangways and couplers ◆ Capable to draft, test and formulate installation instructions for the friction brake system of trains ◆ Capable to draft, test and formulate installation instructions for the wheel slide protection devices of trains ◆ Capable to draft, test and formulate installation instructions for the train door mechanical devices of trains ◆ Capable to draft, test and formulate installation instructions for train door control and protection devices of trains ◆ Capable to draft, test and formulate installation instructions for air-conditioners of trains and their control equipment

	<p>6.3 Professionalism in formulating installation instructions for mechanical equipment of trains</p> <ul style="list-style-type: none"> ◆ Capable to formulate installation instructions and standards for mechanical equipment of trains 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 mechanical equipment of trains
<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 installation instructions for specified mechanical equipment of trains in compliance with the installation requirements for train equipment; and (ii) Capable to test the effectiveness of the draft installation instructions and make amendments 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 mechanical engineering and the mechanical equipment of trains.</p>