

1. Title	Formulate an overall maintenance policy and plan for the railway system
2. Code	EMRAMA701A
3. Range	Formulate an overall maintenance policy and plan for the railway system, including the design and division of work of its overall maintenance system, so as to respond to the requirements on the overall quality and efficiency of the railway transportation service.
4. Level	7
5. Credits	20
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Studies and skills to formulate an overall maintenance policy and plan for the railway system</p> <ul style="list-style-type: none"> <li>◆ Master the expertise, including electrical and mechanical knowledge, in railway works in various disciplines, and apply the expertise to review, analyze, consolidate and evaluate the performance and trend data of the entire railway system, and to formulate an overall maintenance policy and plan</li> <li>◆ Master the skills in analyzing customers' requirements, development trend and culture of railway transportation service</li> <li>◆ Master the expertise in professional management and human relationship and the skills in coordinating railway operational departments</li> <li>◆ Master the skills in analyzing, reformatting and evaluating performance data of railway system equipment, and apply such skills to judge, formulate and review the effectiveness of the train maintenance policy and plan</li> </ul> <p>6.2 Methods and procedures of formulating an overall maintenance policy and plan for the railway system</p> <ul style="list-style-type: none"> <li>◆ Apply electrical and mechanical maintenance techniques and management knowledge to analyze the requirements on the overall quality and efficiency of the railway transportation service, including the requirements on operation frequency, journey time, safety, reliability, comfort, environmental protection and efficiency, so as to set the goal for the overall quality and efficiency of train maintenance</li> <li>◆ Master the development trend of customers' requirements on railway service quality and efficiency</li> <li>◆ Apply electrical and mechanical engineering techniques and management skills to formulate an innovative overall maintenance policy and plan for the railway system according to the goal for the quality and efficiency of railway system maintenance, with the following included: <ul style="list-style-type: none"> <li>• Strategy to continuously improve the methods of maintenance</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Strategy of maintenance unit structure management</li> <li>• Human resources management strategy</li> <li>• Strategy to introduce and apply new technologies</li> <li>• Cost-effectiveness strategy</li> <li>• Risk management strategy</li> <li>• Communication channels</li> </ul> <ul style="list-style-type: none"> <li>◆ Formulate mechanisms to measure, review and improve the maintenance management policy and plan</li> </ul> <p>6.3 Professionalism in formulating an overall maintenance policy and plan for the railway system</p> <ul style="list-style-type: none"> <li>◆ Formulate an overall maintenance policy and plan for the railway system according to the standards and requirements for safety, health, environmental protection and quality management of railway works</li> <li>◆ Understand the safety guidelines as required by the law and codes of practice when formulating an overall maintenance policy and plan for the railway system</li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to formulate an innovative overall maintenance policy and plan for the railway system; and</p> <p>(ii) Capable to formulate effective mechanisms to measure, review and improve the overall maintenance policy and plan for the railway system.</p>
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses the expertise in electrical and mechanical works in various disciplines and operation management.</p>