

1. Title	Verify the design of automatic train control (ATC) system equipment on the train and perform design reviews
2. Code	EMRADE524A
3. Range	Verify the design of ATC system equipment and perform design reviews according to the requirements for the overall design of railway signal and control systems and match with train operation equipment.
4. Level	5
5. Credits	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Design requirements for ATC system equipment on the train to match with the overall design of railway signal control systems and train operation equipment</p> <ul style="list-style-type: none"> <li>◆ Understand the design requirements for ATC system equipment on the train and master the key points. The equipment includes: <ul style="list-style-type: none"> <li>• ATC electronic control equipment on the train</li> <li>• Interface devices</li> <li>• Receive and transmit antennas</li> </ul> </li> <li>◆ Master the techniques of coordinating the design of ATC system equipment on the train with the overall design of railway signal and control systems and train operation equipment</li> </ul> <p>6.2 Methods and procedures of verifying the design of ATC system equipment on the train and performing design reviews</p> <ul style="list-style-type: none"> <li>◆ Verify the design of the ATC system equipment on the train according to the design requirements for ATC system</li> <li>◆ Verify the design of the ATC system equipment on the train matching with the traction control system and brake system of the train</li> <li>◆ Review comprehensively the design of ATC system equipment on the train according to the requirements for the overall design of the railway signal and control system</li> </ul> <p>6.3 Professionalism in verifying and reviewing the design of ATC system equipment on the train</p> <ul style="list-style-type: none"> <li>◆ Verify the design of ATC system equipment on the train and perform design reviews according to the standards and requirements for work 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 in verifying and reviewing the design of ATC system equipment on the train</li> </ul>

7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> <li>(i) Capable to verify the design of ATC system equipment on the train efficiently according to relevant design requirements and standards; and</li> <li>(ii) Capable to review the design of ATC system equipment on the train efficiently to match with the railway signal and control systems and train operation equipment.</li> </ul>
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses professional knowledge of electronics and communication.</p>