

1. Title	Verify the design of railway signal interlock systems and perform design reviews
2. Code	EMRADE522A
3. Range	Verify the design of railway signal interlock systems, including the central interlock components and trackside components, and perform design reviews according to the requirements for the overall design of railway signal and control systems.
4. Level	5
5. Credits	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Design requirements for railway signal interlock systems to match with the overall design of railway signal and control systems</p> <ul style="list-style-type: none"> <li>◆ Understand the design requirements for railway signal interlock systems and master the key points. The equipment includes: <ul style="list-style-type: none"> <li>• Central interlock components</li> <li>• Trackside components</li> <li>• Interface devices</li> <li>• Signal and information transmission equipment</li> </ul> </li> <li>◆ Master the techniques of matching the design of railway signal interlock systems with the overall design of railway signal and control systems</li> </ul> <p>6.2 Methods and procedures of verifying the design of railway signal interlock systems and performing design reviews</p> <ul style="list-style-type: none"> <li>◆ Verify the design of central interlock components, including PLC components and electronic circuits components, according to the requirements for railway signal interlock</li> <li>◆ Verify the design of trackside components, including PLC components, electronic circuits components, interface devices and information transmission equipment, according to the requirements for railway signal interlock</li> <li>◆ Review comprehensively the design of railway signal interlock systems according to the requirements for the overall design of railway signal and control systems</li> </ul> <p>6.3 Professionalism in verifying and reviewing the design of railway signal interlock systems</p> <ul style="list-style-type: none"> <li>◆ Verify the design of railway signal interlock systems 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 railway signal interlock systems</li> </ul>

7. Assessment Criteria	The integrated outcome requirement of this unit of competency is:  (i) Capable to verify the design of railway signal interlock systems efficiently according to the overall requirements for railway signal and control systems and design standards for railway signal interlock systems; and  (ii) Capable to review the design of railway signal interlock systems efficiently to match with the overall requirements for railway signal and control systems.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses professional knowledge of railway signal and control systems.