

1. Title	Install trackside equipment of the railway signalling and control system
2. Code	EMRAIN308A
3. Range	Install trackside equipment of the railway signalling and control system at railway premises, signal switch rooms and control rooms according to installation instructions and drawings, and test, adjust and set such equipment and wiring.
4. Level	3
5. Credits	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Structure and working principles of railway signalling and control system</p> <ul style="list-style-type: none"> <li>◆ Understand the working principles of railway signalling and control system</li> <li>◆ Understand the structure and working principles of railway signalling interlock system</li> <li>◆ Understand the structure and working principles of the following trackside equipment of the railway signalling and control system <ul style="list-style-type: none"> <li>• PLC and control units</li> <li>• Train location detecting devices</li> <li>• Platform screen door control devices</li> <li>• Railway signal display devices</li> <li>• Electronic interface devices</li> <li>• Points switches</li> </ul> </li> </ul> <p>6.2 Methods and procedures of installing and testing trackside equipment of the railway signalling and control system</p> <ul style="list-style-type: none"> <li>◆ Able to read installation instructions and circuit drawings and select suitable information for use</li> <li>◆ Install the trackside equipment of the railway signalling and control system according to the installation instructions and drawings</li> <li>◆ Adjust, test and set the trackside equipment of the railway signalling and control system according to the installation instructions and drawings</li> <li>◆ Use typical tools and instruments for installing and checking electronic and electrical equipment effectively</li> </ul> <p>6.3 Professionalism in installing trackside equipment of the railway signalling and control system</p> <ul style="list-style-type: none"> <li>◆ Capable to follow the requirements of installation instructions to ensure that the procedures and quality of installation are up to standard</li> <li>◆ Understand the safety guidelines and codes of practice for railway signalling works in handling installation and testing of trackside equipment of the railway signalling and control system</li> </ul>

7. Assessment Criteria	The integrated outcome requirement of this unit of competency is:  (i) Capable to install and adjust the trackside equipment of the railway signalling and control system correctly as required; and  (ii) Capable to test the operation of the trackside equipment of the railway signalling and control system effectively when working with train receivers.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic electronic and electrical knowledge.