



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **TLI31910 Certificate III in Mechanical Rail Signalling**

**Release: 1**

## **TLI31910 Certificate III in Mechanical Rail Signalling**

### **Modification History**

Not Applicable

### **Description**

#### **Rationale:**

This is a general qualification for a person engaged in the installation and maintenance of mechanical rail signalling equipment.

It involves a broad range of skilled applications applied in a wide variety of contexts, which may involve application of some discretion and judgement in selecting equipment, services or contingency measures. It may also include responsibility for coordinating the work of others.

### **Pathways Information**

Not Applicable

### **Licensing/Regulatory Information**

Not Applicable

## Entry Requirements

### Entry requirements:

The entry requirements for this qualification are the **8 units** of competency listed below or equivalent vocational competency gained by working within the rail infrastructure environment.

### Entry requirement units:

Field	Unit
<b>B Equipment Checking and Maintenance</b>	TLIB1028A Maintain and use hand tools
<b>D Load Handling</b>	TLID1001A Shift materials safely using manual handling methods
<b>E Communication and Calculation</b>	TLIE2001A Present routine information TLIE1003A Participate in basic workplace communication
<b>F Safety Management</b>	TLIF1001A Follow occupational health and safety procedures TLIF2062A Apply awareness of safeworking rules and regulations CPCCOHS1001A Work safely in the construction industry
<b>U Environment</b>	TLIU2008A Apply environmental procedures to rail infrastructure

**TLI31910 Certificate III in Mechanical Rail Signalling (continued)**

## Employability Skills Summary

### Employability Skills Summary for TLI31910 Certificate III in Mechanical Rail Signalling

The following table contains a summary of the employability skills as identified by the Transport and Logistics Industry for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
---------------------	--

**Employability Skill****Industry/enterprise requirements for this qualification include:****Communication**

- Implement and monitor communication systems and procedures required when working on mechanical rail signalling
- Read and interpret relevant regulations, instructions, signs and labels applicable to working on mechanical rail signalling
- Speak clearly and directly on matters related to rail operations and, in particular, working on mechanical rail signalling
- Listen to and interpret verbal information related to working on mechanical rail signalling
- Write documents as part of duties, including, where applicable, completion of relevant forms, timesheets, service logs and incident reports
- Negotiate issues with others in the course of working on mechanical rail signalling
- Recognise and interpret non-verbal signs, signals and behaviour

**Teamwork**

- Use relevant communication equipment.
- Collaborate with others in the course of working on mechanical rail signalling
- Provide leadership to other personnel in the workplace
- Motivate others in the workplace
- Assist others in the workplace to achieve and maintain competence
- Assist in the resolution of any interpersonal conflicts that may arise during work operations
- Avoid and prevent the harassment of others in the workplace
- Work with persons of different ages, gender, race, religion, political persuasion, etc.

**TLI31910 Certificate III in Mechanical Rail Signalling (continued)****Employability Skill****Industry/enterprise requirements for this qualification include:****Problem solving**

- Identify and solve or report problems arising in the course

<b>Employability Skill</b>	<p><b>Industry/enterprise requirements for this qualification include:</b></p> <p>of working on mechanical rail signalling</p> <ul style="list-style-type: none"> <li>• Monitor and anticipate problems that may occur in the course of working on mechanical rail signalling and take appropriate action to report or resolve the problems within limits of responsibility</li> <li>• Identify and control hazards and risks in a range of situations related to working on mechanical rail signalling and take appropriate precautions</li> <li>• Use mathematics to solve various calculations related to working on mechanical rail signalling.</li> </ul>
<b>Initiative and enterprise</b>	<ul style="list-style-type: none"> <li>• Modify activities dependent on differing situations and contingencies</li> <li>• Take appropriate initiatives in a range of operational situations</li> <li>• Respond appropriately to any changes in equipment, standard operating procedures and the working environment.</li> </ul>
<b>Planning and organising</b>	<ul style="list-style-type: none"> <li>• Follow and apply operational and emergency plans, systems and procedures</li> <li>• Monitor systems and procedures for compliance with regulations and codes of practice</li> <li>• Implement the workplace security and safety management systems</li> <li>• Monitor and evaluate operational performance and compliance</li> <li>• Collect and interpret information needed in the course of working on mechanical rail signalling</li> <li>• Manage time and priorities in the course of working on mechanical rail signalling.</li> </ul>
<b>Self management</b>	<ul style="list-style-type: none"> <li>• Interpret and apply regulations and instructions</li> <li>• Evaluate own work performance.</li> </ul>

**TLI31910 Certificate III in Mechanical Rail Signalling (continued)**

<b>Employability Skill</b>	<p><b>Industry/enterprise requirements for this qualification include:</b></p>
<b>Learning</b>	<ul style="list-style-type: none"> <li>• Contribute to learning and assessment activities in the workplace</li> <li>• Assist others to adapt to any changes in workplace systems, equipment, procedures and the workplace operating environment</li> <li>• Assist in the instruction, coaching or mentoring of</li> </ul>

**Employability Skill****Industry/enterprise requirements for this qualification include:**

- others in the workplace
- Contribute to the assessment of the competence of others in the workplace
- Assist in the creation of a learning environment in the rail industry workplace
- Adapt own competence in response to any changes in the processes and equipment used in train driving
- Update own knowledge and skills required for working on mechanical rail signalling.
- Use equipment and materials required when working on mechanical rail signalling
- Follow and apply operational and servicing instructions for equipment used when working on mechanical rail signalling
- Follow and apply OH&S procedures when using rail equipment and facilities.

**Technology****Packaging Rules****Requirements for completion of the qualification:**

A successful assessment outcome for a total of **18 units** of competency comprising:

- **12 core units** listed below

plus

- **6 elective units** which should be taken from the **elective units** listed below or may include **up to 3 units** drawn with appropriate contextualisation from any currently endorsed national Training Package or Accredited Course.

Where the choice of a unit from another currently endorsed national Training Package or accredited course is made, this unit must contribute towards the vocational outcome of the qualification.

Where imported units are selected, care must be taken to ensure that all pre-requisites specified are complied with.

**Core units:**

Field	Unit
<b>B Equipment Checking and Maintenance</b>	TLIB3107A Test mechanical signalling equipment and isolate faults
	TLIB3046A Service and clean mechanical

<b>Field</b>	<b>Unit</b>
	signalling equipment and infrastructure TLIB3047A Repair and adjust mechanical signalling equipment and infrastructure TLIB3048A Carry out off-site repair, overhaul and assembly of mechanical signalling equipment TLIB3103A Install and maintain mechanical signalling locking and interlocking devices
<b>E Communication and Calculation</b>	TLIE2008A Process workplace documentation
<b>F Safety Management</b>	TLIF3003A Implement and monitor occupational health and safety procedures TLIF2010A Apply fatigue management strategies
<b>J Quality</b>	TLIJ3002A Apply quality systems
<b>K Technology</b>	TLIK2010A Use infotechnology devices in the workplace
<b>S Construction and Installation</b>	TLIS3005A Install mechanical infrastructure for signalling TLIS4007A Decommission mechanical signalling infrastructure equipment and interlocking equipment from service

### TLI31910 Certificate III in Mechanical Rail Signalling (continued)

#### Elective units:

<b>Field</b>	<b>Unit</b>
<b>A Load Handling</b>	TLIA3039A Receive and store stock
<b>B Equipment Checking and Maintenance</b>	TLIB3058A Maintain aerial signal/telecommunication lines and cables TLIB1093A Clean equipment and restore worksite
<b>E Communication and Calculation</b>	TLIE2007A Use communication systems
<b>F Safety Management</b>	TLIF2006A Apply accident/emergency procedures

<b>Field</b>	<b>Unit</b>
	TLIF3013A Coordinate breakdowns and emergencies TLIF3058A Apply safeworking rules and regulations to rail functions TLIF3063A Administer the implementation of fatigue management strategies RIIOHS204A Work safely at heights UETTDRRF02A Perform pole top rescue RIIOHS202A Enter and work in confined spaces
<b>G Teamwork</b>	TLIG1001A Work effectively with others TLIG3002A Lead a work team or group
<b>I Customer Service</b>	TLII1002A Apply customer service skills
<b>M Training and Assessment</b>	TAEDEL301A Provide work skill instruction TAEASS401A Plan assessment activities and processes TAEASS402A Assess competence
<b>S Construction and Installation</b>	TLIS2004A Install and maintain rail bonding systems TLIS2013A Install minor structures TLIS3023A Erect and mount structures and housings for signalling equipment
<b>U Environment</b>	NWP227B Control vegetation on a site
<b>W Equipment and Systems Operations</b>	TLIW3005A Perform direct burial of cables RIIOHS205A Control traffic with a stop-slow bat RIIHAN301A Operate elevating work platform CPCCSF2003A Cut&bend materials using oxy/LPG equipment