



**Australian Government**

# **TLI32111 Certificate III in Rail Structures**

**Release 3**

## TLI32111 Certificate III in Rail Structures

### Modification History

Release 2 - One unit updated to current version. Equivalent.

Release 1 - Changes to core and elective units. Packaging rules updated. Equivalent.

### Description

*Please note RTO to insert unit group selected from the group choice below on the testamur*

#### **Rationale:**

This is a general qualification for a person engaged in the rail infrastructure environment who performs tasks involving checking and repairing structures through a broad range of skilled applications in a wide variety of contexts. It 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.

#### **Job roles:**

Job roles and titles vary across different sectors. Possible job titles relevant to the groups listed below (job roles) include:

#### **Steel/Concrete/Masonry Structures Maintenance**

- Senior structures maintainer

#### **Timber Structures Maintenance**

- Senior structures maintainer
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### Pathways Information

Not Applicable

### Licensing/Regulatory Information

Not Applicable

## Entry Requirements

The entry requirement for this qualification is TLI21311 Certificate II in Rail Infrastructure (Structures) or relevant industry experience gained by working in the rail infrastructure (structures) environment.

## Employability Skills Summary

### Employability Skills Summary for: TLI32111 Certificate III in Rail Structures

The following table contains a summary of the employability skills as identified by the Transport and Logistics Industry for this qualification. The 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:
<b>Communication</b>	<ul style="list-style-type: none"> <li>• Implement and monitor communication systems and procedures required for inspecting and/or maintaining operations on rail structures</li> <li>• Read and interpret relevant procedures, instructions, signs and labels applicable to the supervision of inspection and/or maintenance operations on rail structures</li> <li>• Speak clearly and directly on matters related to inspection and/or maintenance operations on rail structures</li> <li>• Listen to and interpret verbal information related to inspection and/or maintenance operations on rail structures</li> <li>• Write and complete basic documents as part of duties</li> <li>• Negotiate issues with others in the course of inspection and maintenance operations on rail structures</li> <li>• Recognise and interpret non-verbal signs, signals and behaviour</li> <li>• Use relevant communication equipment</li> </ul>
<b>Teamwork</b>	<ul style="list-style-type: none"> <li>• Work effectively with others in the course of inspection and/or maintenance operations on rail structures</li> <li>• Provide leadership to team or work group</li> <li>• Motivate others in the workplace</li> <li>• Assist others in the workplace to achieve and maintain competence</li> <li>• Assist in the resolution of interpersonal conflicts that may arise during inspection and/or maintenance operations on rail structures</li> <li>• Avoid and prevent the harassment of others in the workplace</li> <li>• Work with persons of different ages, gender, race, religion, political persuasion, etc.</li> </ul>
<b>Problem solving</b>	<ul style="list-style-type: none"> <li>• Identify and solve or report problems arising in the course of inspection and/or maintenance operations on rail structures</li> </ul>

- Monitor and anticipate problems that may occur in the course of inspection and/or maintenance operations on rail structures and take appropriate action to report or resolve the problems within limits of responsibility
  - Identify and control hazards and risks in a range of rail infrastructure situations and take appropriate precautions
  - Use mathematics to solve various calculations related to inspection and/or maintenance operations on rail structures
  - Modify activities dependent on differing rail infrastructure situations and contingencies
  - Take appropriate initiative in a range of operational situations
  - Respond appropriately to changes in equipment, standard operating procedures and the work environment
- Initiative and enterprise**
- Follow and apply operational and emergency plans, systems and procedures
  - Implement workplace security and safety management systems
  - Monitor and evaluate operational performance and compliance
  - Collect and interpret information needed in the course of inspection and/or maintenance operations on rail structures
  - Organise and plan work activities
  - Manage time and priorities in the course of inspection and/or maintenance operations on rail structures
- Planning and organising**
- Interpret and apply procedures and instructions
  - Establish and follow own work plans and schedules
  - Evaluate own work performance
- Self management**
- Assist others to adapt to changes in workplace systems, equipment, procedures and the workplace operating environment
  - Assist in the instruction, coaching or mentoring of others in the workplace
  - Contribute to the assessment of competence of others in the workplace
  - Participate in updating own knowledge and skills required for inspecting and/or maintaining rail structures
- Learning**
- Use equipment and materials required during inspection and/or maintenance operations on rail structures
  - Follow and apply operational and servicing instructions for equipment used during inspection and/or maintenance operations on rail structures
  - Follow and apply OH&S procedures when using and servicing rail equipment and facilities
- Technology**

## Packaging Rules

### Requirements for completion of the qualification:

A successful assessment outcome for a total of **11 units** of competency comprising:

- **6 core units** listed below

plus

- **all 3 Group A specialist elective units** or **all 2 Group B specialist elective units** listed below

plus

- the remaining elective units, which are to be chosen as follows:

2 units from the general elective units listed below if Group A is chosen, or

3 units from the general elective units listed below if Group B is chosen

up to 2 elective units may be drawn with appropriate contextualisation from any currently endorsed national Training Package or accredited course, provided that the unit contributes to the vocational outcome of the qualification.

Where imported units are selected, care must be taken to ensure that all prerequisites specified in the unit are complied with.

### Core units:

Field	Unit
<b>E</b> <b>Communication and Calculation</b>	TLIE2007A Use communication systems
	TLIE2029A Conduct workplace information briefings
<b>F</b> <b>Safety Management</b>	TLIF3003A Implement and monitor occupational health and safety procedures
<b>J</b> <b>Quality</b>	TLIJ3002A Apply quality systems
<b>S</b> <b>Construction and Installation</b>	TLIS2013C Install minor structures
	TLIS3029B Implement structures maintenance and installation of minor structures

### Specialist elective units:

Select all units from one of the following specialist elective groups:

- Group A: Steel/Concrete/Masonry Structures Maintenance
- Group B: Timber Structures Maintenance

<b>Group A Steel/Concrete/Masonry Structures Maintenance</b>	
Field	Unit
<b>B</b> <b>Equipment</b>	TLIB2082A Repair steel structures

<b>Checking and Maintenance</b>	TLIB2083A Maintain bridge bearings
	TLIB2096A Repair concrete/masonry structures

<b>Group B Timber Structures Maintenance</b>	
<b>Field</b>	<b>Unit</b>
<b>B Equipment Checking and Maintenance</b>	TLIB2081A Repair timber structures
<b>S Construction and Installation</b>	TLIS2028A Install and replace transoms

**General elective units:**

<b>Field</b>	<b>Unit</b>
<b>B Equipment Checking and Maintenance</b>	TLIB2092A Operate minor mechanical equipment
	TLIB2097A Install and maintain guard rails
<b>E Communication and Calculation</b>	TLIE2008A Process workplace documentation
<b>F Safety Management</b>	TLIF2006A Apply accident-emergency procedures
	TLIF3058A Apply safeworking rules and regulations to rail functions
	TLIF3089A Implement fatigue management policies and procedures for rail infrastructure
<b>G Teamwork</b>	TLIG1001A Work effectively with others
<b>I Customer Service</b>	TLII1002A Apply customer service skills
<b>S Construction and Installation</b>	TLIS2012A Install and service rail lubrication equipment
	TLIS2027A Install and maintain surface track drainage
	TLIS2028A Install and replace transoms
	TLIS2033A Install and repair temporary track supports
	TLIS2034A Install and repair rail fastening systems
	TLIS2035A Install and repair fences and gates

	TLIS3037B Install and repair rail earthworks
<b>U Environment</b>	TLIU4001A Implement and monitor environmental protection policies and procedures
<b>W Equipment and Systems Operations</b>	MEM24001B Perform basic penetrant testing MEM24003B Perform basic magnetic particle testing TLIW3034A Apply protective coating systems to structures TLIW3035A Heat and cut materials using oxy-LPG equipment for the rail industry