



Australian Government

Department of Education, Employment and Workplace Relations

TLI21311 Certificate II in Rail Infrastructure

Release: 1

TLI21311 Certificate II in Rail Infrastructure

Modification History

Changes to core and elective units. Packaging rules revised. 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 basic operations within the rail infrastructure environment undertaking a range of tasks involving known routines and procedures, and taking some responsibility for the quality of work outcomes.

Job roles:

Job roles and titles vary across different sectors. Possible job titles relevant to this qualification include:

Rail infrastructure - Track Work:

- Track worker
- Track installer
- Track maintainer

Rail infrastructure - Structures:

- Structures maintainer

Rail infrastructure - Track Surfacing:

- Plant operator
- Mobile plant operator
- Way gang driver
-

Pathways Information

Not Applicable

Licensing/Regulatory Information

Not Applicable

Entry Requirements

Not Applicable

Employability Skills Summary

Employability Skills Summary for TLI21310 Certificate II in Rail Infrastructure

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:
Communication	<ul style="list-style-type: none"> • Use communication systems and procedures used in construction and/or maintenance of rail infrastructure • Read and follow relevant, instructions, manuals, notices and signs applicable to their role within the construction and/or maintenance of rail infrastructure • Speak clearly and directly on matters related to their role within the construction and/or maintenance of rail infrastructure • Complete documents as part of duties, including completion of relevant forms • Recognise and interpret non-verbal signs, signals and behaviour • Use relevant communication equipment.
Teamwork	<ul style="list-style-type: none"> • Participate in the resolution of any interpersonal conflicts that may arise during construction and/or maintenance of rail infrastructure • Avoid and prevent the harassment of others in the workplace • Collaborate with others in the course of construction and/or maintenance of rail infrastructure • Work with persons of different ages, gender, race, religion, political persuasion, etc.
Problem solving	<ul style="list-style-type: none"> • Identify and solve or report problems arising in the course of construction and/or maintenance of rail infrastructure • Recognise problems that may occur in the course of construction and/or maintenance of rail infrastructure and take appropriate action to report or resolve the problems within limits of responsibility • Recognise hazards and risks in a range of rail situations and take appropriate precautions.
Initiative and enterprise	<ul style="list-style-type: none"> • Respond appropriately to any changes in equipment, standard operating procedures and the working environment.
Planning and	<ul style="list-style-type: none"> • Follow and apply operational and emergency plans, systems and procedures

-
- | | |
|------------------------|---|
| organising | <ul style="list-style-type: none">• Comply with applicable rail and safety regulations and codes of practice• Follow and apply workplace security and safety management systems and safeworking requirements• Collect and interpret information needed in the course of the construction and/or maintenance of rail infrastructure within limits of responsibility• Manage time in the course of construction and/or maintenance of rail infrastructure. |
| Self management | <ul style="list-style-type: none">• Interpret and apply applicable instructions and procedures• Follow work plans and schedules• Check own work performance. |
| Learning | <ul style="list-style-type: none">• Participate in updating of own knowledge and skills required for rail activities, in response to any changes in the processes and equipment used in the construction and/or maintenance of rail infrastructure. |
| Technology | <ul style="list-style-type: none">• Operate equipment and tools required during the construction and/or maintenance of rail infrastructure• Follow and apply operational and servicing instructions for equipment used during the construction and/or maintenance of rail infrastructure• Follow and apply the applicable safeworking requirements and OH&S procedures when using rail equipment and facilities. |

Packaging Rules

Requirements for completion of the qualification:

A successful assessment outcome for a total of **16 units** of competency (depending on the group) comprising:

- the **8 core units** listed below

plus

- all units** from **one specialist elective** group (A, B or C) listed below

plus

- 2 elective units** from the **general elective units** listed below **if selecting Group A or C or 3 if selecting Group B**; all of which may be drawn with appropriate contextualisation from any currently endorsed national Training Package or accredited course, provided that the units contribute to the vocational outcome of the qualification

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

Core units:

Field	Unit
B Equipment Checking and Maintenance	TLIB1028A Maintain and use hand tools
D Load Handling	TLID1001A Shift materials safely using manual handling methods
E Communication and Calculation	TLIE1003A Participate in basic workplace communication
F Safety Management	TLIF1001A Follow occupational health and safety procedures TLIF2010A Apply fatigue management strategies TLIF2080B Safely access the rail corridor
U Environment	TLIU2008A Apply environmental procedures to rail infrastructure
W Equipment and Systems Operations	TLIW2001A Operate under track protection rules

Specialist elective units:

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

- Group A: Track Work
- Group B: Structures
- Group C: Track Surfacing

Group A		Track Work	
Field		Unit	
B Equipment Checking and Maintenance		TLIB2085A	Apply track fundamentals
		TLIB2092A	Operate minor mechanical equipment
S Construction and Installation		TLIS2030A	Carry out track ballasting
		TLIS2031A	Install railway sleepers
		TLIS2034A	Install and repair rail fastening systems
		TLIS2044A	Carry out rail installation

Group B		Structures	
Field		Unit	
B Equipment Checking and Maintenance		TLIB2084A	Carry out routine maintenance of structures
		TLIB2086A	Apply awareness of structures fundamentals
		TLIB2092A	Operate minor mechanical equipment
E Communication and Calculation		RIICCM201A	Carry out measurements and calculations
		RIICCM203A	Read and interpret plans and specifications

Group C		Track Surfacing	
Field		Unit	
B Equipment Checking and Maintenance		TLIB1093A	Clean equipment and restore worksite
		TLIB2001A	Check and assess operational capabilities of equipment
		TLIB2085A	Apply track fundamentals
		TLIB2091A	Measure and record track geometry
C Vehicle Operation		TLIC2058A	Travel medium or heavy self-propelled on-track equipment
		OR	
		TLIC2059A	Propel and operate light on-track equipment

Group C	Track Surfacing
S Construction and Installation	TLIS2030A Carry out track ballasting

General elective units:

Field	Unit
B Equipment Checking and Maintenance	TLIB1093A Clean equipment and restore worksite
	TLIB2121A Maintain rail joints
	TLIB2034A Maintain poles and associated hardware
	TLIB2091A Measure and record track geometry
	TLIB2097A Install and maintain guard rails
C Vehicle Operation	RIIMPO317A Conduct roller operations
	RIIMPO318B Conduct skid steer loader operations
	RIIMPO319A Conduct backhoe/loader operations
	RIIMPO320A Conduct civil construction excavator operations
	RIIMPO321B Conduct civil construction wheel loader operations
	RIIMPO322A Conduct civil construction tracked front end loader operations
	RIIMPO326A Conduct civil construction water cart operations
	TLIC3045A Operate road/rail vehicle
F Safety Management	RIIOHS302A Implement traffic management plan
	RIIOHS204A Work safely at heights
	RIIOHS205A Control traffic with a stop-slow bat
	TLIF2062A Apply awareness of safeworking rules and regulations
G Teamwork	TLIG1001A Work effectively with others
K Technology	TLIK2010A Use infotechnology devices in the workplace
S Construction and Installation	CPCCCM2007A Use explosive power tools
	CPCCCM2008A Erect and dismantle restricted height scaffolding
	RIICCM205A Carry out manual excavation

Field	Unit
	RIICCM207A Spread and compact materials manually RIICCM208A Carry out basic levelling RIICCM209A Carry out concrete work RIIHAN301A Operate elevating work platform TLIS2004A Install and maintain rail bonding systems TLIS2020A Install overhead wiring structure TLIS2027A Install and maintain surface track drainage TLIS2033A Install and repair temporary track supports TLIS2034A Install and repair rail fastening systems TLIS2035A Install and repair fences and gates
W Equipment and Systems Operations	TLIW3035A Heat and cut materials using oxy-LPG equipment for the rail industry TLIW2028A Identify the principles of ballast cleaning operations TLIW2029A Identify the principles of ballast regulator operations TLIW2030A Identify the principles of dynamic track stabiliser operations TLIW2031A Identify the principles of self-propelled rail grinder operations TLIW2032A Identify the principles of tamping machine operations TLIW2033A Identify the principles of mechanised track laying operations TLIW2038A Place and remove temporary speed restriction equipment