



Australian Government

TLI37121 Certificate III in Rail Infrastructure

Release 1

TLI37121 Certificate III in Rail Infrastructure

Modification History

Release 1. This is the first release of this qualification in the TLI Transport and Logistics Training Package.

Qualification Description

This is a general qualification for a person engaged in the rail infrastructure environment who performs tasks involving 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 this qualification include:

Rail Infrastructure – Track Maintenance and Construction

- senior track maintainer
- ganger

Rail Infrastructure – Turnout Installation

- specialist track installer
- ganger

Rail Infrastructure – Track Welding

- track welder

Rail Infrastructure – Track Examination

- track examiner

Rail Infrastructure – Rail Testing

- rail tester

Rail Infrastructure – Turnout Construction

- turnout builder
- points and crossings builder

Rail Infrastructure – Rail Track Surfacing

- rail track surfacer

Rail Infrastructure – Track Drainage Maintenance

- track drainage maintainer

Rail Infrastructure – Tram or Light Rail

- tram infrastructure track worker level 4

- light rail track worker.

Please note: RTO to insert on the testamur, the specialist elective unit group selected from the group choice below.

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

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

Packaging Rules

A total of **11 units of competency** comprising:

- **4 core units** listed below, plus
- all units within one of the specialist elective unit groups (job roles) from Group A, Group B, Group C, Group D, Group E, Group F, Group G, Group H or Group I listed below; plus
- **2 general elective units** from Group J listed below if selecting Groups: C or I; or
- **3 general elective units** from Group J listed below if selecting Groups: A or B; or
- **4 general elective units** from Group J listed below if selecting Groups: D, E, F, G or H.

Up to **2 of the general elective units** may be selected from any relevant nationally endorsed Training Package. The general elective units must contribute to the vocational outcomes of the qualification.

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

Where a prerequisite is attached to a unit it is identified by the symbol ⊥

Core units

TLIE2007	Use communications systems
TLIE2029	Conduct workplace information briefings
TLIF3003	Implement and monitor work health and safety procedures
TLIJ0003	Apply quality systems

Specialist elective units

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

- Group A: Track Maintenance and Construction
- Group B: Turnout Installation
- Group C: Track Welding

- Group D: Track Examination
- Group E: Rail Testing
- Group F: Turnout Construction
- Group G: Rail Track Surfacing
- Group H: Track Drainage Maintenance
- Group I: Tram or Light Rail.

Specialist elective groups

Group A: Track Maintenance and Construction

RIICCM201E	Carry out measurements and calculations
RIICCM203E	Read and interpret plans and job specifications
TLIB3094	Check and repair track geometry
TLIS3026	Implement track maintenance and construction

Group B: Turnout Installation

RIICCM201E	Carry out measurements and calculations
RIICCM203E	Read and interpret plans and job specifications
TLIS0003	Install turnouts
TLIS3026	Implement track maintenance and construction

Group C: Track Welding

RIICCM201E	Carry out measurements and calculations
RIICCM203E	Read and interpret plans and job specifications
TLIW0004	Grind rails
TLIW0006	Heat and cut materials using oxy-LPG equipment for the rail industry
TLIW3015	Weld rail using aluminothermic welding process

Group D: Track Examination

RIICCM201E	Carry out measurements and calculations
TLIB3099	Examine track infrastructure
TLIB3100	Visually inspect track infrastructure

Group E: Rail Testing

RIICCM201E	Carry out measurements and calculations
TLIS3010	Test rail using ultrasonic equipment
TLIS3011	Test rail using nondestructive testing equipment

Group F: Turnout Construction

RIICCM201E	Carry out measurements and calculations
RIICCM203E	Read and interpret plans and job specifications
TLIS0001	Construct and assemble points and crossings

Group G: Rail Track Surfacing

TLIB3094	Check and repair track geometry
TLIS0004	Measure and mark track for resurfacing
TLIS3026	Implement track maintenance and construction

Group H: Track Drainage Maintenance

RIICCM201E	Carry out measurements and calculations
RIICCM203E	Read and interpret plans and job specifications
TLIS0002	Install and maintain surface track drainage

Group I: Tram or Light Rail

RIICCM201E	Carry out measurements and calculations
RIICCM203E	Read and interpret plans and job specifications
RIIWH302E	Implement traffic management plans
TLIC3003	Drive medium rigid vehicle
TLIE0002	Process workplace documentation

General elective units**Group J: General elective units**

AHCMOM213	Operate and maintain chainsaws
AHPCPM205	Fell small trees └ AHCMOM213 Operate and maintain chainsaws

CPCCLDG3001	Licence to perform dogging
NWPCAD002	Control vegetation on a site
RIIRIS401E	Apply site risk management system
TAEDEL301	Provide work skill instruction
TLIB2091	Measure and record track geometry
TLIB2092	Operate minor mechanical equipment
TLIB2097	Install and maintain guard rails
TLIB3040	Inspect poles and associated hardware
TLIB3095	Check and repair points and crossings
TLIB3099	Examine track infrastructure
TLIB3102	Adjust rail
TLIB4071	Install and maintain pole mounted switches and transformers
TLIC2058	Travel medium or heavy self-propelled on-track equipment
TLIC3045	Operate road/rail vehicle
TLID0012	Operate a vehicle-mounted loading crane
TLID0016	Operate a forklift
TLIE0002	Process workplace documentation
TLIF0008	Apply safety critical communications in the rail environment
TLIF0015	Recognise the impact of human capabilities/limitations on human performance in a rail environment
TLIF2006	Apply accident-emergency procedures
TLIF3058	Apply safeworking rules and regulations to rail functions
TLIF3089	Implement fatigue management policies and procedures for rail infrastructure
TLIG0002	Lead a work team
TLIG0003	Work effectively with others in a team
TLIG2007	Work in a socially diverse environment

TLII0005	Apply customer service skills
TLIK2010	Use infotechnology devices in the workplace
TLIS0002	Install and maintain surface track drainage
TLIS2012	Install and service rail lubrication equipment
TLIS2033	Install and repair temporary track supports
TLIS2034	Install and repair rail fastening systems
TLIS2035	Install and repair fences and gates
TLIS3025	Implement ballast unloading
TLIS3026	Implement track maintenance and construction
TLIS3037	Install and repair rail earthworks
TLIU4001	Implement and monitor environmental protection policies and procedures
TLIW0003	Grind rail on tram/light rail systems
TLIW0005	Grind switches and crossings
TLIW0006	Heat and cut materials using oxy-LPG equipment for the rail industry
TLIW0008	Weld rail using flashbutt welding process
TLIW2028	Identify the principles of ballast cleaning operations
TLIW2029	Identify the principles of ballast regulator operations
TLIW2030	Identify the principles of dynamic track stabiliser operations
TLIW2031	Identify the principles of self-propelled rail grinder operations
TLIW2032	Identify the principles of tamping machine operations
TLIW2033	Identify the principles of mechanised track laying operations
TLIW3027	Operate minor track equipment
TLIW3043	Weld rail on tram/light rail systems using electric welding process

Qualification Mapping Information

This qualification replaces and is equivalent to TLI37120 Certificate III in Rail Infrastructure.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>