



TLI32515 Certificate III in Rail Infrastructure

Railtrain deliver and assess TLI32515 Certificate III in Rail Infrastructure.

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

- Senior track maintainer
- Ganger

Rail Infrastructure – Track Construction

- Senior track installer
- Ganger

Rail Infrastructure – Track Welding

- Track welder

Rail Infrastructure – Track Examination

- Track examiner

Other specialist fields include turnout construction, track examination, rail testing, timber/composite turnout construction and concrete/steel turnout construction. For further information,

www.training.gov.au

Entry Requirements

The entry requirement for this qualification is TLI21315 Certificate II in Rail Infrastructure [Track Work] or relevant industry experience gained by working in the rail infrastructure environment.

Network Entry Requirements

A Category 1 Rail Medical Assessment is required for this qualification in most cases.

Packaging Rules

A total of 11 units of competency comprising:

5 core units and all units within one of the specialist elective unit groups plus a minimum of 2 general elective units and a maximum of 4 general elective units from the general elective units listed below (depending on the specialist elective group or job role selected).

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.



Core units

RIICCM201D	Carry out measurements and calculations
TLIE2007	Use communications systems
TLIE2029	Conduct workplace information briefings
TLIF3003	Implement and monitor work health and safety procedures
TLIJ3002	Apply quality systems

Specialist elective units

All units from one specialist elective groups: Group A: Track Work

Group A: Track Maintainer

RIICCM203D	Read and interpret plans and job specifications
TLIB3094	Check and repair track geometry
TLIB3095	Check and repair points and crossings
TLIS3026	Implement track maintenance and construction

Group B: Track Construction

RIICCM203D	Read and interpret plans and job specifications
TLIB3094	Check and repair track geometry
TLIS3026	Implement track maintenance and construction

Group D: Track Welding

RIICCM203D	Read and interpret plans and job specifications
TLIW2012	Grid rails
TLIW3015	Weld rail using aluminothermic welding process
TLIW3035	Heat and cut materials using oxy-LPG equipment for the rail industry

Group E: Track Examination

TLIB3099	Examine track infrastructure
TLIB3100	Visually inspect track infrastructure



CORE UNITS

RIICCM201D Carry out measurements and calculations

This unit describes a participant's skills and knowledge required to carry out measurements and calculations in Civil Construction.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

TLIE2007 Use communications systems

This unit involves the skills and knowledge required to use communications systems in accordance with relevant regulations and workplace procedures.

It includes identifying system features, operating a communications system effectively, using appropriate communications system protocols, maintaining equipment and completing documentation.

It involves applying established communication principles and practices, and using local technical, colloquial language and vocabulary in day-to-day communication.

Work is performed under some supervision, generally within a team environment.

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

TLIE2029 Conduct workplace information briefings

This unit involves the skills and knowledge required to conduct workplace information briefings in accordance with organisational requirements.

It includes preparing and delivering workplace briefings, and completing routine workplace documents as part of routine work.

Work is performed under some supervision generally in a team environment. This unit applies to formal types of briefings such as pre-work briefs, pre-start briefs, toolbox talks, worksite protection briefs and safe work method statement safety briefings.

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



CORE UNITS

TLIF3003 Implement and monitor work health and safety procedures

This unit involves the skills and knowledge required to implement and monitor work health and safety (WHS)/occupational health and safety (OHS) procedures, in compliance with relevant WHS/OHS regulations.

It includes accessing information about WHS/OHS workplace policies and procedures, and implementing and monitoring procedures for identifying and assessing hazards and controlling risks. It also includes planning and supervising housekeeping arrangements, and implementing and monitoring procedures for dealing with hazardous events.

Work is performed under some supervision generally within a team environment.

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

TLIJ3002 Apply quality systems

This unit involves the skills and knowledge required to apply quality systems in workplace operations in accordance with relevant regulations and workplace quality standards within the transport and logistics industry.

It includes working within a quality improvement system and using quality improvement systems, tools and techniques in accordance with enterprise procedures.

Work is performed under some supervision, generally within a team environment.

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



SPECIAL ELECTIVE UNITS

Group A specialist units for Track Maintenance

RIICCM203D Read and interpret plans and job specifications

This unit describes a participant's skills and knowledge required to read and interpret plans and specifications in Civil Construction.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

TLIB3094 Check and repair track geometry

This unit involves the skills and knowledge required to check and repair track geometry, in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes determining the job requirements, restoring track geometry, checking track compliance after work and completing required documentation.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under minimal supervision, generally in a team environment. It involves the application of routine operational principles and procedures when checking and repairing track geometry, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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



Group A specialist units for Track Maintenance

TLIB3095 Check and repair points and crossings

This unit involves the skills and knowledge required to check and repair points and crossings in accordance with rail industry standards, safeworking and regulatory requirements, and workplace procedures.

It includes determining job requirements, maintaining components and tolerances, installing components, conducting post-installation checks and completing required documentation.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures when checking and repairing points and crossings, as part of workplace activities across a variety of operational contexts within the Australian rail system.

Operators of mechanised equipment must have undertaken training and, where appropriate, hold the relevant licence, permit or certificate and be recognised as competent for the class of machinery being used.
No licensing, legislative or certification requirements apply to this unit at the time of publication.

TLIS3026 Implement track maintenance and construction

This unit involves the skills and knowledge required to implement track maintenance and construction activities in accordance with approved standards, safeworking and regulatory requirements, and workplace procedures.

It includes planning work, implementing construction or maintenance activities, dealing with maintenance and construction problems, and completing required documentation.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed generally in a team environment. It involves the application of routine operational principles and procedures when implementing track maintenance and/or construction, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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



Group B specialist units for Track Construction

RIICCM203D Read and interpret plans and job specifications

This unit describes a participant's skills and knowledge required to read and interpret plans and specifications in Civil Construction.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

TLIB3094 Check and repair track geometry

This unit involves the skills and knowledge required to check and repair track geometry, in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes determining the job requirements, restoring track geometry, checking track compliance after work and completing required documentation.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under minimal supervision, generally in a team environment. It involves the application of routine operational principles and procedures when checking and repairing track geometry, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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



Group D specialist units for Track Welding

RIICCM203D Read and interpret plans and job specifications

This unit describes a participant's skills and knowledge required to read and interpret plans and specifications in Civil Construction.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

TLIW2012 Grid rails

This unit involves the skills and knowledge required to grind rail and welds in accordance with rail industry standards, safeworking and regulatory requirements, and workplace procedures.

It includes determining job requirements, grinding weld and/or weld repair, grinding rail to repair surface defects, and completing all required documentation. This competency relates to the grinding of new welds and weld repairs, wheel burns, rail batter and overflow in plain track.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures when grinding rail and welds, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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

Group D specialist units for Track Welding

TLIW3015 Weld rail using aluminothermic welding process

This unit involves the skills and knowledge required to weld rail using the aluminothermic welding process in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes preparing and planning the welding method, preparing the rail for aluminothermic welding, carrying out the welding process, checking weld conformance and completing required documentation.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety and to comply with relevant codes of practice and/or guidelines.

Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures when welding rail using the aluminothermic welding technique, as part of workplace activities across a variety of operational contexts within the Australian rail system.

Operators of mechanised equipment must have undertaken training and, where appropriate, hold the relevant licence, permit or certificate and be recognised as competent for the class of machinery being used.

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

TLIW3035 Heat and cut materials using oxy-LPG equipment for the rail industry

This unit involves the skills and knowledge required to heat and cut materials for the rail industry using oxy-LPG equipment.

It includes planning and preparing for work, setting up and testing the equipment, heating and cutting materials, shutting down equipment and completing clean-up activities.

People achieving competence in this unit will need to fulfil applicable state/territory legislated work health and safety (WHS)/occupational health and safety (OHS) requirements and rail safety requirements, and to comply with relevant codes of practice and/or guidelines.

Work involves heating and cutting steel and includes cutting up waste for salvage; cutting steel, rails and bolts; and cutting holes in plate (with the exception of structural steel members). Heating activities include steel and bolts (excluding structural steel members).

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



Group E specialist units for Track Examination

TLIB3099 Examine track infrastructure

This unit involves the skills and knowledge required to examine track and right of way infrastructure in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes preparing for examination, examining track and right of way, analysing examination results, and reporting findings.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under minimal supervision, generally within a team environment. It involves the application of routine operational principles and procedures when examining track infrastructure, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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

TLIB3100 Visually inspect track infrastructure

This unit involves the skills and knowledge required to visually inspect track infrastructure in accordance with safeworking and regulatory requirements, and workplace procedure.

It includes patrolling the track and right of way infrastructure, and recording and documenting identified defects in accordance with workplace requirements.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under minimal supervision, generally within a team environment. It involves the application of routine operational principles and procedures when visually inspecting railway track infrastructure, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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



General Elective Units

The following is a selection of general electives which may be selected.

For further information about general elective selection <http://training.gov.au/Training/Details/TLI32515>

TLIB2091 Measure and record track geometry

This unit involves the skills and knowledge required to measure and record track geometry in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes measuring and recording track geometry, and reporting results. People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under minimal supervision, generally within a team environment. It involves the application of routine operational principles and procedures when measuring and recording track geometry, across a variety of operational contexts within the Australian rail system.

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

TLIB3099 Examine track infrastructure

This unit involves the skills and knowledge required to examine track and right of way infrastructure in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes preparing for examination, examining track and right of way, analysing examination results, and reporting findings.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under minimal supervision, generally within a team environment. It involves the application of routine operational principles and procedures when examining track infrastructure, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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



General Elective Units

TLIC3045 Operate road/rail vehicle

This unit involves the skills and knowledge required to operate road/rail vehicles on track in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes performing pre-operational and post-operational checks, on tracking and off tracking vehicles, operating equipment, and completing required documentation. It encompasses the operation of all road/rail on-track vehicles.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety and safeworking requirements and to comply with relevant codes of practice and/or guidelines.

Operators of road/rail vehicles may need to have applicable road and/or high risk licence or certification requirements for the type of vehicle being used.

It involves the application of routine operational principles and procedures when operating road/rail vehicles as part of workplace activities across a variety of operational contexts.

A road vehicle fitted with retractable rail guidance wheels (also known as a hi-rail vehicle) and may also involve weed sprayer, light-medium rigid vehicles, excavators, pettibone, tractors and/or four-wheel drives.

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

TLIF3058 Apply safeworking rules and regulations to rail functions

This unit involves the skills and knowledge required to apply applicable safeworking rules and regulations to rail functions carried out on rail networks.

It includes correctly using communications protocols; interpreting and responding to radio, hand signal and light commands; interpreting and following relevant safeworking rules and protocols; and taking appropriate action in safety incidents, unsafe situations or emergencies.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under established safeworking system rules, protocols and procedures.

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



General Elective Units

TLIG3002 Lead a work team or group

This unit involves the skills and knowledge required to lead a work team or group in accordance with workplace procedures and relevant regulations.

It includes participating in work team/group planning, managing and developing work team/group performance, participating in and facilitating a work team/group achieve workplace tasks, as well as documenting and reviewing work team/group performance.

Work is performed under some supervision, generally within a team environment. Work involves the application of established procedures when leading a work team or group.

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

TLIW3027 Operate minor track equipment

This unit involves the skills and knowledge required to operate minor track equipment as part of workplace activities across a variety of rail operational contexts.

It includes performing pre-operational equipment checks; obtaining approval to place on track; preparing, operating and monitoring minor equipment on track; removing equipment from track; performing post operation equipment procedures; and completing documentation.

The unit covers equipment that can be manually lifted on or off track, including equipment that can be moved and operated on trolleys. Minor track equipment may include ballast scarifiers, dog pullers, joint lifters, multi-spindle borers, power track jacks, spike drivers and various fastening applicators.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Operators of minor track equipment must have undertaken training and, where appropriate, hold the relevant licence, permit and/or certification and be recognised as competent for the requirements for the type of equipment being used.

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



General Elective Units

TLIF2062 Apply awareness of safeworking rules and regulations

This unit involves the skills and knowledge required to apply a basic awareness of applicable safeworking rules and regulations to work functions in the rail industry.

It includes interpreting and applying safeworking rules and protocols, recognising and reporting unsafe situations, following safeworking procedures, and taking appropriate safety precautions.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice, rules and/or guidelines.

Work is performed under established procedures, with accountability and responsibility for self and others in achieving the prescribed outcomes within the limits of duty of care responsibility.

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

TLIW2001 Operate under track protection rules

This unit involves the skills and knowledge required to operate under track protection rules in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes accessing and interpreting information about track protection requirements, carrying out assigned protection and/or work activities, and responding appropriately to safety incidents and abnormal situations.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under some supervision, generally within a team environment.

It involves the application of relevant track protection rules and requirements to assigned track work activities across a variety of operational contexts within the Australian rail system.

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