



New Zealand
nzih
School of Engineering, Energy and Infrastructure

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PROGRAMME INFORMATION HANDBOOK 2021

*New Zealand Certificate in
Infrastructure Works Level 3*
with optional strand in Plant Operation



Welcome

Welcome to the New Zealand Institute of Highway Technology and thank you for choosing to study this programme.

NZIHT places a strong emphasis on delivering quality programmes based on industry needs and utilises permanent staff and independent presenters who are recognised experts in the subjects they teach.

The Institute, based in New Plymouth, delivers all its training and education programmes in a block course format which enables students to study whilst in full-time employment.

NZIHT amalgamated with the Western Institute of Technology at Taranaki (WITT) on the 1 January 2021, who is the accredited provider for the programmes delivered by NZIHT.

NZIHT has three main objectives:

- To provide the highest standard of skills and technical training to the civil engineering industry.
- To ensure that our graduates from our tertiary education programmes are of the highest standard.
- To provide value for money.

NZIHT looks forward to your participation. We are committed to help you achieve your learning goals.

To Enrol

Simply request an enrolment pack, fill out the enrolment form within the pack and return the completed form to the Programme Manager at NZIHT along with a verified copy of your Birth Certificate or New Zealand Passport.

Contact

Jan Kivell
Programme Manager
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Programme structure and entry criteria

Programme Aims and Objectives

Programme strategic purposes

The purpose of this qualification is to provide the infrastructure industry with people who have relevant knowledge and skills that can be applied to a range of infrastructure works processes. It is the cornerstone qualification for those graduates wanting to move into an infrastructure career pathway.

Graduates of this qualification are able to carry out infrastructure works operations safely and to a quality standard in a variety of infrastructure work contexts.

All graduates will be capable of working under limited supervision.

Graduate profile

Graduates of this qualification will be able to:

- Apply safe work practices and comply with environmental requirements on an infrastructure works site
- Apply quality and industry best practice principles for infrastructure works
- Apply work processes to carry out infrastructure works operations
- Inspect, operate and maintain small plant for infrastructure works.

This qualification may build on the New Zealand Certificate in Infrastructure Works (Level 2) [Ref: 2522], and can lead to level four qualifications in the infrastructure works industry, such as:

- New Zealand Certificate in Infrastructure Works (Civil) (Level 4) with strands in Earthworks, Road Construction, and Road Maintenance [Ref: 2725]
- New Zealand Certificate in Infrastructure Works (Bitumen Surfacing Construction) (Level 4) [Ref:3775]
- New Zealand Certificate in Bituminous Product Manufacturing (Level 4) with strands in Binder Manufacturing Operations, Bituminous Mixes Operation, and Bitumen Spraying Operations [Ref:2687]
- New Zealand Certificate in Infrastructure (Forestry Earthworks) (Level 4) [Ref: 3782]
- New Zealand Certificate in Infrastructure Works (Pipeline Construction and Maintenance) (Level 4) with strands in Drinking-Water, Wastewater and Stormwater, and Trenchless Technologies [Ref:3558]

Employment pathway

Graduates of this qualification may be employed as operators in a broad range of sectors within the infrastructure works industry in the following contexts:

- Civil works
- Bitumen surfacing
- Pipeline construction and maintenance
- Water reticulation
- Forestry earthworks
- Piling and deep foundations.

Programme structure

All courses are compulsory

COURSE CODE	COURSE TITLE	LEVEL	NZQF CREDITS	WITT CREDITS
CIF3.300	Safe Work Practices	3	14	12
CIF3.301	Protection and Services	3	10	10
CIF3.302	Quality Assurance and Records	3	10	10
CIF3.303	Soil, Materials and Asbestos	3	11	11
CIF3.304	Safe Handling and Loads	3	8	8
CIF3.305	Site Operations	3	14	14
CIF3.306	Operate and Maintain Small Plant	3	10	10
Total Credits			77	75

Programme length

This programme is equivalent to approximately 12 months of part-time study.

Programme fee

This programme is offered fee free for 2021 to NZ Citizens and Permanent Residents. The cost to attend for students on Work Visas is \$3,000 + GST.

Entry criteria

Applicants must be working in the infrastructure works industries.

Academic achievement

Applicants should demonstrate an ability to succeed in tertiary study shown by the completion of any of the following qualifications or courses of study:

- National Certificate in Infrastructure Works (Level 2)

or

- New Zealand Certificate in Infrastructure Works (Level 2)

or

- NCEA Level 1 Literacy requirements

English language

Applicants whose first language is not English, or who come from a country where the language of instruction in schools or other teaching institutions is not English, are required to provide evidence of having passed such tests of English language competence as detailed in Policy and Procedure English Language Proficiency.

Life skills/work experience

Applicants who do not meet the academic entry criteria may be admitted to the programme of study if they are able to demonstrate:

- Equivalent knowledge
- Equivalent knowledge/capability by the testimony of an employer.

Selection criteria

Where there are more applicants than places available, entry to the programme will be in order of receipt of completed enrolment.

Verification of Citizenship/Permanent Residency

Applicants must supply a verified copy of either their NZ Birth Certificate or NZ Passport as verification of New Zealand Citizenship or Permanent Residency to attend this programme fee free. Applicants must supply a copy of their Work Visa to attend this programme at the cost of \$3,000 + GST

Delivery format

The New Zealand Certificate in Infrastructure Works (Level 2) is delivered over a 20 week period via block courses, workbooks and self-directed learning within the work place.

All courses are compulsory

COURSE	COURSE NAME	LEVEL	VERSION	NZQF CREDITS	WITT CREDITS
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BLOCK ONE : Attend TWO (2) days off-job training followed by self-directed study

CIF3.300	Safe Work Practices	3		14	
20869	Demonstrate knowledge of notifiable works and work permits typical of infrastructure works sites	3	3	3	12
27201	Mitigate environmental damage caused by a contamination incident	3	3	3	
30265	Apply health and safety risk assessment to a job role	3	2	8	

BLOCK TWO: Attend TWO (2) days off-job training followed by self-directed study

CIF3.301	Protection and Services	3		10	
27501	Demonstrate knowledge of protection and support systems for excavation on an infrastructure work site	3	1	2	10
6479	Locate and identify services for infrastructure works	3	7	5	
6476	Interpret and use plans to locate features on infrastructure works sites	3	6	3	

BLOCK THREE : Attend TWO (2) days off-job training followed by self-directed study

CIF3.302	Quality Assurance and Records	3		10	
27329	Demonstrate knowledge of and apply quality assurance practices to own work area in an infrastructure works operation	3	3	5	10
26784	Maintain daily records for an infrastructure works site	3	2	5	

BLOCK FOUR : Attend TWO (2) days off-job training followed by self-directed study

CIF3.303	Soil, Materials and Asbestos	3		11	
31445	Demonstrate knowledge of soils and aggregates, and compaction, for infrastructure works	3	1	6	11
31446	Demonstrate knowledge of materials used for infrastructure works	3	1	3	
30596	Demonstrate knowledge of asbestos and safety measures for asbestos-related work	3	1	2	

BLOCK FIVE: Attend TWO (2) days off-job training followed by self-directed study

CIF3.304	Safe Handling and Loads	3		8	
17459	Demonstrate and apply knowledge of safe manual handling practices in the workplace	3	7	3	8
28715	Load, secure, and transport infrastructure works materials, small plant, and equipment	3	1	2	
9681	Contribute within a team or group which has an objective	3	7	3	

BLOCK SIX: Attend TWO (2) days off-job training followed by self-directed study

CIF3.306	Operate and Maintain Small Plant	3		10	
31448	Operate and maintain small plant for infrastructure works	3	1	10	10

BLOCK SEVEN : Attend TWO (2) days off-job training followed by self-directed study

CIF3.305	Site Operations	3		14	
31447	Demonstrate knowledge of and carry out civil works site operations	3	1	14	14

Course aims, learning outcomes and learning hours

The overall aim, main topics, learning outcomes and learning hours for each course are shown in Table 3. The learning hours for NZIHT's block-course delivery model are extremely important so these are explained in more detail below:

Learning hours

We understand how easy it is to get distracted by busy work, family roles and social lives. Maintaining a healthy work-life balance is often challenging. To successfully complete each course, hence be awarded the qualification, it is important that you get into a learning routine or 'study rhythm' to manage this balance. To help you achieve this, the learning hours for each course are broken down into blocks to highlight the parts that must be managed by every student.

The breakdown of hours is based on a six week assessment submission period. This is the maximum time period allocated to students to complete assessment workbooks unless stated otherwise on the Assessment Workbook. You can submit the Assessment Workbook prior to the due date if you complete it before the due date.

Block courses are usually scheduled to be three-four weeks apart. If you are struggling with an aspect of your Assessment Workbook, bring your queries to the next block course for assistance.

Each course has a credit value assigned to it and this value represents the estimated time to complete the course. As a general guide, 1 credit equates to 10 hours of learning.

The components of the total learning hours for each course are explained as follows:

Block course: These are the hours of direct tutor contact in a face-to-face 'classroom' setting.

Tutor directed: These are the hours required by the individual student to complete the set activities and assessment tasks as instructed by tutors and assessors within the course workbooks.

Self-directed: These are the hours required for each student to plan and manage their own learning. This includes your work whilst on the job; practicing your new skills and/or use of knowledge in your workplace.

You will also have the support of your employer – probably your supervisor – who will give you opportunities to learn from them. For on job activities, they will confirm that your knowledge and skills align with this qualification.

CIF3.300 SAFE WORK PRACTICES

This course aims to provide individuals with the skills and knowledge to:

- Demonstrate knowledge of current health and safety regulations relating to notifiable works
- Mitigate environmental damage caused by a contamination incident
- Describe and apply principles of health and safety risk assessment.

Main topics:

- Health and safety
- Notifiable works
- Permits
- Personal protective equipment
- Contamination incident
- Mitigate environmental damage
- Health and safety risk assessment

Learning outcomes:

On successful completion of this course students will be able to:

1. Demonstrate knowledge of current health and safety regulations relating to notifiable works.
2. Describe risk control measures for notifiable works typical of infrastructure works sites.
3. Describe the types and purpose of permits typical of infrastructure works sites.
4. Select and use personal protective equipment.
5. Identify and take preventative action to mitigate environmental damage caused by a contamination incident and report a contamination incident at an infrastructure works site.
6. Clean the site after a contamination incident at an infrastructure works site.
7. Describe the principles of health and safety risk assessment.
8. Apply health and safety risk assessment to a job role in accordance with regulatory requirements and industry good practice.

Total Learning Hours	120
Block course	16 (2 contact days)
Tutor directed	32 (5.3 hours per week)
Self-directed (including workplace activities)	72 (12 hours per week)

Course aims, learning outcomes and learning hours

CIF3.301 PROTECTION AND SERVICES

This course aims to provide individuals with the skills and knowledge to:

- Describe protection and support systems used for excavation safety
- Locate, mark, record and report services for infrastructure works
- Identify and describe details and features of plans for infrastructure works sites.

Main topics:

- Excavation safety
- Locating and marking services
- Infrastructure works site plans.

Learning outcomes:

On successful completion of this course students will be able to:

1. Describe protection and support systems used for excavation safety on an infrastructure works site.
2. Explain reasons for the selection of specific protection and support systems on an infrastructure works site.
3. Confirm the existence of services for infrastructure works.
4. Locate and mark services for infrastructure works.
5. Record and report position of services for infrastructure works.
6. Describe the consequences of damage to services and the procedures for managing and reporting damage to services.
7. Identify and describe details and features of plans relevant to own work for infrastructure works.
8. Use plans to locate features on site.

Total Learning Hours	120
Block course	16 (2 contact days)
Tutor directed	24 (4 hours per week)
Self-directed (including workplace activities)	60 (10 hours per week)

CIF3.302 QUALITY ASSURANCE AND RECORDS

This course aims to provide individuals with skills and knowledge to:

- Apply quality assurance practices in an infrastructure works operation.
- Demonstrate knowledge of daily records to be kept and maintained for an infrastructure works site.

Main topics:

- Quality assurance practices
- Conducting inspections in an infrastructure works operations
- Daily records

Learning outcomes:

On successful completion of this course students will be able to:

1. Monitor quality of own work in an infrastructure works operation.
2. Demonstrate knowledge of company quality assurance and quality assurance practices in relation to own work area in an infrastructure works operation.
3. Conduct routine inspections of own work area in an infrastructure works operation.
4. Demonstrate knowledge of daily records to be kept for an infrastructure works site.
5. Complete daily records relevant to own role on an infrastructure works site.

Total Learning Hours	120
Block course	16 (2 contact days)
Tutor directed	24 (4 hours per week)
Self-directed (including workplace activities)	60 (10 hours per week)

CIF3.303 SOIL, MATERIALS AND ASBESTOS

This course aims to provide individuals with the skills and knowledge to:

- Demonstrate knowledge of materials, soils, aggregates and compaction, for infrastructure works
- Knowledge of Asbestos and associated health risks, and to undertake measures to protect people doing asbestos-related work against asbestos exposure.

Main topics:

- Soil and aggregate properties
- Compaction
- Materials
- Asbestos

Learning outcomes:

On successful completion of this course students will be able to:

1. Describe knowledge of soil and aggregate properties.
2. Demonstrate knowledge of compaction.
3. Demonstrate knowledge of materials used for infrastructure works.
4. Demonstrate knowledge of asbestos and associated health risk.
5. Demonstrate knowledge of measures to control respiratory risk for people doing asbestos-related work.

Total Learning Hours	120
Block course	16 (2 contact days)
Tutor directed	28 (4.6 hours per week)
Self-directed (including workplace activities)	66 (11 hours per week)

CIF3.304 SAFE HANDLING AND LOADS

This course aims to provide individuals with skills and knowledge to:

- Demonstrate knowledge of types of manual handling risks and use of safe manual handling practices with and without mechanical aids
- Prepare to load and load a vehicle; and restrain, secure, protect, and transport a load for infrastructure works activities
- Contribute within a team or group which has an objective.

Main topics:

- Manual handling
- Prepare, load, restrain, secure, protect and transport a load on a vehicle for infrastructure works activities
- Contribute within a team.

Learning outcomes:

On successful completion of this course students will be able to:

1. Demonstrate knowledge of types of manual handling risks in the workplace.
2. Describe injury risk reduction measures for manual handling in the workplace.
3. Use safe manual handling practices with mechanical aids in the workplace.
4. Use safe manual handling practices without mechanical aids in the workplace.
5. Prepare to load a vehicle for infrastructure works activities.
6. Load a vehicle.
7. Restrain, secure, and protect a load for infrastructure works activities.
8. Transport the load for infrastructure works activities.
9. Contribute within a team or group which has an objective.

Total Learning Hours	120
Block course	16 (2 contact days)
Tutor directed	16 (2.6 hours per week)
Self-directed (including workplace activities)	48 (8 hours per week)

Course aims, learning outcomes and learning hours

CIF3.305 SITE OPERATIONS

This course aims to provide individuals with skills and knowledge to:

- Carry out civil works site operations.

Main topics:

- Civil works site operations.

Learning outcomes:

On successful completion of this course students will be able to:

1. Demonstrate knowledge of civil works site operations.
2. Carry out civil works site operations.

Total Learning Hours	120
Block course	16 (2 contact days)
Tutor directed	40 (6.6 hours per week)
Self-directed (including workplace activities)	84 (14 hours per week)

CIF3.306 OPERATE AND MAINTAIN SMALL PLANT

This course aims to provide individuals with skills and knowledge to:

- Demonstrate knowledge of small plant and its operations.

Main topics:

- Prepare and operate small plant
- Post-operational procedures and routing maintenance.

Learning outcomes:

On successful completion of this course students will be able to:

1. Demonstrate knowledge of small plant and its operations for infrastructure works.
2. Prepare to operate small plant for infrastructure works.
3. Operate small plant for infrastructure works.
4. Carry out post-operational procedures and routine maintenance on small plant for infrastructure works.

Total Learning Hours	120
Block course	16 (2 contact days)
Tutor directed	24 (4 hours per week)
Self-directed (including workplace activities)	60 (10 hours per week)

Block course attendance and assessment

Workbooks and assessment tasks

At the commencement of the each block course you will be issued with an Assessment Workbook which incorporates all assessment tasks/activities for each course. Each Assessment Workbook MUST be completed, then signed and dated by the workplace supervisor to verify that you have completed all the tasks/activities assigned.

You will need to return the completed and verified assessment workbooks to NZIHT for assessment by an NZIHT Assessor. It is your responsibility to ensure you safely deliver your assessment workbooks to NZIHT for assessment. You are strongly advised to keep a copy of your assessment activities as your workbooks will not be returned to you, and should you misplace or damage your workbooks. Once everything is found to be in order and ready for assessment, the Assessor may make contact and visit you in your workplace to verify the work you have done.

Once the assessment process has been completed you will receive notification of the unit standards achieved or any further work required. Please phone the Programme Manager at NZIHT (06) 759 7065 to discuss any difficulties you may be having with your workbooks and/or training. If necessary, the Programme Manager will put you in direct contact with the NZIHT assessor.

Support can be arranged for those students with learning difficulties. Please contact the Programme Manager if you need assistance.

Assessment requirements

- All assessments are competency based.
- Work must be submitted by the due date shown on the Assessment Workbook unless the Assessor/ Programme Manager has approved an extension. This is usually six weeks from the completion of the Block Course.
- A request for an extension must be submitted no later than two working days prior to the due date of the assessment. If approved, an extension will normally not exceed five working days after the due date, except in exceptional circumstances.
- Under normal circumstances, work that has been submitted on time will be returned within four weeks after the due date.
- Students who receive a Not Achieved result will be allowed only one resubmission of the Assessment Workbook. A further resubmission may be permitted in exceptional circumstances and must be applied for through the Programme Manager. A fee may apply.
- Students with disabilities or recognised conditions of impairment may receive assistance during assessment such as a reader/writer. Refer to WITT Policy and Procedure Assessments*.
- Regulations pertaining to resubmissions are in accordance with WITT Policy and Procedure Assessment.*
- Students may lodge an appeal in accordance with WITT Policy and Procedure Academic Appeals.*
- Recording and reporting of results is in accordance with WITT Policy and Procedure Reporting and Certification* with the exception that results will be reported at the end of each offering of the programme.

* Please contact the Programme Manager if you require access to a Policy and Procedure.

Assessment conduct

NZIHT expects you to conduct yourself honestly when you complete your Assessment Workbooks. You must not copy the work of another student or allow another student to copy your work.

It is also important that you understand the difference between working together with peers (which allows you to learn from them) and copying. It is acceptable for you to discuss questions with your peers or work colleagues but the answers you write in your Assessment Workbook must be your own. The tutors will discuss this with you during the block course.

If the assessor identifies that you have copied someone's answers they will stop marking your Assessment Workbook and it will be returned to you either unmarked or you may receive a 'not achieved' result. This means you will not achieve the course or the qualification.

At the back of the Assessment Workbook supplied by NZIHT you are required to sign a declaration acknowledging that the answers to the assessment questions are your own work.

Credits already achieved

- It is important to inform the Programme Manager if you have already achieved any of the unit standards listed in Table 2.
- If you have achieved credit for any of these unit standards through NZIHT or WITT, they will be recorded as CC (cross credit) within this programme.
- If you achieved any of these unit standards through another tertiary education provider, your results for this programme will show AAP (Achieved at Another Provider).
- It is important that you check your NZQA Record of Learning.

Requirements for award of qualification

- Students must achieve 75 WITT credits (77 NZQF Credits) to be awarded the New Zealand Certificate in Infrastructure Works (Level 3) with optional strand in Plant Operation.
- Full attendance is required on each of the block courses. A student who fails to attend two or more consecutive block courses without acceptable explanation may be withdrawn from the programme.
- All courses are compulsory.
- Students are expected to complete the programme within one year. The maximum number of years from first enrolment to completion of the qualification is two years.



Supporting programme information

Withdrawing from the programme

If your commitment and involvement in this programme of study ceases at any time you should complete a withdrawal form and lodge this with the Programme Manager. If you do not officially withdraw from the programme your results will be reported as a fail grade due to coursework not being completed and your transcript will show IC (Insufficient Coursework).

Change of address / contact details

You are required to advise the Programme Manager of any changes to your details and/or circumstances that could affect your placement on the course.

It is your responsibility to advise NZQA of a change of address.

Academic conduct

Once accepted on the programme you are required to take responsibility for your own learning and academic progress. You should complete all assessment activities by the advised due dates and ensure any work submitted for assessment is your own and not that of another person or persons. You are required to comply with any instructions given for the conduct of any test, workbook or workplace assessments.

Programme regulations

Please contact the Programme Manager if you require a full copy of the current Programme Regulations for the New Zealand Certificate in Infrastructure Works (Level 3) with optional strand in Plant Operation.

Appeals

If you have legitimate grounds for questioning a decision relating to academic matters (e.g. programme admission, assessment results, etc.) you may lodge an appeal for consideration by the Academic Appeals Committee. Applications must be lodged within 14 days of receiving a decision. The Policy and Procedure Academic Appeals and associated forms are available by contacting the Programme Manager.

Complaints

If you have any concerns about any aspect of study on this programme, please contact the Programme Manager so your issues can be discussed and resolved fairly and as quickly as possible. NZIHT will make every attempt to address your concerns.

In the unlikely event that your concerns remain unresolved you can lodge a formal complaint with WITT, by contacting WITT's Administration Manager on 0800 WITT NZ.

Student evaluation and satisfaction surveys

Your success on this programme is important to us

Therefore we welcome your views on what we are doing well and/or how we can improve. NZIHT and WITT highly value the feedback we receive from our students. While we try to ensure that the teaching you receive meets your needs and the needs of the industry within which you work, there may be areas we are unaware of where we are not meeting these needs.

To help keep us informed you will be invited to complete a brief questionnaire (evaluation survey) that will focus on various aspects of your learning experience. We encourage you to help us improve the quality of your learning experience by completing these surveys openly and honestly. Survey information is kept confidential and only used for improvement purposes. We thank you in advance for taking the time to complete these surveys.

Student support services

As a WITT student you are eligible to access the following support services:

- Health Services: Confidential health advice via 0800 WITT NZ ext 8775 or 8815.
- Counselling and Chaplaincy Services: WITT counsellors and chaplain via 0800 WITT NZ ext 8766 or ext 8765.
- Maori and Pasifika Support Services: You can contact WITT Maori and Pasifika Centre staff via 0800 WITT NZ ext 8978.
- Scholarships and grants information: can be accessed by contacting the scholarship coordinator via 0800 WITT NZ.
- Student ID Card: You are entitled to a WITT student ID card which will enable you to access WITT resources and facilities. Contact the NZIHT Programme Coordinator if you want an ID card issued in your name.
- NZIHT Support: The NZIHT Programme Manager and staff are available to assist and guide your studies. If you need help on any course related matters, please contact the Programme Manager in the first instance.

If you require any further information about this programme, any of the courses, or assessment tasks, please don't hesitate to contact the Programme Manager, Jan Kivell.

Email: jan@nziht.co.nz



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CONTACT

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