

2021 PROGRAMME INFORMATION

TK1019

NZ DIPLOMA IN ENGINEERING (CIVIL)



CONTENTS

| | |
|--|----------|
| 1. BACKGROUND..... | 1 |
| 2. A CAREER IN CIVIL ENGINEERING | 1 |
| 3. ADMISSION CRITERIA..... | 1 |
| SPECIAL ADMISSION CRITERIA | 2 |
| 4. PROGRAMME STRUCTURE | 2 |
| 5. METHOD OF DELIVERY | 3 |
| 5.1 BLOCK COURSES | 3 |
| 5.2 BLOCK COURSE FORMAT | 3 |
| 5.3 COURSE MANAGEMENT SYSTEM..... | 4 |
| 6. RECOGNITION OF PRIOR LEARNING (RPL)..... | 4 |
| 7. HOW TO APPLY | 5 |
| CONTACT DETAILS FOR INQUIRIES..... | 5 |
| ENTRY APPLICATION FORM | 6 |

NZ Diploma in Engineering (Civil)

Programme Code: TK1019

1. BACKGROUND

The NZ Diploma in Engineering (Civil) is a level 6, 240 credit qualification structured as follows:

- 16 courses comprised of 12 compulsory plus 4 electives (three of the electives must be at Level 6)
- All courses are of 15 credit value
- Five of the compulsory courses are common to the mechanical, electrical, electronics and civil strands of the NZDE.
- Ownership of the NZ Diploma in Engineering qualification rests with the NZ Board for Engineering Diplomas (NZBED).

The NZ Diploma in Engineering (Civil) is a two year, full-time programme of study which can be completed part time.

NZIHT, through the Western Institute of Technology at Taranaki (WITT), offers this programme on a part time basis using a mixed-mode delivery format. This method of delivery caters specifically for the needs of students who are unable to attend a conventional full-time programme. More details on the method of delivery are given in Section 5.

2. A CAREER IN CIVIL ENGINEERING

The NZ Diploma in Engineering (Civil) prepares a student for a career in the civil engineering industry. Civil engineers plan, design and construct the infrastructure in which we live and work. This includes the establishment of facilities like roads, railways, airports, water supply, drainage, wastewater disposal, bridges, dams, multi-storey buildings, tunnels and other public works.

Civil engineers are employed by a range of different organizations including district and city councils, engineering consultants, contractors, transportation agencies such as NZ Transport Agency, academic institutions, environmental agencies etc.

Engineering NZ Accreditation

NZIHT has accreditation from Engineering NZ (formerly IPENZ). This means that NZIHT graduates of the NZ Diploma in Engineering (Civil) can take their qualification to the UK, Ireland, Canada, South Africa, USA, Australia and Korea and it will be recognised in any one of these Dublin Accord member countries as being substantially equivalent to that of the other members.

3. ADMISSION CRITERIA

Minimum Academic Entry Criteria

For entry to this programme, applicants are required to have –

- NCEA Level 2*
and
- A minimum total of 48 credits at level 2 in four subjects including at least 12 credits in mathematics (preferably achievement standards in algebra, calculus or trigonometry),
or
- equivalent qualifications (e.g. International Baccalaureate or Cambridge)
or
- equivalent credits from appropriate trades training and/or demonstrated skills and experience

*including a minimum of 10 literacy credits at level 1 or higher (for those who achieved NCEA Level 2 before 2013).

English Language Requirements

In addition to meeting the minimum entry criteria, those applicants for whom English is a second language (including International students) must meet the IELTS overall language requirement:

- Overall Band Score (Academic) of 6.0 IELTS, with no individual score less than 5.5, or equivalent.

Life skills/work experience

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

- Equivalent knowledge and skills; **and/or**
- Previous and relevant life skills or work experience; **and/or**
- Other formal or informal study such as to suggest likelihood of successful programme completion.

Applicants, who seek entry to the programme under the Life Skills/Work Experience Clause of the entry criteria above, may be required to attend an interview, and/or supply references or other supporting documentation.

Applicants who do not have the required NCEA Level 2 Mathematics skills will be required to complete the foundation course – Introductory Engineering Mathematics (Level 3).

Acceptance

Applicants wishing to enrol for the NZ Diploma in Engineering (Civil) must complete the Entry Assessment Form and return it with supporting documentation to the Programme Coordinator for evaluation.

Following evaluation of the applications by the Programme Coordinator each applicant will be informed in writing of the result. There is a requirement that applicants accepted onto the Programme must complete a Western Institute of Technology at Taranaki (WITT) Enrolment form.

Applicants will receive access to be able to complete the Enrolment Form when they are notified of their acceptance onto the Programme.

Please note a student is confirmed onto the Programme when NZIHT has received the Enrolment Form from the student. A confirmation email with the Programme Regulations and Student Handbook will be sent to the student once enrolled.

Prior to the start of the first study block students will have access on the NZIHT Course Management System (CMS) to the electronic course notes and course information sheet/s.

Course Fees

The NZ Diploma in Engineering (Civil) is currently covered under the government's Targeted Training and Apprenticeship Fund (TTAF). Course fees are free for **domestic** students until December 2022. For further information please see the TEC website.

Additional Expenses

4.103 Technical Literacy – drawing equipment. Requirements advised in Course Information Sheet.

Travel and accommodation to attend study blocks – if required - varies depending on where student travels from and chooses to stay.

4. PROGRAMME STRUCTURE

At the lower levels of study, students receive a fundamental grounding in engineering principles and practice. This broad-based grounding is extended at higher levels in the various sub-disciplines of civil engineering.

NZ Diploma in Engineering (Civil) Programme

| Code DEC | Course 12 Compulsories (Bold) + FOUR electives (at least THREE at Level 6) | C or E ¹ | Level | Credits | EFTS | Pre or Co-Requisites |
|--|--|---------------------|-------|---------|-------|---|
| 4.101 | Eng. Fundamentals | *C | 4 | 15 | 0.125 | |
| 4.102 | Eng. Mathematics 1 | *C | 4 | 15 | 0.125 | |
| 4.103 | Technical Literacy | *C | 4 | 15 | 0.125 | |
| 4.201 | Materials (Civil) | C | 4 | 15 | 0.125 | |
| 5.207 | Geotechnical Eng. 1 | C | 5 | 15 | 0.125 | |
| 5.201 | Structures 1 | C | 5 | 15 | 0.125 | DEC4.101 |
| 4.202 | Land Surveying 1 | C | 4 | 15 | 0.125 | |
| 5.202 | Civil & Structural Drawing | C | 5 | 15 | 0.125 | DEC4.103 |
| 6.101 | Eng. Management | *C | 6 | 15 | 0.125 | Minimum of 105 credits from NZDE |
| 6.102 | Eng. Project | *C | 6 | 15 | 0.125 | DEC4.103, DEC4.201, DEC5.207 Min 45 credits at Level 5 |
| 5.203 | Hydraulics (Civil) | C | 5 | 15 | 0.125 | DEC4.101, DEC4.102 |
| 5.204 | Highway Eng. 1 | C | 5 | 15 | 0.125 | DEC5.207, DEC4.102 |
| 5.205 | Eng. Surveying | E | 5 | 15 | 0.125 | DEC4.202 |
| 5.206 | Structures 2 | E | 5 | 15 | 0.125 | DEC5.201, DEC4.102 (Co-) |
| 6.201 | Geotechnical Eng. 2 | E | 6 | 15 | 0.125 | DEC5.207 |
| 6.205 | Water & Waste Water Systems | E | 6 | 15 | 0.125 | DEC5.203 |
| 6.206 | Water & Waste Water Management | E | 6 | 15 | 0.125 | DEC5.203 (Co-) |
| 6.202 | Highway Eng. 2 | E | 6 | 15 | 0.125 | DEC5.204 |
| 6.203 | Traffic Engineering | E | 6 | 15 | 0.125 | DEC5.204 |
| 6.204 | Structures 3 | E | 6 | 15 | 0.125 | not offered by NZIHT |
| 6.207 | Land Surveying 2 | E | 6 | 15 | 0.125 | not offered by NZIHT |
| *C = Common Compulsory (these are courses common to Civil, Electrical, Electronics & Mechanical strands of the NZDE) C = Compulsory E = Elective | | | | | | |

5. METHOD OF DELIVERY

5.1 Block Courses

A combination of contact sessions, called **Study Blocks**, and structured self-directed study is used to deliver the programme. The self-directed study component is undertaken in the student's own time at home with the aid of course notes and a proposed work programme. Interaction with the course presenter as and when required is via e-mail or telephone. Interaction with the course presenter and fellow students can also be made through the Course Management System website (NZIHT CMS).

The length of the **Study Blocks** varies according to the nature of individual courses.

This method of delivery enables students to acquire the qualification on a part-time basis. A person in full-time employment, who is willing to work hard,

should be able to undertake on average 2 courses per semester. On this basis the programme can be completed in about 4 to 5 years.

The current venues where Study Blocks are delivered, subject to demand, are Hamilton, Christchurch, Auckland and Palmerston North. Other venues will be considered based on demand.

5.2 Block Course Format

The learning activities for each course comprise the following components:

1. Contact session(s), referred to as **Study Blocks**, totalling between 5 and 8 days broken into two or more blocks of approximately equal duration per course.

2. Structured **self-directed study** involving Self Evaluation Exercises and Assignments.
3. Final Examination.

The Study Block **timetable** for courses offered in 2021 are available on the CMS Library. www.nzihcms.co.nz

These programmes are delivered using a mixed-mode delivery model. The key elements of the model are study blocks and tutor-directed self-study. Tutor-directed self-study are the parts of the course which you do in your own time BEFORE and AFTER attending study blocks. In this model the study blocks serve the purpose of supporting the tutor-directed self-study components of the course.

It is compulsory for students to attend all Study Blocks in their courses. The Study Blocks are especially critical to NZIHT's mode of delivery.

In the first instance if a Student cannot attend a Study Block, NZIHT will attempt to change the Student to an alternative venue. If an alternative venue cannot be found, the Student is required to apply to the Academic Programme Leader to be exempted from study block attendance. This will only be granted if the student can provide satisfactory evidence that he/she will not be disadvantaged by non-attendance of the study block eg on the basis of previous study (only if the student has achieved not less than 65% for any courses completed to date) or relevant recent work experience.

If the Academic Programme Leader does not grant an exemption or is not able, in agreement with student, to provide an alternative arrangement for the Study Block material to be satisfactorily covered then the student will be required to withdraw from the course or have the course transferred to another semester. Refunds of course fees or transfer of course fees will be assessed on a case by case basis and will be dependent on the time that withdrawal or transfer takes place.

5.3 Course Management System

Applicants accepted onto the Programme find it useful to have independent access to the internet. NZIHT has introduced a Course Management System website (CMS) to facilitate the interaction between fellow students, tutors and administrators.

The address is www.nzihcms.co.nz

CMS is a website where:

- Administration staff post some of the admin resources commonly required by the student and communicates logistics, including venue and timetable information
- Students can ask course related questions of the course presenters,
- Course presenters can discuss course related matters or disseminate additional information.
- Question-and-answer discussion trails (discussion forum) can be facilitated among members of a class group (including the course presenter),
- Marks for tests and assignments are posted during the progress of courses.

On acceptance into the programme students are provided with a user name and password to gain access to the site and its facilities.

6. RECOGNITION OF PRIOR LEARNING (RPL)

RPL refers to the practice of receiving applications for credit towards qualifications offered by WITT for formal or informal learning obtained elsewhere, and determining the suitability of the evidence received to warrant the award of credit towards a qualification awarded by WITT. RPL may take the following forms:

Assessment of Prior Learning (APL)

Formally acknowledges the value of a student's prior learning, whether formal or informal, by assessing that prior

learning for the purpose of considering the granting of credit towards a unit of learning, course or programme in which a student wishes to enrol.

Credit Transfer (CT)

Credit for a course where the exact same course has been completed at another provider. Formal evidence must be provided by the student to indicate that they hold the relevant result. NB: If the other provider's course outcomes do not exactly match the WITT course learning outcomes the application is to be treated as an Assessment of Prior Learning (APL).

Evidence of Prior Learning

Evidence of competency in the relevant Learning Outcomes must be provided to support an application for APL or CT.

This evidence may include but is not exclusive to:

- Official Transcripts
- Course Documents
- Assessed Work
- Challenge Test set by the faculty (ie demonstration of skill or examination of knowledge)
- Portfolio of drawings and/or supporting documents as evidence of relevant work experience

How to Apply for RPL

A formal application process must be entered into by the student in order to gain such a credit (an application fee is payable). The Academic Programme Leader can give an opinion on the likelihood of success but all applications are subject to approval.

Discuss the application for RPL and the costs involved in the assessment of the RPL application with the Programme Coordinator.

7. HOW TO APPLY

Complete the Entry Application Form (see page 6) and send to the Programme Coordinator. Attach copies of results from school (NCEA Level 2/6th Form Certificate, any tertiary education, and any additional information or documents (e.g. CV) that may assist the Programme Coordinator in determining your

eligibility, possibilities for recognition of prior learning (RPL) and which courses you should enrol for.

This is a pre-enrolment process.

Once eligibility has been confirmed, students will receive log in details for the Course Management System (CMS) to complete the Enrolment Form.

Enrolment Form Submission Periods:

Semester 1 courses: Enrolments are accepted until late January.

Students may enrol for semester 1 & 2 at the start of the year.

Semester 2 courses: Enrolments are accepted until mid July

CONTACT DETAILS FOR ENQUIRIES

Programme Coordinator

NZIHT

PO Box 4273

New Plymouth 4340

Telephone : 06 759 7065

Email : admin@nziht.co.nz

ENTRY APPLICATION FORM

NZ Diploma in Engineering (Civil)

| | |
|-----------------|--|
| Send to: | admin@nziht.co.nz or NZIHT PO Box 4273 New Plymouth 4340 |
|-----------------|--|

| | |
|--------------------|--|
| Legal Name: | |
|--------------------|--|

| | | | |
|-----------------------|--|----------------------------------|--|
| Date of Birth: | | NSN Number: (if known) | |
|-----------------------|--|----------------------------------|--|

| | |
|-----------------|--|
| Address: | |
|-----------------|--|

| | |
|---------------|--|
| Email: | |
|---------------|--|

| | | | |
|------------------|--|-------------------|--|
| Employer: | | Job Title: | |
|------------------|--|-------------------|--|

| Telephone | | Citizenship <i>(please tick appropriate box)</i> | | |
|-----------|--|--|--------------------------|--|
| Home | | New Zealand Citizen | <input type="checkbox"/> | |
| Work | | Permanent Resident | <input type="checkbox"/> | |
| Mobile | | Other <i>(please specify)</i> | <input type="checkbox"/> | |

Academic History

If you have completed NCEA Level 1, 2 or 3 at school, we can access your NZQA Record of Learning to assess your application. If you have completed 5th, 6th or 7th Form at school, please scan and send a copy of your results.

| (a) Secondary Level <i>(Please tick the levels achieved)</i> | School Subjects/Courses completed for which result transcripts have not yet been received | |
|---|---|--------|
| <input type="checkbox"/> NCEA Level 1 (5th Form Certificate) <input type="checkbox"/> NCEA Level 2 (6th Form Certificate) <input type="checkbox"/> NCEA Level 3 (Bursary) | Level | Course |
| | | |
| | | |
| | | |
| | | |
| | | |

| |
|--|
| (b) Tertiary Level Please provide details of any tertiary studies completed to date: |
|--|

| |
|--|
| |
| |
| |
| |
| |
| |
| |
| |
| |

Venue abbreviations: HMN = Hamilton
AKL = Auckland

CHC = Christchurch
PMN = Palmerston North

| Course Code | Course Name | Level | Credits | Pre-requisites or Co-Requisites | 2021 | | | | | | | |
|---|----------------------------|-------|---------|---|------------|-----|-----|-----|------------|-----|-----|-----|
| | | | | | Semester 1 | | | | Semester 2 | | | |
| | | | | | HMN | CHC | AKL | PMN | HMN | CHC | AKL | PMN |
| Compulsory Courses: 12 (Total compulsory credits =180) | | | | | | | | | | | | |
| DEC4.101 | Eng. Fundamentals | 4 | 15 | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ |
| DEC4.102 | Eng. Mathematics 1 | 4 | 15 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| DEC4.103 | Technical Literacy | 4 | 15 | | ✓ | | | ✓ | ✓ | ✓ | | |
| DEC4.201 | Materials (Civil)* | 4 | 15 | | ✓ | ✓ | | | ✓ | | | |
| DEC4.202 | Land Surveying 1 | 4 | 15 | | ✓ | ✓ | ✓ | ✓ | | | | |
| DEC5.201 | Structures 1 | 5 | 15 | DEC4.101 | | | | | ✓ | ✓ | ✓ | ✓ |
| DEC5.202 | Civil & Structural Drawing | 5 | 15 | DEC4.103 | ✓ | ✓ | | | ✓ | | | |
| DEC5.203 | Hydraulics (Civil)** | 5 | 15 | DEC4.101 (Co-) DEC4.102 (Co-) | ✓ | ✓ | | | | | | |
| DCE5.204 | Highway Eng. 1 | 5 | 15 | DEC5.207, DEC4.102, DEC4.201 | ✓ | ✓ | | ✓ | | | | |
| DEC5.207 | Geotechnical Eng. 1*** | 5 | 15 | | | | | | ✓ | ✓ | | |
| DEC6.101 | Eng. Management | 6 | 15 | Minimum of 105 credits from NZDE | ✓ | | | ✓ | | ✓ | | ✓ |
| DEC6.102 | Eng. Project | 6 | 15 | DEC4.103, DEC4.201, DEC5.207 Min 45 credits at Level 5 | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ |
| Elective Courses: 4 Please note: At least THREE at level 6 (Total elective credits = 60) | | | | | | | | | | | | |
| DEC5.205 | Eng. Surveying | 5 | 15 | DEC4.202 | | | | | ✓ | ✓ | ✓ | |
| DEC5.206 | Structures 2 | 5 | 15 | DEC5.201 (Pre-) DEC4.102 (Co-) | | | | | ✓ | | | |
| DEC6.201 | Geotechnical Eng. 2 | 6 | 15 | DEC5.207 | | ✓ | | | ✓ | | | |
| DEC6.202 | Highway Eng. 2 | 6 | 15 | DEC5.204 | | | | | ✓ | ✓ | | |
| DEC6.203 | Traffic Engineering | 6 | 15 | DEC4.102 (Co-) | ✓ | ✓ | | | | | ✓ | |
| DEC6.205 | Water & Waste Systems | 6 | 15 | DEC5.203 | | | | | ✓ | ✓ | | ✓ |
| DEC6.206 | Water & Waste Management | 6 | 15 | | ✓ | | | ✓ | ✓ | ✓ | | ✓ |

Key:

Materials (Civil)- Each block will be restricted to a maximum number of 20 students per venue to keep the numbers reasonable for Laboratory Visits..

****Hydraulics (Civil)****- Each Block will be restricted to a maximum number of 20 students per venue to keep the numbers reasonable for Laboratory Visits. *The second Block for Hydraulics will be run in Hamilton only. Christchurch Block 1 students must attend Block 2 in Hamilton.*

*****Geotechnical Engineering 1*****- Each block will be restricted to a maximum number of 20 students per venue to keep the numbers reasonable for Laboratory Visits.

+ Engineering Project – Palmerston North Semester 1 Block 1 only. Students will need to attend Block 2 in either Hamilton or Christchurch.

Please note - all courses scheduled will be offered subject to sufficient demand