



New Zealand Diploma in Engineering (Mechanical) (Level 6)



Domestic Fees

\$7,910



Duration

2 years full-time or part-time equivalent (domestic only)



witt.ac.nz



Gain the theoretical and practical skills necessary to gain employment as an engineering technician in the mechanical engineering field and help to 'make the world'. Engineering Technicians are generally involved in design and operations. This qualification is an International Dublin Accord qualification under the accreditation of Engineering New Zealand.

You will gain a solid grounding in engineering theory and principles of engineering science including design and drawing, materials, fluids, thermodynamics and production. Engineers are in demand and successful graduates will be able to seek work as Engineering Technicians.

This programme is internationally benchmarked and recognised under the well-respected Dublin Accord, which opens up opportunities to working both in New Zealand and internationally.

Students studying the New Zealand Diploma in Engineering can apply for the GNS Scholarship - find out more via our [scholarships page](#).

You will learn how to:

- apply engineering theory to practice working within well-defined* engineering problems relevant to their specialist field of mechanical engineering.
- use their engineering knowledge to make informed problem solving decisions in mechanical engineering and to implement these decisions.
- identify, evaluate and manage risks within well-defined* engineering problems relevant to their field of mechanical engineering.

*Well-defined engineering problems can be solved in standardised ways, are frequently encountered and hence familiar to most practitioners in the specialist area, have consequences that are locally important but not far-reaching and can be resolved using limited theoretical knowledge but normally require extensive practical knowledge.



Job prospects at a glance

The Engineering industry is made up of a range of occupations that involve the design, production and improvement of integrated systems.

Pay rates

The average annual salary for drafts person jobs in New Zealand ranges from \$70,000 to \$80,000.*

* seek.co.nz/career-advice/role/draftperson_2/salary

Job opportunities

Chances of getting a job as an engineering technician are good due to increase in demand for their services.

\$70-\$80K PER YEAR



Courses

NDE3.301

Engineering Practice

Learn skills involved in safety using engineering workshop machines and equipment and to develop an awareness of common manufacturing processes.

NDE4.102

Engineering Mathematics

Acquire mathematical skills, concepts and understandings in order to perform calculations and solve problems within engineering contexts.

NDE4.101

WITT reserves the rights to withdraw or adjust programmes, alter start date or fee schedules, and make any other changes as it may deem desirable or necessary, without prior notice. All programmes are subject to a sufficient number of enrolments and completion of all approval and accreditation requirements.

WITT and this programme are part of Te Pūkenga – New Zealand Institute of Skills and Technology

Engineering Fundamentals

Learn the basic fundamentals of a range of engineering disciplines.

NDE4.103

Technical Literacy

Develop technical research skills along with oral, written, graphical and interpersonal communication skills.

NDE4.301

Engineering CAD

Learn basic CAD draughting skills required for an engineering technician.

NDE4.302

Mechanics

Develop a sound understanding of the principles of mechanics.

NDE4.303

Material Properties

Gain an understanding of the characteristics and properties of common engineering materials used in mechanical and process engineering.

NDE5.304

Electrical Fundamentals

Develop a sound knowledge of electrical and electronic theory and how these are applied to mechanical engineering systems.

NDE5.303

Manufacturing Processes

Apply engineering knowledge to common

manufacturing processes.

NDE5.302

Strength of Materials 1

Develop an understanding of the essential elements of strengths of materials.

NDE5.301

Thermodynamics and Heat Transfer

Develop a sound basic knowledge of thermodynamic principles – including gas laws, measurement of pressure and temperature, mass & energy conservation & energy sources in NZ content – and the mechanisms of heat transfer including the uses of heat exchanges.

NDE6.301

Fluid Mechanics

Understand and apply the principles of fluid statistics and dynamics to common engineering problems.

NDE6.302

Mechanics of Machines

Develop understanding to solve complex problems involved within machinery dynamics such as power transmission, balancing, noise and lubrications systems.

NDE6.308

Strength of Materials 2

Develop an understanding and advanced knowledge of strengths of materials and the detailed design of mechanical engineering components.

NDE6.102

Engineering Project (Mechanical)

Determine and apply the processes required to analyse mechanical engineering design problems and identify possible solutions.

NDE6.101

Engineering Management

Develop the knowledge and skills required to administer and manage projects efficiently in a specific discipline of engineering.

Programme Specific Information

Graduates of the New Zealand Diploma in Engineering will be able to study towards a technologist degree such as Bachelor of Engineering Technology, or a professional engineering qualification such as Bachelor of Engineering.

This Diploma is compliant to Dublin Accord and signatory to International Engineering Alliance.

Entry requirements

- NCEA Level 2 including 12 credits in mathematics; or
- Equivalent knowledge, life skills, work experience or study

We welcome applications from both international students and New Zealand residents whose first language is not English. For this programme you will require an IELTS (Academic) band score of 6.0 or greater (with no sub score below 5.5 in speaking, reading, writing and listening); or equivalent.

Text books

You can find a list of textbooks needed for this programme [here](#)

Career Options

Mechanical Engineering Cadetship, Engineering Technician, Engineering Design Assistant, Project

Management, Engineering Management, engineering related sales, AutoCAD Draughtsman, AutoCAD Operator.

Further study options

Diploma in Engineering Practice (NZDEP) which can be gained in the workplace, or degree-level study.