

Introductory Engineering Mathematics (Micro-credential) (Level 3)



Duration
20 weeks



Domestic Fees
Fees Free for 2027



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Learn introductory mathematics skills and gain the knowledge to meet the entry criteria for the New Zealand Diploma in Engineering, or for those currently studying the New Zealand Diploma in Engineering programme get the mathematics skills and application you need.

The purpose of this micro-credential is to provide introductory mathematical skills and knowledge in an engineering context.

You will learn how to:

- Apply algebraic functions, formulae, and equations to solve mathematical problems in engineering contexts
- Solve quadratic equations to interpret and solve engineering-related problems
- Solve simultaneous equations to support problem-solving in engineering applications
- Apply trigonometric methods, including sine, cosine, and tangent, to solve measurement problems relevant to engineering
- Solve logarithmic expressions and equations in engineering contexts
- Plot and interpret graphs of linear and quadratic functions to model relationships in engineering scenarios
- Apply basic statistical methods to summarise and interpret data relevant to engineering problems
- Apply basic calculus techniques (differentiation and integration) to solve introductory problems in engineering contexts

Entry Requirements

Academic entry criteria

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

- NCEA Level 1 and must include NCEA Level 1 requirements for Literacy and Numeracy ; and/or

- Equivalent NQF Unit Standards

Life Skills/Work Experience

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

- Evidence of equivalent knowledge and skills gained through relevant life skills or work experience, or
- Evidence of other formal or informal study at a level that demonstrates the potential to succeed at Level 3.

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.