



INTERNATIONAL  
COLLEGE of AUCKLAND

# NZ DIPLOMA IN ENGINEERING

## (Electrical Engineering Strand)

Level  
**6**

Credits  
**240**

Duration  
**2 Years**

Intake  
**SEP / FEB / JULY**

Further Study Pathway  
Students can apply for  
Bachelors of Engineering Technology



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## Overview

Are you ready to power up your future in engineering? The New Zealand Diploma in Engineering (Electrical) offered at ICA is designed to equip students with the essential theoretical knowledge and hands-on practical skills required to excel in the dynamic field of electrical engineering, especially in power systems. This nationally developed and internationally recognised qualification focuses on real-world industry needs and is aligned with Engineering New Zealand standards.

Students will gain solid grounding in electrical principles, machinery, and sustainable energy, and will also complete an industry-focused capstone project. Real-world labs, small class sizes, and experienced tutors make this programme ideal for future electrical technicians and engineers.

## Common Compulsory

1. DE4101 – Engineering Fundamentals
2. DE4102 – Engineering Mathematics 1
3. DE4103 – Technical Literacy
4. DE4401 – Electrical Principles
5. DE4402 – Electrical and Electronic Applications
6. DE5401 – Power Engineering
7. DE5402 – PLC Programming 1
8. DE5403 – Electronic Principles
9. DE5404 – Electrical Machines
10. DE5408 – CAD Electrical
11. DE6101 – Engineering Management
12. DE6102 – Engineering Project

## Elective Courses (Level 6)

1. DE6401 – Power Systems 1
2. DE6409 – Electrical Building Services
3. DE6411 – PLC Programming 2
4. DE6420 – Protection Systems

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## Career Opportunities

Graduates of this diploma are highly sought after in New Zealand and overseas. Career pathways may include

**Power Systems Engineer**  
**Electrical Engineer**  
**Electrical Services Engineer**  
**Electronics Engineer**  
**Control Systems Engineer**  
**Automation and Robotics Engineer**  
**Computer or Network Engineer**  
**Electrical Design Technician**

## Entry Requirements

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).

**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

## Intake

**SEP 25 / FEB 26 / JULY 26**

## 2 Years

Full-time: 2 years