

## Programme Details

It is designed for those who want to work with the future technologies and current market trends in New Zealand. A student who is keen in solving electrical or electronic engineering problems, want to design systems and administrate networks can join ICA “Diploma in Electrical Engineering” (DEE).

The DEE consists of two specializations:  
1) Telecommunication and networks,  
2) Electronics and embedded systems  
along with compulsory courses in electrical engineering including mathematics, engineering management and final project.  
Total Credits: 240,  
Duration: 2 Years (Full Time) (Total 80 weeks including holidays)



# STUDY



**INTERNATIONAL  
COLLEGE of AUCKLAND**

**Admissions and Fees**

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## Diploma in Electrical Engineering

Level 7



## Contents

### Compulsory papers:

DEE500 Mathematics for Engineers  
DEE600 Engineering Project Management  
DEE700 Final Project

### Optional Papers (Any Three Papers):

DEE501 Electrical Circuits and Devices  
DEE502 Computer Programme and CAD Tools  
DEE610 Electronic Communication Systems  
DEE602 Data Communications and Computer Networks  
DEE603 Antenna and Wave Propagation  
DEE604 Advanced Circuits and Systems  
DEE605 Advanced Electronic Devices and Applications  
DEE606 Microprocessor and Digital Logic Design

### Strand Papers

#### Telecommunication and Networks (All Six Papers)

DEE710 Network Security  
DEE711 Analysis and Design of Enterprise Networks  
DEE712 Wireless Sensor Networks  
DEE713 Wireless Communication  
DEE714 Broadband Communication  
DEE715 Optical Fibre Communication

#### Electronics and Embedded Systems (All Six Papers)

DEE720 Power Electronics Principles and Applications  
DEE721 Automated Test System Design and Best Practices  
DEE722 Advanced Microcontrollers and Interfacing  
DEE723 Real Time Embedded Systems  
DEE724 Real Time Operating Systems  
DEE725 Control Systems

### Career Opportunities

- Business intelligence consultant
- Programming Web developer
- Network engineer
- Mobile applications developer
- Database administrator

### Entry Requirements

Applicants must have a Diploma in Civil Engineering (Level 5) or equivalent knowledge and skills.  
For international students: IELTS (academic=6.0 score with no band less than 5.5).



## Aim

This programme aims to provide an advanced programme of study covering core knowledge and skills in electrical and electronics engineering, and two specialist strands: Telecommunications and networks; and Electronics and embedded systems. The programme has been designed for students who have already completed a course of study in electrical engineering at Level 5, or who have equivalent skills and knowledge, and wish to develop more specialist knowledge and skills.

## Recognition of Prior Learning (RPL)

RPL addresses previous qualifications and relevant experience including:

- Cross credits
- Assessment of prior learning
- Credit transfers

Maximum 50% of cross credits may be awarded through RPL and APL. Credit transefrs can be done for all the subjects already passed.

### Electrical Engineering Society

- Visit our Facebook page  
<https://www.facebook.com/ICAElectricalSociety>

