

BEngTech (Electrical)

Enrolment 2025 (for students who commenced in 2023 or earlier)

STUDENT ID: NAME: SIGNED:

Once you have made your selections please go to MyAUT to complete your enrolment.

- FY = Full Year, S1 = Semester 1, S2 = Semester 2
- Pre-requisite courses are shown in the brackets after each course; please check these to ensure you have completed all necessary pre-requisite courses.
- Final approval for enrolment will be made by the Programme Leader or School Registrar. **Shaded courses are compulsory core courses.** For enrolment queries or issues, please email your Academic Administrator (e: engineer@aut.ac.nz).

YEAR 1						
ENGE401	Introductory Engineering Mathematics	S1		**ENSE503	Introduction to Engineering Programming (enrol in COMP500 Programming Concepts and Techniques instead if repeat is required)	S2
ENGE500	Introduction to Sustainable Engineering Design	S1		ENEL500	Analogue Devices & Systems (ENEL501)	S2
**ENEL501	Electrical Engineering Principles (enrol in ENGE504 Electrical Engineering Fundamentals instead if repeat is required)	S1		** ENEL505	Personal Computer Engineering and Applications (enrol in COMP504 Networks and Internet instead if repeat is required)	S2
ENEL503	Digital Devices and Systems	S1		ENGE501	Engineering Mathematics 1 (ENGE401)	S1/S2

YEAR 2						
**ENEL507	Electrical Machines (ENEL501 or ENGE504)	S1		**ENEL508	Introduction to Illumination Engineering (ENEL501 or ENGE504) (not offered in 2025. Students can enrol in ENGE603 instead/ prereq ENGE504)*	S2
ENEL510	Industrial Measurement and Control (ENEL501 or ENGE504)	S1		ENGE600	Engineering Management I	S2
**ENEL506	Elements of Power Engineering (ENEL501 or ENGE504) (enrol in ENEL621 Elements of Power Engineering instead if repeat is required/ prereq ENEL501 or ENGE504)	S1		**ENEL614	Electrical Building Services (ENEL501 or ENGE504)	S2
ENEL602	Electronics Project (ENEL500 & ENEL501 (or ENGE504))	S1/S2			Major Option Course 1	

***Students can also take a similar course at another institution and have it cross credited**

YEAR 3						
ENGE777	Engineering Work Experience					S1/S2
ENEL791	Specialisation Project (Part A)	S1/S2		ENEL792	Specialisation Project (Part B)	S1/S2
ENEL710	Sustainable Energy for Renewable Power (ENEL506 (or ENEL621) & ENEL507)	S1		ENGE701	Engineering Management II (ENGE600)	S2
ENEL608	Introduction to Microcontrollers (ENSE503 or COMP500)	S1		ENEL703	Power Systems Engineering (ENEL500 & ENEL506 (or ENEL621) & ENEL501 (or ENGE504))	S2
	Major Option Course 2				Major Option Course 3	

<See the back for Major Option Courses and Note>

Major Option Courses						
**ENEL511	PLC Application A (ENEL503)	-		ENEL615	Illumination Engineering (ENEL508)	S2
ENEL701	Power Electronic Systems (ENE506 or ENEL621)	S1		**ENEL603	Industrial Circuit Model (ENEL501, ENGE501)	S2
ENEL613	Power Electronics (ENEL506)	-		*ENEL620	PLC Applications (ENEL503)	
ENEL618	PLC Application B (ENEL500)	-		*ENGE603	Renewable Energy Generation, Storage and Utilisation (ENEL501)	
ENEL702	Instrumentation and Control Systems (ENEL510, ENGE601)	S1		***ENEL606	Analogue and Digital Systems (ENEL501, ENEL500, ENEL503)	
***ENEL621	Elements of Power Engineering (ENEL501)	S1		ENGE601	Engineering Mathematics II (ENGE501)	S1/S2

****Courses not offered in 2025**

*****requires variation of study**

Note:

1. Course level is the first digit of the numerical part of the alphanumeric code.
2. Students must complete all year 1 courses to enrol in any of Year 3 courses.
3. Students must complete all compulsory courses (shaded in grey or blue) and can take elective courses either from their major (unshaded) or outside their major (up to 30 points only).
4. Students must have at least 150 points at level 6 or higher. Of these at least 75 points must be at Level 7 or higher
5. Enrolment in Specialisation Project subject to the satisfactory completion of 240 points and completion of all year 1 courses.
6. Completion of ENGE777 is compulsory to graduate and no credits will be offered for this course:
 - a. Work Experience to commence at 240 points
 - b. A student must complete a minimum of 600 hours of planned supervised work experience approved by the programme director within one year of completing the coursework requirements to be eligible for this qualification.
7. Students who plan on studying at postgraduate level or transfer to the Bachelor of Engineering (Hons) programme should take ENGE601 Engineering Mathematics II.
8. Course offerings are subject to change each year.