

# Information on transfer options to Auckland University of Technology (AUT)

---

The School of Engineering, Computer and Mathematical Sciences at AUT has four departments, Department of Electrical and Electronic Engineering (15 academic staff), Department of Mechanical Engineering (18 academic staff), Department of Computer Science and Software Engineering (36 academic staff), and Department of Mathematical Sciences (16 academic staff). We offer BE(Honours, Electrical and Electronic Engineering) and BE(Honours, Mechatronics Engineering), which are quite matched to BE(Honours, Electronic and Computer Engineering) and BE(Honours, Mechatronics Engineering).

Our school is in the newly built WZ building, which has a building area of 18,000 square meters and offers an innovative new teaching environment for students in the heart of Auckland.

## Capacity for taking on additional students

There are no capacity limits. Our current staff and teaching resources still have capacity to accommodate the indicated number of Massey students at each level of completion.

For BE(Honours) Programme, AUT offers seven majors and they share the common first-year engineering courses. From Year 2 onwards, BE(Honours) will study courses according to a chosen major, such as Mechatronics Engineering, and the lecture class size is about 50 students, which are usually grouped into two tutorial/lab streams, each of about 25 students.

## Transferability of courses

For those students in BE(Honours, Mechatronics Engineering) and BE(Honours, Electronic and Computer Engineering) currently enrolled in Massey University who choose the transfer option, we have appended a table for providing Recognition of Previous Learning (RPL) for their completed courses to be transferred to the BE(Honours, Mechatronics Engineering) and BE(Honours, Electrical and Electronic Engineering) at AUT with full credits (Appendix 1).

No additional courses, semesters or years of study will be required for transferring students. As mentioned above, we will provide RPL for those BE(Honours, Mechatronics Engineering) and BE(Honours, Electronic and Computer Engineering) students for all their courses completed at Massey University. They will complete their degree within the normal time frame (four years for full-time study) provided that they do not fail any course.

Students who have incomplete years of study can also transfer should they wish. The RPL matching is provided based on courses, thus, we can provide a study plan for them at AUT once their RPL credits are confirmed.

## GPA requirements

There are no GPA requirements for students enrolled in Massey University BE(Honours, Mechatronics Engineering) and BE(Honours, Electronic and Computer Engineering). As long as students in these two majors are enrolled at Massey University, once we receive their applications, we will assess the possible

RPL and confirm the offer, followed by a specific study plan customised for their particular academic progress.

### Ability to change to a different major

The following options are available for changing to a different major:

- (i) from Mechatronics Engineering to Mechanical Engineering, or
- (ii) from Electronic and Computer Engineering to Electrical and Electronic Engineering (EEE) or
- (iii) from Electronic and Computer Engineering to Software Engineering.

Note that although AUT does not offer an Electronic and Computer Engineering major, the students from this major at Massey University will transfer to our EEE or Software Engineering major, which luckily have significant overlap with their major and thus are viable alternatives. The students are welcome to specify their choices in their applications for a transfer to AUT BE(Honours).

### RPL for Applicants from BE(Honours) Massey University

Institution	Programme of Study	Major	Duration	Accreditation
Massey University (MU)	Bachelor of Engineering (Honours, MT)	Mechatronics Engineering	4 years (8 semesters)	Washington Accord
Auckland University of Technology (AUT)	Bachelor of Engineering (Honours, MT)	Mechatronics Engineering	4 years (8 semesters)	Washington Accord

Color Convention:

Year 1	Year 2	Year 3	Year 4

### Course Mapping

Massey-Mechatronics Engineering		AUT-Mechatronics Engineering	
<b>Year One</b>			
124104 Physics 1A: Mechanics and Thermodynamics	15	ENME510 Mechanical Principles A	15
124105 Physics 1B: Electricity, Waves and Modern Physics	15	ENEL515 Electrical Principles A	15
159100 Programming for Engineering and Technology	15	ENSE504 Introduction to Computing	15
160101 Calculus	15	ENGE501 Engineering Maths I	15
160102 Algebra	15	ENME511 Mechanical Principles B	15
228115 Engineering and Technology Principles	15	ENEL516 Electrical Principles B	15
247114 Science and Sustainability for Engineering and Technology	15	ENGE500 Intro to Sustainable Engineering Design	15
Any 100-level 15 credit course	15	MINOR1 Minor Elective 1	15
<b>Year Two</b>			
159270 Hardware-Oriented Computing	15	ENEL608 Introduction to Microcontrollers	15
228211 Engineering Practice 3: Product Development	15	MINOR2 Minor Elective 2	15
228212 Engineering Practice 4: Materials & Manufacturing	15	ENME502 Engineering Materials I	15
228271 Engineering Mathematics 2	15	ENGE601 Engineering Mathematics II	15
281272 Signals and Systems	15	ENEL702 Instrumentation and Control Systems	15
281281 Analogue Electronic Systems	15	ENEL600 Electronics	15
281282 Digital Electronic Systems	15	ENEL602 Project	15
282260 Manufacturing Engineering and Computer Aided Design	15	ENME609 Solid Mechanics I	15

<b>Year Three</b>			
228311 Engineering Practice 5: Engineering Design with Constraints	30	ENGE600 Engineering Management I	15
		ENSE600 Software Construction	15
228371 Statistical Modelling for Engineers and Technologists	15	ENGE702 Engineering Mathematics III	15
281353 Control Engineering	15	ENEL809 Digital Control	15
281384 Embedded Systems Design	15	ENEL712 Embedded System Design	15
282371 Mechanics and Materials	15	MINOR3 Minor Elective 3	15
282373 Fluid Mechanics and Thermodynamics	15	ENME711 Fluids and Thermodynamics	15
282372 Mechanism and Component Design	15	ENME702 Mechanical Design (Credit to ENSE602 OOP for Engineers)	
<b>Year Four</b>			
228711 Engineering Practice 6: Design Capstone Project	30	ENEL891/ENME891 Industrial Project (Part A)	15
		ENEL892/ENME892 Industrial Project (Part B)	15
228798 Individual Research Project	30	ENME802 Computer Aided Engineering and Analysis	15
		COMP822 Human Computer Interaction	15
282762 Robotics and Automation	15	ENME800 Industrial Robotics: Mechanics & Planning	15
282772 Industrial Systems Design and Integration	15	ENME804 Advanced Mechanical Design (as MINOR4 Minor Elective 4)	15
282778 Mechatronics	15	ENME703 Mechatronics and Control (credit to ENSE810 Software Engineering)	15
15 credits from any 700-level course selected from the following prefixes: 158 Information Technology, 159 Computer Science	15	ENGE701 Engineering Management II	15

Institution	Programme of Study	Major	Duration	Accreditation
Massey University (MU)	Bachelor of Engineering (Honours, ECE)	Electronic and Computer Engineering	4 years (8 semesters)	Washington Accord
Auckland University of Technology (AUT)	Bachelor of Engineering (Honours, EEE)	Electrical and Electronic Engineering	4 years (8 semesters)	Washington Accord

Color Convention:

Year 1	Year 2	Year 3	Year 4

Course Mapping

Massey-Electronic and Computer Engineering		AUT-Electrical and Electronic Engineering	
<b>Year One</b>			
124104 Physics 1A: Mechanics and Thermodynamics	15	ENME510 Mechanical Principles A	15
124105 Physics 1B: Electricity, Waves and Modern Physics	15	ENEL515 Electrical Principles A	15
159100 Programming for Engineering and Technology	15	ENSE504 Introduction to Computing	15
160101 Calculus	15	ENGE501 Engineering Maths I	15
160102 Algebra	15	ENME511 Mechanical Principles B	15
228115 Engineering and Technology Principles	15	ENEL516 Electrical Principles B	15
247114 Science and Sustainability for Engineering and Technology	15	ENGE500 Intro to Sustainable Engineering Design	15
Any 100-level 15 credit course	15	General Elective (15 Level and above)	15
<b>Year Two</b>			
158222 Data Wrangling and Machine Learning	15	ENGE600 Engineering Management I / COMP615 Foundations of Data Science	15
159270 Hardware-Oriented Computing	15	ENEL608 Introduction to Microcontrollers	15
228211 Engineering Practice 3: Product Development	15	ENEL602 Project	15
228212 Engineering Practice 4: Materials & Manufacturing	15	ENME502 Engineering Materials	15
228271 Engineering Mathematics 2	15	ENGE601 Engineering Mathematics II	15
281272 Signals and Systems	15	ENEL601 Signals and Systems	15
281281 Analogue Electronic Systems	15	ENEL704 Circuit Theory	15
281282 Digital Electronic Systems	15	ENEL600 Electronics	15

<b>Year Three</b>			
158235 Networks, Security and Privacy	15	COMP715 Network Security (Credit to ENEL700 Communication Engineering)	15
158333 Applied Machine Learning and Big Data Processing	15	ENGE702 Engineering Mathematics III	15
218741 Light & Lighting	15	ENEL615 Illumination Engineering (credit to ENEL703 Power System Engineering)	15
228311 Engineering Practice 5: Engineering Design with Constraints	30	ENEL709 Engineering Design Innovation Project	15
		ENEL705 Fields and Waves	15
281353 Control Engineering	15	ENEL702 Instrumentation and Control Systems	15
281384 Embedded Systems Design	15	ENEL712 Embedded System Design	15
228371 Statistical Modelling for Engineers and Technologists	15	ENGE800 Engineering Numerical Techniques and Statistical Analysis	15
<b>Year Four</b>			
228711 Engineering Practice 6: Design Capstone Project	30	ENEL891 Industrial Project (Part A)	15
		ENEL892 Industrial Project (Part B)	15
228798 Individual Research Project	30	ENEL809 Digital Control	15
		ENEL813 Power Systems Quality Management	15
281755 Digital Signal Processing	15	ENSE807 Digital Signal Processing	15
281776 Advanced Communication Engineering	15	ENEL800 Wireless Systems	15
281780 Advanced Electronic Circuits	15	ENEL701 Power Electronic Systems / ENEL801 Advanced Power Electronics	15
15 credits from any 700-level course selected from the following prefixes: 158 Information Technology, 159 Computer Science	15	ENGE701 Engineering Management II	15