The Degree of Master of Architectural Engineering (MArchEng – 120 points)

These regulations must be read in conjunction with the General Regulations for the University.

1. Version

- (a) These Regulations came into force on 1 January 2018.
- (b) This degree was first offered in 2018.

2. Variations

In exceptional circumstances the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate may approve a personal programme of study which does not conform to these regulations.

3. The structure of the qualification

The Master of Architectural Engineering (MArchEng) consists of Parts I and II totalling 120 points as set out in the Schedule to these Regulations. In order to qualify, a student must:

- (a) either:
 - i. complete both Part I and II, or
 - if accepted to the qualification under Regulation 4(a)(ii), complete Part II of the programme, and
- (b) successfully complete Part I before being permitted to proceed to Part II.

4. Admission to the qualification

A student for the Master of Architectural Engineering, before enrolling, must have:

- (a) either:
 - i. qualified for an appropriate four year bachelor's degree in a subject related to building design with first or second class honours, or equivalent; or
 - ii. qualified for the Postgraduate Certificate in Architectural Engineering with a B Grade Point Average or better: or
 - iii. been admitted with Academic Equivalent Standing; and
- (b)
- qualified for a degree in civil engineering for admission to the Structural Engineering programme; or
- qualified for a degree in mechanical engineering for admission to the Building Services and Energy Engineering programme; and
- (c) been approved as a student by the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate based on relevance and standard of undergraduate study and work experience.

5. Subjects

The Master of Architectural Engineering may be awarded in the following endorsements based on the programme followed by a student during Part II of the qualification:

Structural Engineering, Integrated Building Design, and Building Services and Energy Engineering.

6. Time limits

The qualification adheres to the General Regulations for the University with a time limit of 48 months.

7. Transfers of credit, substitutions and cross-credits

This qualification adheres to the Credit Recognition and Transfer Regulations, with no additional stipulations.

8. Progression

- (a) This qualification adheres to the General Regulations for the University, which permits 30 points of course failures to qualify for the qualification, with no additional stipulations.
- (b) A student who has successfully completed Part I of the Structural Engineering programme may proceed to Part II of the Structural Engineering or Integrated Building Design programme.

(c) A student who has successfully completed Part I of the Building Services and Energy Engineering programme may proceed to Part II of the Building Services and Energy Engineering or Integrated Building Design programme.

9. Honours, Distinction and Merit

This qualification adheres to the General Regulations for the University and may be awarded with Distinction and Merit.

10. Exit and Upgrade Pathways to other Qualifications

A student who has not met the requirements for the MArchEng or who wishes to transfer to the Postgraduate Certificate in Architectural Engineering may apply to the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate for admission. Admission will be based on having met the requirements for entry.

Schedule C: Compulsory Courses for the Degree of Master of Architectural Engineering

For full course information, go to www.canterbury.ac.nz/courses

Group 1: Part I

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
ENAE601	Whole Building Behaviour	15	X1	Campus	P: Subject to approval of the Head of Department
	and Performance		X2	Campus	
ENAE602	Collaborative Building Design Studio	15	X1	Campus	P: Subject to approval of the Head of Department.
			X2	Campus	

Group 2: Part II

Course Code	Course Title	Pts	2024		P/C/R/RP/EQ
ENAE620	Integrated Building Design Project	15	X1	Campus	P: Subject to approval of the Head of Department
			X2	Campus	

Integrated Building Design

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
ENAE605	Sustainable Building Design Practice	15	X	Campus	P: Subject to approval of the Head of Department
ENAE606	Building Modelling and Integrated Design	15	x	Campus	P: Subject to approval of the Head of Department

Building Services and Energy Engineering

Course Code	Course Title	Pts	2024		P/C/R/RP/EQ
ENAE607	Building Energy Systems Design Practice	15	Х	Campus	P: Subject to approval of the Head of Department.
ENAE608	HVAC Design Practice	15	Х	Campus	P: Subject to approval of the Head of Department.

Structural Engineering

Course Code	Course Title	Pts	2024		P/C/R/RP/EQ
ENAE603	Structural Design Practice	15	X	Campus	P: Subject to approval of the Head of Department
ENAE604	Structural Assessment and Retrofit	15	Х	Campus	P: Subject to approval of the Head of Department

Schedule E: Elective Courses for the Degree of Master of Architectural Engineering

Structural Engineering

Restricted to students who have successfully completed Part I Structural Engineering programme.

Three courses from:

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
ENAE609	Building Envelope Design and Engineering	15	X	Campus	P: Subject to approval of the Head of Department
ENEQ634	Special topic	15	NO		P: Subject to approval of the Head of Department or the Programme Director.
ENEQ642	Seismic Assessment and Retrofit Strategies for Existing Reinforced Concrete Buildings	15	NO		P: Subject to approval of Head of Department. R: ENEQ692 RP: Post-graduate admission and approval of the departmental Director of Post-graduate Studies. Undergraduate background in earthquake engineering is expected.
ENEQ650	Advanced Steel and Composite Structures	15	X	Campus	P: ENCI436 or approval of Head of Department or Programme Director R: ENCI611
ENEQ681	Special Topic	15	x	Campus	P: Subject to approval of the Head of Department or Programme Director.

- (1) CIVIL715 Advanced Structural Concrete (Offered by Te Whare Wānanga o Tāmaki Makaurau | University of Auckland)
- (2) CIVIL721 Foundation Engineering (Offered by Te Whare Wānanga o Tāmaki Makaurau | University of Auckland)
- (3) A course approved by the Director of Architectural Engineering.

Integrated Building Design A

Restricted to students who have successfully completed Part I Integrated Building Design programme. Three courses from:

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
ENAE609	Building Envelope Design and Engineering	15	X	Campus	P: Subject to approval of the Head of Department
ENAE610	Building Sustainability Assessment	15	Х	Campus	P: Subject to approval of the Head of Department
ENAE611	Human Factors in Building Design	15	NO		P: Subject to approval of the Head of Department
ENCM610	Construction Management	15	NO		P: Subject to approval of Programme Director
ENCM650	Cost Engineering	15	NO		RP: BE (Hons) or equivalent

Or; a course approved by the Director of Architectural Engineering.

Integrated Building Design B

Restricted to students who have successfully completed Part I Structural Engineering or Part I Building Services and Energy Engineering programme.

Course Code	Course Title	Pts	2024		P/C/R/RP/EQ
ENAE605	Sustainable Building Design Practice	15	X	Campus	P: Subject to approval of the Head of Department
ENAE606	Building Modelling and Integrated Design	15	X	Campus	P: Subject to approval of the Head of Department

And one course from:

Course Code	Course Title	Pts	2024		P/C/R/RP/EQ
ENAE609	Building Envelope Design and Engineering	15	X	Campus	P: Subject to approval of the Head of Department
ENAE610	Building Sustainability Assessment	15	Х	Campus	P: Subject to approval of the Head of Department
ENAE611	Human Factors in Building Design	15	NO		P: Subject to approval of the Head of Department
ENCM610	Construction Management	15	NO		P: Subject to approval of Programme Director
ENCM650	Cost Engineering	15	NO		RP: BE (Hons) or equivalent

Or; a course approved by the Director of Architectural Engineering.

Building Services and Energy Engineering

Restricted to students who have successfully completed Part I of the Building Services and Energy Engineering programme.

Three courses from:

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
ENAE609	Building Envelope Design and Engineering	15	X	Campus	P: Subject to approval of the Head of Department
ENAE612	Advanced Building Environmental Control	15	NO		P: Subject to approval of the Head of Department
ENEQ634	Special topic	15	NO		P: Subject to approval of the Head of Department or the Programme Director.
ENME605	Advanced Energy Systems Engineering	15	NO		P: Subject to approval of the Head of Department. R: ENME405, ENGR404 RP: Bachelors degree in Engineering or equivalent
ENME623	Advanced Instrumentation and Sensors	15	S1	Campus	P: Subject to approval of the Head of Department. R: ENME423 RP: Bachelors degree in Engineering or equivalent

- (1) MECHENG 724 Multivariable Control Systems (Offered by Te Whare Wānanga o Tāmaki Makaurau | University of Auckland)
- (2) MECHENG 726 Acoustics for Engineers (Offered by Te Whare Wānanga o Tāmaki Makaurau | University of Auckland)
- (3) MECHENG 714 Wind Engineering (Offered by Te Whare Wānanga o Tāmaki Makaurau | University of Auckland)
- (4) MECHENG 711 Computational Fluid Dynamics (Offered by Te Whare Wānanga o Tāmaki Makaurau | University of Auckland)
- (5) A course approved by the Director of Architectural Engineering.