

The Degree of Bachelor of Engineering with Honours (BE(Hons) – 480 points)

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

1. Version

These Regulations came into force on 1 January 2026.

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

- (a) To qualify for the BE(Hons) a student must:
 - i. be credited with a minimum of 480 points towards the qualification unless direct entry is granted under regulation 4(b)iii; and
 - ii. be credited with the required courses listed in Schedule C to these regulations; and
 - iii. satisfy the requirements for a discipline, as listed in Schedule S, to these regulations and optionally, meet the requirements for a minor, as listed in Schedule S, to these regulations.
 - iv. be credited with no fewer than 120 points at 400-level or higher; and
- (b) The Engineering First Year programme of study will consist of no fewer than 120 points including the 100 level courses specified in Schedule C and sufficient 100 level courses from Schedule S to meet the requirements for at least one discipline as specified in Schedule S; and
- (c) The Second, Third and Fourth Year programme will each have no fewer than 120 points.
- (d) Where the courses specified by these regulations consist of fewer than 480 points, the remaining points may consist of courses from the schedules to any University of Canterbury degree regulation.

4. Admission to the qualification

- (a) Admission to the BE(Hons) First Year Programme is by approval of the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate.
- (b) Admission to the BE(Hons) Second Year Programme is by approval of the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate, and is based on:
 - i. successful performance in the Engineering First Year programme of at least 120 points with a competitive GPA that secures a place in a discipline; or
 - ii. successful performance in a modified First Year Programme, approved by the Amo Matua, Pūhanga Executive Dean of Engineering or delegate, with a competitive GPA that secures a place in a discipline; or
 - iii. direct entry, with successful completion of a qualifying programme of no more than 60 points at 100-level as specified by the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate.
- (c) The allocation of places in Second Year programmes is in accordance with the Faculty Admissions Policy.
- (d) The Amo Matua, Pūhanga | Executive Dean of Engineering or delegate, may decline entry to a student who has been offered a place in the Second Year of the BE(Hons) degree and who has not completed their enrolment by the Friday preceding the first day of lectures of Semester 1.
- (e) Admission on the basis of Regulation 4(b)(ii) or 4(b)(iii) must be made by written application to the Amo Matua, Pūhanga | Executive Dean of Engineering, or delegate. An interview may also be required. Consideration for admission under Regulation 4(b)(ii) will normally be based on completion of the STAR MATH course. Consideration for admission under Regulation 4(b)(iii) will be based on outstanding academic results from Secondary School examinations (or equivalent demonstrated learning). If direct entry is granted, the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate may waive up to 120 points of the Engineering First Year.
- (f) Students who do not gain admission to the Second Year of a discipline within two years of first enrolment in Engineering First Year may not continue with the qualification.
- (g) With the approval of the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate, students who have completed Engineering First Year may apply to defer their degree for a duration of 1 year but no more than 3 years.

5. Subjects

- This qualification may be awarded in the following disciplines: Chemical and Process Engineering, Civil Engineering, Computer Engineering, Electrical and Electronic Engineering, Forest Engineering, Mechanical Engineering, Mechatronics Engineering, Natural Resources Engineering, and Software Engineering.
- The degree may also be completed with a minor that denotes sub-specialisation within an engineering discipline.
- Any given course may contribute to the requirements of both the discipline and a minor in that same discipline.

6. Time limits

- The time limit for completion of the Second, Third, and Fourth Years and work experience requirements of this qualification is 6 years of study.
- The programmes of study for full-time students are stipulated below. Students enrolled on a part-time basis must seek academic advice in relation to their enrolment.
- In the case of a student pursuing double degrees or suspension of studies, qualification timelines may be extended if approved by the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate.
- A student who has an approved suspension of study for more than a calendar year may be required to undertake preparatory work prior to resuming studies in this qualification. Any preparatory programme of study must be completed while on suspension, and immediately prior to the end of their suspension.

7. Transfers of credit, substitutions and cross-credits

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

8. Progression

This qualification adheres to the General Regulations for the University, with the following stipulations:

- Introductory courses for Mathematics, Physics and Chemistry (EMTH117/MATH101, PHYS111 and CHEM114) may only be attempted twice in the BE(Hons) First Year. There may be at most two attempts across EMTH117 and MATH101 combined. The requirement to progress is a pass in PHYS111, CHEM114, or EMTH117, or at least a B in MATH101. Students in introductory courses who do not meet the requirement to progress after the second attempt will be excluded from the BE(Hons) First Year.
- A student is not permitted to enrol in any 200-level courses in the BE(Hons) regulations prior to gaining admission to a Second Year Programme unless the Amo Matua, Pūhanga | Executive Dean of Engineering, or delegate, has approved a modified First Year programme in accordance with Regulation 4(b)ii.
- A student is not permitted to enrol in any engineering courses of the Fourth Year programme prior to completion of the Second Year Programme.
- A student may enquire, from the Amo Matua, Pūhanga | Executive Dean of Engineering, or delegate, as to the Kaupeka Pūhanga | Faculty of Engineering guidelines, on the application of restricted credit as described in the General Conditions for Credit Regulations.

9. Honours, Distinction and Merit

- The BE(Hons) may be awarded with First, Second, or with Third Class Honours. Second Class Honours must be listed in Division I or Division II.
- Honours is awarded for academic achievement, measured by weighted GPA, 20% weighting on the 300-level and 80% on the 400-level, and completion of requirements within the time limitations of the BE(Hons). Where students have completed courses on exchange, these grades will be used in the calculation of honours. Only the first attempt of a course, or its substitute, will be considered in the calculation.
- Where a student has completed more courses than necessary the courses that were passed subsequent to when the required credit for the degree is satisfied will not be used in the Honours calculation.
- In exceptional circumstances a student may be permitted by the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate to complete all the requirements, both academic and non-academic, of the award outside the time limitation. In such circumstances the student will be awarded a Degree of Bachelor of Engineering.

10. Exit and Upgrade Pathways to other Qualifications

There are no advancing qualifications for the BE or BE(Hons).

Schedule C: Compulsory Courses for the Degree of Bachelor of Engineering with Honours

For full course information, go to courseinfo.canterbury.ac.nz

Note: Students who have achieved a high grade in MATH199 may be approved by the Amo Matua, Pūhanga | Executive Dean, Engineering, or delegate for a modified First Year programme, including exemption from some or all courses in Schedules C and S.

Course Code	Course Title	Pts	2026	Location	P/C/R/RP/EQ
COSCI31	Introduction to Programming for Engineers	15	S1	Campus	P: 1) EMTH117 or MATH101, or 2) NCEA 14 Credits (18 strongly recommended) at level 3 Mathematics (including the standards 'Apply differentiation methods in solving problems (91578)' and 'Apply integration methods in solving problems (91579)'), or 3) Cambridge: D at A level or an A at AS level in Mathematics, or 4) IB: 4 at HL or 5 at SL in Mathematics, or 5) approval of the Head of Department based on alternative prior learning. (01 Jan 2024 - present) R: COSCI21
			V1	Campus	
			V2	Campus	
			S2	Campus	
			A	Campus	
			V3	Campus	
EMTH118	Engineering Mathematics 1A	15	S1	Campus	P: 1) EMTH117, OR 2) B grade or higher in TRNS017 or MATH101, OR 3) NCEA 14 Credits (18 strongly recommended) at level 3 Mathematics (including the standards 'Apply differentiation methods in solving problems (91578)' and 'Apply integration methods in solving problems (91579)'), OR 4) Cambridge: D at A level or an A at AS level in Mathematics, OR 5) IB: 4 at HL or 5 at SL in Mathematics, OR 6) approval of the Head of School based on alternative prior learning. R: MATH102, MATH108, MATH199
			V1	Campus	
			V2	Campus	
			S2	Campus	
			V3	Campus	
EMTH119	Engineering Mathematics 1B	15	SU2	Campus	P: EMTH118, COSCI31 R: MATH103, MATH109, MATH199
			V1	Campus	
			V2	Campus	
			S2	Campus	
			V3	Campus	
			SU2	Campus	
ENGR100	Engineering Academic Skills	0	W	Campus	
			V1	Campus	
			A	Campus	
			V2	Campus	
			V3	Campus	
ENGR101	Foundations of Engineering	15	S1	Campus	
			V2	Campus	
			S2	Campus	
			A	Campus	
ENGR200	Engineering Work Experience	0	A	Campus	P: Acceptance into a professional year of the BE(Hons) programme. RP: Completion of Engineering Intermediate

PHYS101	Engineering Physics A: Mechanics, Waves, Electromagnetism and Thermal Physics	15	SU2	Campus	P: 1) a) PHYS111 or NCEA 14 credits (18 credits strongly recommended) at level 3 Physics, and b) MATH101 or EMTH117 or 14 Credits (18 credits strongly recommended) at level 3 Mathematics (including the standards 'Apply differentiation methods in solving problems (91578)' and 'Apply integration methods in solving problems(91579)'), or 2) Cambridge: D at A level or an A at AS level in both Physics and Mathematics, or 3) IB: 4 at HL or 6 at SL in both Physics and Mathematics, or 4) a) TRNS008 with a B+ or better grade, and b) TRNS017, or 5) approval of the Head of Department based on alternative prior learning. R: PHYS113, PHYS112 EQ: PHYS113
			S1	Campus	
			V2	Campus	
			S2	Campus	

Schedule S: Subject Courses for the Degree of Bachelor of Engineering with Honours

Note: Not all courses offered in a given year.

Pūhanga Matū, Tukanga | Chemical and Process Engineering

A student specialising in Chemical and Process Engineering must be credited with all of Schedule C and the following:

First Year

CHEM111

Second Year

ENCH199, ENCH241, ENCH281, ENCH291, ENCH292, ENCH293, ENCH295, ENCH296, ENCH298

Third Year

- (1) ENCH390, ENCH391, ENCH392, ENCH393, ENCH394, ENCH395, ENCH396; and
- (2) One course selected from ENCN375, ENGR404, ENGR407, ENCN405

Fourth Year

- (1) ENCH494, ENCH495, ENCH496, ENCH497; and
- (2) One course selected from ENCN375, ENGR404, ENGR407, ENCN405 or 15 points from 400-level approved by the Director of Studies
- (3) One course selected from either ENCH482, ENCH483, ENCH486, ENCH487, ENGR401, ENGR409 or 15 points from 400-level approved by the Director of Studies

Minor in Bioprocess Engineering

A student minoring in Bioprocess Engineering will complete the requirements to specialise in Chemical and Process Engineering and must be credited with the following:

- (1) ENCH281, ENCH482, ENGR407; and
- (2) ENCH494 or ENCH495

Note: ENCH494 or ENCH495 must be taken with an approved bioprocess engineering focus as approved by the Director of Studies.

Minor in Sustainable Energy Engineering

A student minoring in Sustainable Energy Engineering will complete the requirements to specialise in Chemical and Process Engineering and must be credited with the following:

- (1) ENCH392, ENCH483, ENGR404; and
- (2) ENCH494 or ENCH495

Note: ENCH494 or ENCH495 must be taken with an approved sustainable energy engineering focus as approved by the Director of Studies.

Minor in Environmental Process Engineering

A student minoring in Environmental Process Engineering will complete the requirements to specialise in Chemical and Process Engineering and must be credited with the following:

- (1) ENCH390, ENCH486, ENGR409; and
- (2) ENCN375 or ENGR407; and
- (3) ENCH494 or ENCH495

Note: ENCH494 or ENCH495 must be taken with an approved environmental process engineering focus as approved by the Director of Studies.

Pūhanga Metarahi | Civil Engineering

A student specialising in Civil Engineering must be credited with all of Schedule C and the following:

First Year

CHEM111 and ENGR102

Second Year

ENCI199, EMTH210, ENCN201, ENCN205, ENCN213, ENCN221, ENCN231, ENCN242, ENCN253, ENCN281

Note: Students are required to attend the Second Year Camp. Work at the camp will form part of the assessment for ENCN281 Environmental Engineering and ENCN201 Communication Skills Portfolio 1.

Third Year

- (1) ENCN301, ENCI335, ENCN304, ENCN342, ENCN353, ENCN361, ENCN371, ENCN375; and
- (2) ENCI336 or ENCN347

Fourth Year

- (1) ENCN493; and
- (2) ENCI492 or ENCN491; and
- (3) 15 points from: ENCI417, ENCI418, ENCN412, ENCN446, ENGR409; and
- (4) Additional 60 points from: ENCI417, ENCI418, ENCI419, ENCI437, ENCI438, ENCN401, ENCN404, ENCN405, ENCN412, ENCN415, ENCN423, ENCN441, ENCN442, ENCN446, ENCN452, ENCN454, ENCN482, ENGR403, ENGR409, a 15 point 400-level course approved by the Director of Studies

Note: Students with a GPA of 6 or more may apply to take one 600-level course approved by the Director of Studies.

Minor in Structural Engineering

A student minoring in Structural Engineering will complete the requirements to specialise in Civil Engineering and must be credited with the following:

- (1) 45 points from: ENCI417, ENCI418, ENCI419, ENCI437, ENCI438; and
- (2) ENCN493

Note: ENCN493 must have a structural engineering focus as approved by the Director of Studies.

Minor in Water and Environmental Systems Engineering

A student minoring in Water and Environmental Systems Engineering will complete the requirements to specialise in Civil Engineering and must be credited with the following:

- (1) 45 points from: ENCN405, ENCN441, ENCN442, ENCN446, ENCN482, ENGR409, 15 points from 400-level in a relevant course approved by the Director of Studies; and
- (2) ENCN493

Note: ENCN493 Project must have a water and environmental systems engineering focus as approved by the Director of Studies.

Pūhanga Rorohiko | Computer Engineering

A student specialising in Computer Engineering must be credited with all of Schedule C and the following:

First Year

COSC122 or MATH120

Second Year

- (1) ENEL198, ENEL199, EMTH210, EMTH211, ENCE260, ENEL200, ENEL220, ENEL270, SENG201; and
- (2) COSC264 or COSC265

Third Year

- (1) ENCE361, ENEL300, ENEL301, ENEL320, ENEL321, ENEL373; and
- (2) 30 points from: COSC362, COSC363, COSC364, COSC367, COSC368, ENCE360, SENG301, SENG365, any 15 points 300-level course approved by the Director of Studies

Fourth Year

- (1) ENCE461, ENCE464, ENEL400; and
- (2) 60 points from: COSC401, COSC440, COSC422, COSC428, COSC441, ENEL420, ENEL422, ENEL445, ENEL491, ENME403, ENMT482, SENG406, any one 15 point 400-level course approved by the Director of Studies

Minor in Communications and Network Engineering

A student minoring in Communications and Network Engineering will complete the requirements to specialise in Computer Engineering and must be credited with the following:

- (1) COSC264; and
- (2) COSC364, ENEL320; and
- (3) COSC441, ENEL400, ENEL422.

Pūhanga Hiko | Electrical and Electronic Engineering

A student specialising in Electrical and Electronic Engineering must be credited with all of Schedule C and the following:

First Year

COSC122 or MATH120

Second Year

ENEL198, ENEL199, ENEL200, EMTH210, EMTH211, ENEL220, ENEL270, ENEL280, ENEL290, ENCE260

Third Year

ENCE361, ENEL300, ENEL301, ENEL320, ENEL321, ENEL372, ENEL373, ENEL382

Fourth Year

- (1) ENEL400, and
- (2) 90 points from: ENCE461, ENCE464, ENEL420, ENEL422, ENEL445, ENEL471, ENEL480, ENEL481, ENEL491, ENME403, ENMT482, one 15 point 400-level or higher course approved by the Director of Studies

Minor in Power Engineering

A student minoring in Power Engineering will complete the requirements to specialise in Electrical and Electronic Engineering and must be credited with the following:

ENEL480, ENEL372, ENEL382, ENEL471, and ENEL481.

Pūhanga Ngahere | Forest Engineering

A student specialising in Forest Engineering must be credited with all of Schedule C and the following:

First Year

CHEM111 and ENGR102

Second Year

FORE199, EMTH210, FORE205, FORE215, ENCN213, ENCN221, ENCN231, ENCN253, ENFO204

Note: Students are required to attend a Second Year combined Forest Engineering and Forest Science field trip

Third Year

ENCN353, ENCN371, FORE316, FORE422, FORE242, ENCN304, FORE323

Fourth Year

- (1) ENFO410, ENFO499, FORE423, FORE448; and
- (2) 60 points from: FORE426, FORE435, FORE437, FORE443, FORE449, ENCN415, ENCN452, ENGE412, ENGR403, 15 point 400-level course approved by the Director of Studies or delegate.

Note: Students are required to attend a Fourth Year Forest Engineering field trip.

Pūhanga Pūrere | Mechanical Engineering

A student specialising in Mechanical Engineering must be credited with all of Schedule C and the following:

First Year

CHEM111 and ENGR102

Second Year

ENME199, EMTH210, EMTH271, ENME201, ENME202, ENME203, ENME207, ENME215, ENME221

Third Year

- (1) ENME301, ENME302, ENME303, ENME307, ENME313, ENME314, ENME315; and
- (2) ENME311 or ENME351 or ENME362.

Fourth Year

- (1) ENME401, ENME408, ENME418; and
- (2) 60 points from: ENGR401, ENME402, ENME403, ENME404, ENME405, ENME406, ENME407, ENME411, ENME412, ENME417, ENME423, ENME427, ENME451, ENME460, ENME465, ENME480, ENME486, ENME488, ENME492, ENMT482, 15 point 400-level course approved by the Head of Department or Delegate.

Minor in Aerospace Engineering

A student minoring in Aerospace Engineering will complete the requirements to specialise in Mechanical Engineering and must be credited with the following:

- (1) ENME362, and
- (2) 30 points from: ENGR401, ENME404, ENME417, ENME460, ENME486, ENME488, 15 point 400-level course approved by the Head of Department or Delegate.

Note: ENME408 Project, must be taken with an approved aerospace engineering focus as approved by the Head of Department or Delegate.

Minor in Biomedical Engineering

A student minoring in Biomedical Engineering will complete the requirements to specialise in Mechanical Engineering and must be credited with the following:

- (1) ENME351, MDPH401, and
- (2) 15 points from: ENME423, ENME451, MDPH406, 15 point 400-level course approved by the Head of Department or Delegate.

Note: ENME408 Project must be taken with an approved biomedical engineering focus as approved by the Head of Department or Delegate.

Pūhanga Kōhikohiko | Mechatronics Engineering

A student specialising in Mechatronics Engineering must be credited with all of Schedule C and the following:

First Year

ENGR102

Second Year

ENEL198, ENME199, EMTH210, EMTH211, ENCE260, ENEL270, ENME202, ENME203, ENMT211, ENMT221.

Third Year

- (1) ENCE361, ENEL301, ENEL372, ENME302, ENME303, ENMT301; and
- (2) 15 points from: ENEL373, ENME314, 15 points from 300- or 400-level course approved by the Director of Studies.

Fourth Year

- (1) ENCE461, ENME403, ENMT401; and
- (2) 60 points from: COSC440, COSC428, ENCE464, ENEL420, ENEL471, ENEL491, ENGR401, ENME402, ENME404, ENME406, ENME423, ENME451, ENMT482, and other 400-level or higher-level courses approved by the Director of Studies with a maximum of 30 points from non-Engineering coded courses.

Pūhanga Rawa Taiao | Natural Resources Engineering*

* Not open to new enrolments

A student specialising in Natural Resources Engineering must be credited with all of Schedule C and the following:

First Year

CHEM111 and ENGR102

Second Year

ENCI199, ENCN201, EMTH210, ENCN205, ENCN213, ENCN221, ENCN231, ENCN242, ENCN253, ENCN281

Note: Students are required to attend the Second Year Camp. Work at the camp will form part of the assessment for ENCN281 and ENCN201

Third Year

ENCN301, ENCI335, ENCN304, ENCN342, ENCN347, ENCN353, ENCN361, ENCN371, ENCN375

Fourth Year

- (1) ENCN493; and
- (2) ENNR413; and
- (3) 60 points from ENCN401, ENCN405, ENCN412, ENCN415, ENCN423, ENCN441, ENCN442, ENCN446, ENCN452, ENCN454, ENCN482, ENGR403, ENGR409, WATR403, or a 15-point 400-level course approved by the Director of Studies

Note: Students with a GPA of 6 or more may apply to take one 600-level course approved by the Director of Studies.

Pūhanga Pūmanawa | Software Engineering

A student specialising in Software Engineering must be credited with all of Schedule C and the following:

First Year

COSC122 and MATH120

Second Year

- (1) COSC261, COSC262, COSC265, ENCE260, SENG199, SENG201, SENG202; and
- (2) 30 points from: COSC264, EMTH210, EMTH211, MATH220, MATH230.

Third Year

- (1) COSC368, ENEL301, SENG301, SENG302, SENG365, and
- (2) 30 points from: COSC362, COSC363, COSC364, COSC367, COSC369, DATA301, ENCE360, ENCE361, SENG303, 15 point 300-level course approved by the Director of Studies.

Fourth Year

- (1) SENG401, SENG402, SENG406; and
- (2) 60 points from: 400-level courses selected from COSC, SENG, ENCE, and DATA430–439 approved by the Director of Studies.