

The Degree of Bachelor of Science with Honours (BSc(Hons) – 120 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 2018.

2. Variations

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

3. The structure of the qualification

To qualify for the degree of Bachelor of Science with Honours a student must pass courses from the Schedule to these Regulations having a value of at least 120 points with the following stipulations:

- (a) Courses must include a research project of 30 points.
- (b) A student may, with the approval of the Tumuaki Kura | Heads of Schools concerned, replace up to 45 points in courses prescribed for the major with courses prescribed for another major at an equivalent level. Where specific limits are given in a Schedule to these Regulations, the more restrictive of the two shall apply.
- (c) A student may complete the degree of Bachelor of Science with Honours in two majors (Combined Honours). Except in cases specified in Schedule S: Group 1 to these Regulations, a student wishing to complete a Combined BSc(Hons) degree must:
 - i. satisfy the Honours entry requirements in each major; and
 - ii. take 400-level courses totalling at least 60 points in each subject; and
 - iii. complete one research project (worth at least 30 points) that reflects the combined nature of the degree.

4. Admission to the qualification

To be admitted to the Bachelor of Science with Honours a student, before enrolling must:

- (a) either
 - i. have completed the requirements for a bachelor's degree with at least a B (5.0 GPA) average in 60 points at 300-level in their major; or
 - ii. been admitted under the regulations for admission with Academic Equivalent Standing for the BSc(Hons); or
 - iii. gained direct entry into 200-level courses and have completed a minimum of 240 points, including 90 points at 300-level (this applies to BSc students who have not completed their qualification); or
 - iv. completed a qualifying course prescribed by the Tumuaki Tari/Kura | Head of Department/School and approved by the Amo Matua, Pūtaiao | Executive Dean of Science or delegate of a standard equivalent to the prerequisite courses; and
- (b) satisfied the requirements for the subject to be undertaken in the BSc(Hons) as specified in Schedule S: Group 1 or 2 to these Regulations.

5. Subjects

The Degree of Bachelor of Science with (Honours) may be awarded in any of the subjects listed in Schedule S: Group 1 or 2 to these Regulations.

6. Time limits

The time limit for this qualification is 12 months. This may be exceeded if granted an exemption by the Amo Matua, Pūtaiao | Executive Dean of Science or delegate.

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:

- A student who fails up to 30 points for the BSc (Hons) degree may, in exceptional circumstances and with the permission of the Amo Matua, Pūtaiao | Executive Dean of Science or delegate, repeat that course or courses, or substitute another course or courses of equal weight.
- A student who fails more than 30 points will be withdrawn from the qualification.

9. Honours, Distinction and Merit

This qualification adheres to the General Regulations for the University, with no additional stipulations.

10. Exit and Upgrade Pathways to other Qualifications

- A student who has completed the requirements for the BSc(Hons) but has not yet graduated, may apply to the Amo Matua, Pūtaiao | Executive Dean of Science or delegate to be admitted to the Master of Science and have credits transferred.
- A student who has graduated with the BSc(Hons) from the University of Canterbury, may apply to the Amo Matua, Pūtaiao | Executive Dean of Science or delegate to be admitted to the Master of Science and have their BSc(Hons) subsumed in accordance with the General Regulations to the University.
- A student for the BSc(Hons) who has not met the requirements for the qualification but who has satisfied all requirements for the Postgraduate Diploma in Science may apply to the Amo Matua, Pūtaiao | Executive Dean of Science or delegate to withdraw from the degree and be awarded the Diploma.

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

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

Group 1: Single Major

Mātai Kōkōrangī | Astronomy

ASTR480 (or SCIE481 and SCIE482), ASTR422, ASTR423 or ASTR425 or ASTR426, PHYS415, and three other courses from PHYS411–460, MDPH403, MDPH406, with a maximum of two courses from PHYS440–460.

Not all courses may be offered in any one year.

P:

- 90 points of 300-level ASTR or PHYS courses including PHYS310, PHYS311 or PHYS313; and
- 30 points of 300-level MATH courses.

Mātai Matū Koiora | Biochemistry

BCHM480 (or SCIE481 and SCIE482), plus a further 90 points of courses selected from BCHM455 (BIOL455), BCHM456 (BIOL456), BCHM457 (BIOL457), BCHM459, BCHM460 (BIOL460), BCHM461 (BIOL461), BCHM462 (BIOL462), BCHM420, and CHEM430–433 approved by the Kaihautū, Mātai Matū Koiora | Director of Biochemistry. Other suitable courses include: BCHM407–409, BIOL429–462, BIOL481, BIOL496.

P:

- BCHM305, BCHM306, BCHM338, BCHM339 and BCHM381; and
- a minimum of 15 points from CHEM335, 337, 340, BIOL313, 330, 351 or 352.

Mātai Pūtaiao Koiora | Biological Sciences

Courses totalling at least 120 points including BIOL411 and BIOL412 and a project (BIOL480 or SCIE481 and SCIE482). At least 45 points are to be selected from other BIOL 400-level courses. The remaining course may be selected with the approval of Te Kura Pūtaiao Koiora | School of Biological Sciences Kairuruku Tau Tuawhā | Fourth Year Coordinator.

P:

- (1) 60 points from 300-level BIOL courses; and
- (2) BIOL309 or GEOG309 or PSYC344 or 15 points 300-level STAT.

Biotechnology

Courses totalling at least 120 points including BIOL411, BIOL412, BIOL496 and a project (BIOT480 or SCIE481 and SCIE482). At least 30 points are to be selected from BIOL429, BIOL455–457 (BCHM455–457), and BIOL459–463 (BCHM459–462). The remaining course may be selected with the approval of Te Kura Pūtaiao Koiora | School of Biological Sciences Kairuruku Tau Tuawhā | Fourth Year Coordinator.

P: At least 60 points from BCHM301, BCHM305; BCHM306; BIOL309, BIOL313, BIOL333, BIOL334, BIOL335, BIOL351, BIOL352 or appropriate advanced level courses in biochemistry and the molecular biosciences

RP: BIOL309

Cellular and Molecular Biology

Courses totalling at least 120 points including BIOL411 and BIOL412 and a project (CEMB480 or SCIE481 and SCIE482). At least 45 points are to be selected from BIOL455–456 (BCHM455–456), BIOL459–462 (BCHM459–462) and BIOL496. The remaining course may be selected with the approval of Te Kura Pūtaiao Koiora | School of Biological Sciences Kairuruku Tau Tuawhā | Fourth Year Coordinator.

P: At least 60 points from BCHM301, BCHM305, BCHM306, BIOL309, BIOL313, BIOL330, BIOL333, BIOL334, BIOL335, BIOL351, BIOL352.

RP: BIOL309

Mātai Matū | Chemistry

CHEM480 (or SCIE481 and SCIE482), CHEM430 and CHEM431, and four other courses from CHEM432 – CHEM437.

P: CHEM211, either CHEM212 or BCHM212, and 30 points from CHEM251, (CHEM242 or BCHM206); and CHEM281 or BCHM281; and

at least 60 points from CHEM321–343, BCHM338 and BCHM339; and

at least one of CHEM381 and CHEM382.

RP: At least 30 points from courses in Mathematics, Statistics or ENGR101.

Computational and Applied Mathematical Sciences

CAMS449 (or SCIE481 and SCIE482), and 90 points chosen from MATH401–490 and STAT401–490 (other than MATH449 or STAT449). With the approval of the Kairuruku Hōtaka | Programme Coordinator, a student may substitute up to 30 points from other subjects in an applications area.

P: Met the majoring requirements for entry into a BSc(Hons) in Mathematics, or Statistics, or the equivalent.

Computer Science

COSC470 (or SCIE481 and SCIE482), COSC469 and 75 points from COSC401–449, COSC462–468, COSC471–474, COSC477–479, SENG401, SENG403–499, DATA430–439. Up to 15 points of these 75 points may be replaced by appropriate courses from another subject. Not all courses may be offered in any one year.

P:

- (1) 90 points from COSC301–399, SENG301–399, ENCE360–361, DATA301; and
- (2) at least 5.0 GPA in all courses taken from COSC301–399, SENG301–399, ENCE360–361, DATA301; and
- (3) 60 points from COSC201–299, SENG201–299, ENCE260; and
- (4) 30 points from MATH, EMTH, STAT courses excluding MATH101 and MATH110.

Mātauranga Raraunga | Data Science

DATA480 (or SCIE481 and SCIE482), COSC469, and a further 75 points (with the approval of the Kaihautū Hōtaka | Programme Director) from courses from COSC (COSC401–449, COSC462–468, COSC471–474, COSC477–479), DATA (DATA420–440), MATH (MATH401–448, 450–490), STAT (STAT401–448, 450–490), and SENG (SENG401, 403–490). At least 30 points must be taken from the prescribed COSC and SENG coded courses, and a further 30 points from the prescribed MATH and STAT coded courses.

P: All the required 300-level courses for the Data Science major in the Bachelor of Data Science or the Bachelor of Science.

Ecology

Courses totalling at least 120 points including BIOL411 and BIOL412 and a project (ECOL480 or SCIE481 and SCIE482). At least 45 points are to be selected from BIOL420, BIOL423–429, BIOL438. The remaining course may be selected with the approval of Te Kura Pūtaiao Koiora | School of Biological Sciences Kairuruku Tau Tuawhā | Fourth Year Coordinator.

P:

- (1) 60 points from BIOL370–384; and
- (2) BIOL309 or 15 points 300-level STAT

Economics

ECON680 (or SCIE481 and SCIE482), and six courses or their equivalent from ECON601–679. A grade average of B+ or better is required in 300-level Economics prerequisite courses. Some second semester courses may have a first semester course as a prerequisite. All full-time students must take ECON680 and three other courses or their equivalent in each semester.

P:

- (1) ECON206 or ECON325; and
- (2) ECON213 or STAT202 or STAT213; and
- (3) ECON207 and ECON208; and
- (4) 60 points from 300-level Economics courses, including ECON321, ECON324, ECON326 (or equivalent as approved by the Tumuaki Tari | Head of Department).

Mātai Pūtaiao Aronukurangi | Environmental Science

ENVR480, ENVR411 and ENVR415 plus 60 points of relevant courses in ANTA, BIOL, CHEM, DATA, DRRE, ENCH, ENCI, ENGE, ENVR, FORE, GEOG, GEOL, HLTH, MATH, STAT, WATR.

The selection should form a coherent thematic programme, and must be approved by the Director of Postgraduate Studies.

Note that normally all individual course prerequisites must be satisfied.

P: A B average (5.0 GPA) in 90 points of courses at 300-level from majors in the BSc, FORE or ENCN.

Pūhanga Tahua | Financial Engineering

An Honours research project chosen from CAMS449, FINC680 or STAT449. STAT470 (or SCIE481 and SCIE482), and three courses from FINC621 to FINC629, the remaining course should be chosen from COSC401, ECON615, ECON641, ECON642, ECON643/FINC643, FINC610, FINC613, FINC616, FINC621, FINC622, FINC623, FINC624, FINC628, FINC629, MATH407, MATH408, MATH412, STAT445 and STAT460 with the Kairuruku Hōtaka | Programme Coordinator's approval. The remaining courses should be STAT456/ECON614 if the student has not been credited with STAT317/ECON323 previously.

P:

- (1) All the required courses specified in Schedule S for the BSc in Financial Engineering; and
- (2) At least 90 points at 300-level from Schedule V for the BSc in Financial Engineering.

Otherwise, subject to approval of the Kairuruku Hōtaka | Programme Coordinator.

Geography

A Research Project GEOG420 (or SCIE481 and SCIE482) and a further 90 points from GEOG401–419 and GIS403–417. Note: Not all courses will be offered in any one year.

P: A student will normally be expected to either:

- (1) have passed 84–90 points in 300-level courses approved by the Tumuaki Kura | Head of School (including GEOG309 and at least 28–30 other points in 300-level Geography courses); or
- (2) 120 points at 300-level of which 60 are in Geography and 60 are in subjects approved by the Tumuaki Kura | Head of School.

Mātai Aronuku | Geology

GEOL470 (or SCIE481 and SCIE482) and courses totalling 90 points chosen from other GEOL 400-level courses with the approval of the Tumuaki Kura, Te Kura Aronukurangi | Head of the School of Earth and Environment. Practical and fieldwork may be required as part of any GEOL 400-level courses.

P:

- (1) Fieldwork: GEOL351 and GEOL352 (or equivalent fieldwork); and
- (2) 60 points from other GEOL 300-level courses and,
- (3) at least 60 points from science or relevant engineering courses.

RP: An additional 30 points at GEOL 300-level is strongly advisable.

Pāngarau | Mathematics

MATH449 (or SCIE481 and SCIE482) and 90 points chosen from MATH401–490 and STAT401–490 (other than MATH449 or STAT449) or other approved courses at 400-level or above. At least 60 points must be chosen from the MATH course list.

P:

- (1) 45 points from MATH201 or EMTH210, MATH202, MATH203 or EMTH211, MATH220 and MATH240 (including MATH201 and at least one of MATH202 or MATH203); and
- (2) 60 points from MATH301–394; and
- (3) an additional 30 points from MATH301–394 or STAT301–394 or other approved courses.

Mathematical Physics

MAPH480 (or SCIE481 and SCIE482), and a further 90 points, of which 30–45 points are to be chosen from MATH401–443 and the remainder from PHYS411–430, ASTR421–425.

P:

- (1) PHYS203, PHYS205, PHYS206; and
- (2) MATH201–203; and
- (3) 60 points from PHYS 300-level including PHYS311, 313, 326; and 60 points from MATH302, 303, 321, 343, 363, 365, chosen with the approval of the Tumuaki Kura | Head of School.

Medical Physics

MDPH480 (or SCIE481 and SCIE482) and 90 points from MDPH401–410.

P: 90 points at 300-level, approved by the Tumuaki Kura | Head of School.

Microbiology

Courses totalling at least 120 points including BIOL411, BIOL412, BIOL455 (BCHM455), BIOL456 (BCHM456) and a project (MBO480 or SCIE481 and SCIE482). At least 15 points are to be selected from BIOL457 (BCHM457), BIOL459 (BCHM459), BIOL460 (BCHM460), BIOL463 and BIOL496. The remaining 15 points may be selected with the approval of Te Kura Pūtaiao Koiora | School of Biological Sciences Kairuruku Tau Tuawhā | Fourth Year Coordinator.

P:

- (1) BIOL313; and
- (2) At least 30 points selected from BCHM301, BCHM305, BCHM306, BIOL331, BIOL330, BIOL333, BIOL335, BIOL351.

RP: BIOL309

Mātai Ahupūngao | Physics

PHYS480 (or SCIE481 and SCIE482) and 90 points chosen from PHYS411–460, ASTR421–425, MDPH403, MDPH406. A maximum of 30 points from PHYS440–460.

P:

- (1) 90 points of 300-level PHYS or ASTR courses including PHYS310, PHYS311, PHYS313; and
- (2) 30 points of 300-level MATH courses.

Mātai Hinengaro | Psychology

PSYC460, PSYC470 (or SCIE481 and SCIE482) and a further 75 points from PSYC404–441 and PSYC452–499.

P:

- (1) PSYC105 and PSYC106 (or equivalent); and
- (2) At least 60 points of 200-level PSYC courses, including PSYC206 (or equivalent); and
- (3) At least 75 points of 300-level PSYC courses, including PSYC344 (or equivalent); with B average or better in 60 points at 300-level Psychology, including PSYC344 or equivalent.

OR

OPTION 2: Credited with a Bachelor's degree lacking a major in Psychology, but having credit for a substantial amount of psychology course content and having completed PSYC105 and PSYC106 (or equivalent), along with 120 points in Psychology above 100-level, including PSYC206 and PSYC344 (or equivalent). At 300-level must have a B average or better in 60 points, including PSYC344 or equivalent.

Tatauranga | Statistics

STAT449 (or SCIE481 and SCIE482) and 90 points chosen from STAT401–490 and MATH401–490 (other than STAT449 or MATH449) or other approved courses at 400-level or above. At least 60 points must be chosen from the STAT course list. One of these courses must be STAT461 or STAT464 if the student has not been credited with either STAT213 or STAT314 (or equivalent) previously.

P: Either:

- (1) Option 1: (1) PSYC105 and PSYC106 (or equivalent); and
- (2) (2) At least 60 points of 200-level PSYC courses, including PSYC206 (or equivalent); and
- (3) (3) At least 75 points of 300-level PSYC courses, including PSYC 344 (or equivalent); with B average or better in the best three courses.

OR

- (1) OPTION 2: Credited with a Bachelor's degree lacking a major in Psychology, but having credit for a substantial amount of psychology course content and having completed PSYC105 and PSYC106 (or equivalent), along with 120 points in Psychology above 100-level, including PSYC206 and PSYC344 (or equivalent). At 300-level the best three courses must have B average or better.

Group 2: Double Major

Economics and Mathematics

Either:

- (a) ECON680 (or SCIE481 and SCIE482) plus 90 points from ECON610–670 or MATH401–490 (excluding MATH449), including at least 30 points in ECON and at least 45 points in MATH; or
- (b) MATH449 (or SCIE481 and SCIE482) plus 90 points from ECON610–670 or MATH401–490 (excluding MATH449), including at least 45 points in ECON and at least 30 points in MATH.

P:

- (1) STAT213 or (STAT212 and STAT214); and
- (2) 45 points from MATH201–294, including MATH201, 203, 240; and
- (3) 60 points from 300-level ECON including 45 points from ECON321, 324, 326 and 331; and
- (4) 60 points from MATH301–394 or STAT301–394, including at least 30 points from MATH301–394 and MATH343.

Finance and Mathematics

Either:

- (a) FINC680 (or SCIE481 and SCIE482) plus 90 points selected from FINC601–660 or MATH401–490 (excluding MATH449), including at least 30 points from FINC courses and at least 45 points from MATH courses; or
- (b) MATH449 (or SCIE481 and SCIE482) plus 90 points selected from FINC601–660 or MATH401–490 (excluding MATH449) including at least 45 points from FINC courses and at least 30 points from MATH courses.

P:

- (1) A student must have met the majoring requirements for the BSc in Mathematics and passed FINC201, FINC203, FINC205 and FINC331; and at least 30 additional points from 300-level FINC courses; or
- (2) A student must have met the majoring requirements for the BCom or BSc in Finance and passed or 45 points from MATH201, MATH202, MATH203, MATH270; and at least 45 additional points from MATH301–394.

Finance and Statistics

Either:

- (a) FINC680 (or SCIE481 and SCIE482) plus 90 points from FINC601–660 or STAT401–490 (excluding STAT449), including at least 30 points from FINC courses and at least 45 points from STAT courses; or
- (b) STAT449 (or SCIE481 and SCIE482) plus 90 points from FINC601–660 or STAT401–490 (excluding STAT449), including at least 45 points from FINC courses and at least 30 points from STAT courses.

P:

- (1) A student must have met the majoring requirements for the BSc in Statistics and passed FINC201, FINC203, FINC205, and FINC331; and at least 30 additional points from 300-level FINC courses; or
- (2) A student must have met the majoring requirements for the BCom or BSc in Finance and passed 45 points from STAT201–294; and at least 45 additional points from STAT301–394.

Mathematics and Philosophy

Either:

- (a) MATH449 (or SCIE481 and SCIE482) plus 90 points from PHIL401–499 (excluding PHIL480) or MATH401–490 (excluding MATH449), including at least 30 points from PHIL courses and at least 30 points from MATH courses; or
- (b) PHIL480 (or SCIE481 and SCIE482) plus 90 points from PHIL401–499 (excluding PHIL480) or MATH401–490 (excluding MATH449) including at least 30 points from PHIL courses and at least 30 points from MATH courses.

P:

- (1) 45 points from MATH201–294; and
- (2) 60 points from MATH301–394; and
- (3) 45 points from PHIL208, PHIL209, PHIL233, HAPS201, HAPS202, MATH230; and
- (4) 45 points from PHIL301–399, HAPS302, MATH308, MATH309, MATH336.

Mathematics and Statistics

MATH449 or STAT449 (or SCIE481 and SCIE482) plus 90 points chosen from MATH401–490 and STAT401–490 (other than MATH449 or STAT449). At least 45 points must be chosen from MATH and at least 45 points must be chosen from the STAT.

P:

- (1) 45 points from MATH201, MATH202, MATH203, MATH220 and MATH240, including MATH201 and at least one of (MATH202 or MATH203); and
- (2) 45 points from STAT201–294; and
- (3) 105 points from MATH301–394 and STAT301–394, including at least 45 points from each of the MATH and STAT course lists.