

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 Pūtaiao | Academic Dean of Science 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 Pūtaiao | Academic Dean of Science 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 the 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 Pūtaiao | Academic Dean of Science.

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) A student will be withdrawn from the degree if more than 30 points is failed.
- (b) Courses may not be repeated.

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) A student who has completed the requirements for the BSc(Hons) but has not yet graduated, may apply to the Amo Pūtaiao | Academic Dean of Science to be admitted to the Master of Science and have credits transferred.
- (b) A student who has graduated with the BSc(Hons) from the University of Canterbury, may apply to the Amo Pūtaiao | Academic Dean of Science to be admitted to the Master of Science and have their BSc(Hons) subsumed in accordance with the General Regulations to the University.
- (c) 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 Pūtaiao Academic Dean of Science 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

Astronomy

ASTR 480, ASTR 422, ASTR 423 or ASTR 425 or ASTR 426, PHYS 415, and three other courses from PHYS 411–460, MDPH 403, MDPH 406, with a maximum of two courses from PHYS 440–460.

Not all courses may be offered in any one year.

P:

- (1) 90 points of 300-level ASTR or PHYS courses including PHYS 310, PHYS 311 or PHYS 313; and
- (2) 30 points of 300-level MATH courses.

Biochemistry

BCHM 480 plus a further 90 points of courses selected from BCHM 455 (BIOL 455), BCHM 456 (BIOL 456), BCHM 457 (BIOL 457), BCHM 459 (BIOL 459), BCHM 460 (BIOL 460), BCHM 461 (BIOL 461), BCHM 462 (BIOL 462), BCHM 420, and CHEM 430–433 approved by the Kaihautū, Mātai Matū Koiora | Director of Biochemistry. Other suitable courses include: BCHM 407–409, BIOL 429–462, BIOL 481, BIOL 496.

P:

- (1) BCHM 305, BCHM 306, BCHM338, BCHM339 and BCHM381; and
- (2) a minimum of 15 points from CHEM 335, 337, 340, BIOL 313, 330, 351 or 352.

Biological Sciences

Courses totalling at least 120 points including BIOL 411 and BIOL 412 and a project (BIOL 480). 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) BIOL 309 or GEOG 309 or PSYC 344 or 15 points 300-level STAT.

Biotechnology

Courses totalling at least 120 points including BIOL 411, BIOL 412, BIOL 496 and a project (BIOT 480). At least 30 points are to be selected from BIOL 429, BIOL 455–457 (BCHM 455–457), and BIOL 459–463 (BCHM 459–462). 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 BCHM 301, BCHM 305; BCHM 306; BIOL 309, BIOL 313, BIOL 333, BIOL 334, BIOL 335, BIOL 351, BIOL 352 or appropriate advanced level courses in biochemistry and the molecular biosciences
RP: BIOL309

Cellular and Molecular Biology

Courses totalling at least 120 points including BIOL 411 and BIOL 412 and a project (CEMB 480). At least 45 points are to be selected from BIOL 455–456 (BCHM 455–456), BIOL 459–462 (BCHM 459–462) and BIOL 496. 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 BCHM 301, BCHM 305, BCHM 306, BIOL 309, BIOL 313, BIOL 330, BIOL 333, BIOL 334, BIOL 335, BIOL 351, BIOL 352.
RP: BIOL309

Chemistry

CHEM 480, CHEM 430 and CHEM 431, and four other courses from CHEM 432–437.

P:

- (1) CHEM 211, either CHEM 212 or BCHM 212, and 30 points from CHEM 251, (CHEM 242 or BCHM 206); and
- (2) CHEM 281 or BCHM 281; and
- (3) at least 60 points from CHEM 321–343, BCHM 338 and BCHM 339; and
- (4) at least one of CHEM 381 and CHEM 382.

RP: At least 30 points from courses in Mathematics, Statistics or ENGR 101.

Computational and Applied Mathematical Sciences

CAMS 449 and 90 points chosen from MATH 401–490 and STAT 401–490 (other than MATH 449 or STAT 449). 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

COSC 470, COSC 469 and 75 points from COSC 401–439, COSC 462–468, COSC 471–474, SENG 401, SENG 403–499, DATA 430–439. 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 COSC 301–399, SENG 301–399, ENCE 360–361, DATA 301; and
- (2) at least 5.0 GPA in all courses taken from COSC 301–399, SENG 301–399, ENCE 360–361, DATA 301; and
- (3) 60 points from COSC 201–299, SENG 201–299, ENCE 260; and
- (4) 30 points from MATH, EMTH, STAT courses excluding MATH 101 and MATH 110.

Data Science

DATA 480, COSC 469, and a further 75 points (with the approval of the Kaihautū Hōtaka | Programme Director) from courses from COSC (COSC 401–449, COSC 462–474, excluding COSC 470), DATA (DATA 420–440), MATH (MATH 401–448, 450–490), STAT (STAT 401–448, 450–490), and SENG (SENG 401, 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 BSc in Data Science.

Ecology

Courses totalling at least 120 points including BIOL 411 and BIOL 412 and a project (ECOL 480). At least 45 points are to be selected from BIOL 420, BIOL 423–429, BIOL 438. 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 BIOL 370–384; and
- (2) BIOL 309 or 15 points 300-level STAT

Economics

ECON 680 and six courses or their equivalent from ECON 601–679. 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 ECON 680 and three other courses or their equivalent in each semester.

P:

- (1) ECON 206 or ECON 325; and
- (2) ECON 213 or STAT 202 or STAT 213; and
- (3) ECON 207 and ECON 208; and
- (4) 60 points from 300-level Economics courses, including ECON 321, ECON 324, ECON 326 (or equivalent as approved by the Tumuaki Tari | Head of Department).

Environmental Science

ENVR 480, ENVR 410 and ENVR 411 and courses totalling not less than 60 points selected from relevant courses offered by the Environmental Science home departments/schools of Forestry (FORE), Geography (GEOG), Geological Sciences (GEOL and ENGE), Biological Sciences (BIOL), and Waterways (WATR) and from relevant courses, as approved by the Coordinator, that are offered by Antarctic Studies (ANTA), Biochemistry (BCHM), Chemistry (CHEM), Chemical and Process Engineering (ENCH), Civil Engineering (ENCI), Health Sciences (HLTH) and Mathematics and Statistics (MATH and STAT). The selection should form a coherent thematic programme, and must be discussed with the Coordinator.

P: A student who has fulfilled the requirements for honours 200 and 300-level in appropriate courses in the BSc or BEng, and as approved by the Coordinator, may enrol for Environmental Science honours 400-level.

Finance and Mathematics

Either:

- (a) FINC 680 plus 90 points selected from FINC 601–660 or MATH 401–490 (excluding MATH 449), including at least 30 points from FINC courses and at least 45 points from MATH courses; or
- (b) MATH 449 plus 90 points selected from FINC 601–660 or MATH 401–490 (excluding MATH 449) 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 FINC 201, FINC 203, FINC 205 and FINC 331; 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 MATH 201, MATH 202, MATH 203, MATH 270; and at least 45 additional points from MATH 301–394.

Finance and Statistics

Either:

- (a) FINC 680 plus 90 points from FINC 601–660 or STAT 401–490 (excluding STAT 449), including at least 30 points from FINC courses and at least 45 points from STAT courses; or
- (b) STAT 449 plus 90 points from FINC 601–660 or STAT 401–490 (excluding STAT 449), 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 FINC 201, FINC 203, FINC 205, and FINC 331; 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 STAT 201–294; and at least 45 additional points from STAT 301–394.

Financial Engineering

An Honours research project chosen from CAMS 449, FINC 680 or STAT 449. STAT 470 and three courses from FINC 621 to FINC 629, the remaining course should be chosen from COSC 401, ECON 615, ECON 641, ECON 642, ECON 643/FINC 643, FINC 610, FINC 613, FINC 616, FINC 621, FINC 622, FINC 623, FINC 624, FINC 628, FINC 629, MATH 407, MATH 408, MATH 412, STAT 445 and STAT 460 with the Kairuruku Hōtaka | Programme Coordinators approval. The remaining courses should be STAT 456/ECON 614 if the student has not been credited with STAT 317/ECON 323 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 (GEOG 420) and a further 90 points from GEOG 401–419 and GISC 403–417.

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 GEOG 309 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.

Geology

GEOL 470 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.

Mathematics

MATH 449 and 90 points chosen from MATH 401–490 and STAT 401–490 (other than MATH 449 or STAT 449) 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 MATH 201 or EMTH 210, MATH 202, MATH 203 or EMTH 211, MATH 220 and MATH 240 (including MATH 201 and at least one of MATH 202 or MATH 203); and
- (2) 60 points from MATH 301–394; and
- (3) an additional 30 points from MATH 301–394 or STAT 301–394 or other approved courses.

Mathematics and Philosophy

Either:

- (a) MATH 449 plus 90 points from PHIL 401–499 (excluding PHIL 480) or MATH 401–490 (excluding MATH 449), including at least 30 points from PHIL courses and at least 30 points from MATH courses; or
- (b) PHIL 480 plus 90 points from PHIL 401–499 (excluding PHIL 480) or MATH 401–490 (excluding MATH 449) including at least 30 points from PHIL courses and at least 30 points from MATH courses.

P:

- (1) 45 points from MATH 201–294; and
- (2) 60 points from MATH 301–394; and
- (3) 45 points from PHIL 208, PHIL 209, PHIL 233, HAPS 201, HAPS 202, MATH 230; and
- (4) 45 points from PHIL 301–399, HAPS 302, MATH 308, MATH 309, MATH 336.

Mathematical Physics

MAPH 480, and a further 90 points, of which 30–45 points are to be chosen from MATH 401–443 and the remainder from PHYS 411–430, ASTR 421–425.

P:

- (1) PHYS 203, PHYS 205, PHYS 206; and
- (2) MATH 201–203; and
- (3) 60 points from PHYS 300-level including PHYS 311, 313, 326; and MATH 302, 303, 321, 343, 363, 365 chosen with the approval of the Tumuaki Kura | Head of School.

Medical Physics

MDPH 480 and 90 points from MDPH 401–410.

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

Microbiology

Courses totalling at least 120 points including BIOL 411, BIOL 412, BIOL 455 (BCHM 455), BIOL 456 (BCHM 456) and a project (MBIO 480). At least 15 points are to be selected from BIOL 457 (BCHM 457), BIOL 459 (BCHM 459), BIOL 460 (BCHM 460), BIOL 463 and BIOL 496. 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) BIOL 313; and
- (2) At least 30 points selected from BCHM 301, BCHM 305, BCHM 306, BIOL 331, BIOL 330, BIOL 333, BIOL 335, BIOL 351.

RP: BIOL309

Physics

PHYS 480 and 90 points chosen from PHYS 411–460, ASTR 421–425, MDPH 403, MDPH 406. A maximum of 30 points from PHYS 440–460.

P:

- (1) 90 points of 300-level PHYS or ASTR courses including PHYS 310, PHYS311, PHYS 313; and
- (2) 30 points of 300-level MATH courses.

Psychology

Courses totalling 120 points selected from any 400-level courses in Psychology; but must include PSYC 460 or an equivalent, and must include PSYC 470.

P:

- (1) PSYC 105 and PSYC 106 (or equivalent); and
- (2) At least 60 points of 200-level PSYC courses, including PSYC 206 (or equivalent); and
- (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

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 PSYC 105 and PSYC 106 (or equivalent), along with 120 points in Psychology above 100-level, including PSYC 206 and PSYC 344 (or equivalent). At 300-level the best three courses must have B average or better.

Statistics

STAT 449 and 90 points chosen from STAT 401–490 and MATH 401–490 (other than STAT 449 or MATH 449) 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 STAT 461 or STAT 464 if the student has not been credited with either STAT 213 or STAT 314 (or equivalent) previously.

P:

- (1) MATH 103 or MATH 199; and
- (2) 45 points from STAT 201–294; and
- (3) 60 points from STAT 301–394; and
- (4) an additional 30 points from MATH 301–394 or STAT 301–394 or other approved courses.

Group 2: Double Major

Economics and Mathematics

Either:

- (a) ECON 680 plus 90 points from ECON 610–670 or MATH 401–490 (excluding MATH 449), including at least 30 points in ECON and at least 45 points in MATH; or
- (b) MATH 449 plus 90 points from ECON 610–670 or MATH 401–490 (excluding MATH 449), including at least 45 points in ECON and at least 30 points in MATH.

P:

- (1) STAT 213 or (STAT 212 and STAT 214); and
- (2) 45 points from MATH 201–294, including MATH 201, 203, 240; and
- (3) 60 points from 300-level ECON including 45 points from ECON 321, 324, 326 and 331; and
- (4) 60 points from MATH 301–394 or STAT 301–394, including at least 30 points from MATH 301–394 and MATH 343.

Mathematics and Statistics

MATH 449 or STAT 449 plus 90 points chosen from MATH 401–490 and STAT 401–490 (other than MATH 449 or STAT 449). 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 MATH 201, MATH 202, MATH 203, MATH 220 and MATH 240, including MATH 201 and at least one of (MATH 202 or MATH 203); and
- (2) 45 points from STAT 201–294; and
- (3) 105 points from MATH 301–394 and STAT 301–394, including at least 45 points from each of the MATH and STAT course lists.