UC SCIENCE

Undergraduate Degrees 2024

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UC
UNIVERSITY OF
CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Contents

UC Science – Undergraduate Degree offering

We offer 5 undergraduate degrees:

- Bachelor of Science
- Bachelor of Environmental Science with Honours
- Bachelor of Data Science
- Bachelor of Speech and Language Pathology with Honours
- Bachelor of Psychological Science

Updated 20 January 2024. Do not rely on this booklet alone when planning your degree. For current degree advice please check out our website or organise a meeting with a Student Advisor at canterbury.ac.nz
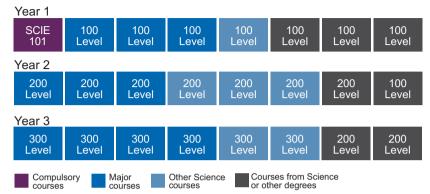
Bachelor of Science (BSc)

The BSc is a 3-year degree that allows students to mix and match subjects across a wide range of subjects, try things out and see what they like before they specialise. Science can open doors to many other careers too, including business, politics, medicine, finance and engineering. The BSc provides the following 19 majors and up to 67 minors taken from areas such as arts, business, commerce and health.

- Astronomy
- Biochemistry
- Biological Sciences
- Chemistry
- Computer Science
- Economics
- Environmental Science
- Finance
- Financial Engineering
- Geography
- Geology
- Linguistics
- Mathematics
- Mathematical Sciences Education
- Medicinal Chemistry
- Philosophy
- Physics
- Psychology
- Statistics

Bachelor of Science – example degree structure

Year 1

SCIE 101	100 Level	100 Level	100 Level	100 Level	100 Level	100 Level	100 Level

Year 2

200 Level	200 Level	200 Level	200 Level	200 Level	200 Level	200 Level	100 Level

Year 3

300 Level	300 Level	300 Level	300 Level	300 Level	300 Level	200 Level	200 Level

- ◼ Compulsory courses
- ◼ Major courses
- ◼ Other Science courses
- ◼ Courses from Science or other degrees

Each small block represents a 15-point course. However, some courses may be 30 points or more.
This diagram is an example only – other combinations are possible. For specific course requirements, go to www.canterbury.ac.nz/regulations

For full course requirements, go to www.canterbury.ac.nz/about-uc/corporate-information/qualification-regulations/bsc-reg

To qualify for the Degree of Bachelor of Science a student must:

1. be credited with a minimum of 360 points towards the qualification
2. have a minimum of 255 points from the BSc schedule (ie, up to 105 points/7 courses from other subjects/degrees)
3. have a minimum of 225 points from courses above 100-level; that is, a maximum of 135 points (9 courses) at 100-level
4. have completed the compulsory course SCIE101 Science, Society and Me
5. have at least 90 points (6 courses) at 300-level, of which, at least 60 points must be in a single subject.
6. Complete the requirements of your chosen major(s) and minor(s).

Bachelor of Science major: Astronomy

ASTR112	PHYS101	PHYS102	MATH102	MATH103	SCIE101	COSC131	100
ASTR211/212	PHYS285	PHYS203	PHYS205	PHYS206	MATH201	Recommended MATH202 and/or 203	100/200
ASTR 323/325	PHYS310	ASTR381	PHYS 311/313	300	300	200/300	200/300

Bachelor of Science major: Biochemistry

BCHM111	BCHM112	SCIE101	CHEM114*	Recommended BIOL112, 113 and CHEM111	100	100	100
BCHM202	BCHM212	BCHM222	BCHM281 or CHEM281	BCHM 253	Recommended BCHM206	200	100/200
BCHM305	BCHM306	BCHM338	BCHM339	Recommended BCHM381**	300	200/300	200/300

*Required if you don't have 14 credits of NCEA L3 Chemistry
**Required for entry into postgraduate level study in Biochemistry

Bachelor of Science major: Biological Sciences

BIOL111	BIOL112	BIOL113	STAT101	SCIE101	Recommended: 15 points of 100-level Chemistry and 15 points of 100-level Mathematics*	100	100
BIOL209	200 BIOL	200 BIOL	200 BIOL	200	200	200	100/200
300 BIOL/ BCHM 305/306	300 BIOL/ BCHM 305/306	300 BIOL BCHM 305/306	300 BIOL/ BCHM 305/306	300	300	200/300	200/300

BIOL309 is required for entry into postgraduate level study in Biological Sciences
*CHEM114 and MATH101 are strongly advised if you don't have 14 credits of NCEA L3 Chemistry or Mathematics

Bachelor of Science major: Chemistry

CHEM111	CHEM112	CHEM114*	SCIE101	100	100	100	100
CHEM211	CHEM212	CHEM242	CHEM251	CHEM281	200	200	100/200
CHEM 3__/ BCHM 338/339	CHEM 3__/ BCHM 338/339	CHEM 3__/ BCHM 338/339	CHEM 381/382	Recommended CHEM 3__/ BCHM388/339	300	200/300	200/300

*Required if you don't have 14 credits of NCEA L3 Chemistry

Bachelor of Science major: Computer Science

COSC 131/121	COSC122	MATH102	MATH120	SCIE101	Recommended COSC101, STAT101	100	100
COSC261	200 COSC/SENG/ENCE[1]	200 COSC/SENG/ENCE	200	200	200	200	100/200
300 COSC/SENG/ENCE/DATA[2]	300 COSC/SENG/ENCE/DATA[2]	300 COSC/SENG/ENCE/DATA[2]	300 COSC/SENG/ENCE/DATA[2]	300	300	200/300	200/300

[1] Choose two from: COSC262, COSC264, COSC265, ENCE260, SENG201   [2] Choose 60 points from: 300-level COSC (excluding COSC366), DATA301, ENCE360, ENCE361, SENG301, SENG302, SENG365

Bachelor of Science major: Economics

ECON104	ECON105	SCIE101	Recommended MATH102, 103 and STAT101	100	100	100	100
ECON206	ECON207	ECON208	Recommended ECON213	200	200	200	100/200
300 ECON[1]	300 ECON[2]	300 ECON[3]	300 ECON	300	300	300	200/300

[1] Recommended ECON321   [2] Recommended ECON324   [3] Recommended ECON325

Bachelor of Science major: Environmental Science

ENVR101	GEOG106	STAT101/MATH102	SCIE101	100 MAJOR	100 MAJOR	Recommended SCIM101	Required CHEM114, CHEM111, or BIOL112*
ENVR209	ENVR210	BIOL209	200 MAJOR	200 MAJOR	200 MAJOR	200	100/200
ENVR302	PSYC341	GEOG309		300 MAJOR	300 MAJOR	300 MAJOR	300 MAJOR

Note: The ENVR major must be taken in conjunction with any other major in the Bachelor of Science. Note 2: With the permission of the Tumuaki Kura | Head of School, a student who has a double major in Geography and Environmental Science must take GEOG309 plus a further 60 points of 300-level Geography.   *If one of these is not included in 2nd major

Bachelor of Science major: Finance

STAT101	MATH102	ACCT102	SCIE101	Recommended ECON104, MATH103, FINC101	100	100	100
FINC201	FINC203	Recommended ECON207 or 200 level STAT	Recommended ECON213 or 200-level STAT	200	200	200	100/200
30 points (2 courses) from FINC301/FINC311/FINC312	300 FINC	300 FINC	300	300	200/300	200/300	

Bachelor of Science major: Financial Engineering

STAT101	MATH102	MATH103	COSC 131/121	COSC122	ECON104	SCIE101	ACCT102
FINC201	ECON207/FINC 203*	ECON213	MATH201	SENG201	STAT 211/221	STAT 213	Recommended INFO213
FINC 311/312	FINC331/ECON331	STAT317/ECON323	Schedule for major	300	300	200/300	200/300

*ECON207 is the recommended

Bachelor of Science major: Geography

GEOG106	GEOG110	SCIE101	100	100	100	100	100
200 GEOG	200 GEOG	200 GEOG	200	200	200	200	100/200
GEOG309		300 GEOG	300 GEOG	300	300	200/300	200/300

Note: With the permission of the Tumuaki Kura | Head of School, a student who has a double major in Geography and Environmental Science must take GEOG309 plus a further 60 points of 300-level Geography.

Note 2: At least another 30 points of 300-level GEOG courses is required for postgraduate studies.

Bachelor of Science major: Geology

GEOL101	GEOL102	SCIE101	100*	100*	100*	100*	100*
GEOL240	GEOL242	GEOL243	GEOL244	GEOL241	200	200	100/200
GEOL351	GEOL352	300 GEOL	300 GEOL	300 Recommended GEOL	300 Recommended GEOL	200/300	200/300

* 100-level courses from ASTR, BIOL, CHEM, COSC, ENVR, GEOG, MATH, PHYS, or STAT is required for postgraduate study.

Bachelor of Science major: Linguistics

LING101	LING102	SCIE101	100	100	100	100	100
LING212	LING217	200 LING	200	200	200	200	100/200
LING310		300 LING	300	300	200/300	200/300	

For postgraduate study, Linguistics majors must include at least one 15-point course in a language other than English (or have equivalent language ability). This can be chosen from CHIN, FREN, GRMN, JAPA, SPAN, RUSS, and TREO.

Bachelor of Science major: Mathematics

MATH102[1]	MATH103[1]	SCIE101	MATH101[2]	Recommended MATH120	100	100	100
45 points (3 courses) selected from MATH201/202/203/220/240			200	200	200	200	100/200
300 MATH	300 MATH	300 MATH	300 MATH	300[3]	300	200/300	200/300

[1] The combination of MATH102 and 103 is equivalent to MATH199 [2] Required if you don't have 14 credits of NCEA L3 Maths
[3] Two other 300-level MATH or STAT courses are required for postgraduate study

Bachelor of Science major: Mathematical Sciences Education

EDUC101/EDUC103	MATH102[1]	COSC121/DATA101/MATH103/STAT101[2]	SCIE101	MATH101[3]	100	100	100
EDMA201	30 points (2 courses) selected from 200-level DATA, MATH, or STAT courses		200	200	200	200	100/200
EDMA301	45 points (3 course) selected from 300-level DATA, MATH, or STAT courses		300	300	200/300	200/300	

[1] MATH199 may be used in place of MATH102 (and MATH103). [2] MATH103 is required if you want to continue to 200-level MATH courses.
[3] Required if you don't have 14 credits of NCEA level 3 mathematics.

Bachelor of Science major: Medicinal Chemistry

CHEM111	CHEM112/BCHM112	CHEM114*	BIOL116	SCIE101	BCHM111/BIOL111	100	100
CHEM212/BCHM212	CHEM242/BCHM206	CHEM246	CHEM281/BCHM281	200	200	200	100/200
CHEM342	CHEM346	CHEM347	CHEM381	300	300	200/300	200/300

*Required if you don't have 14 credits of NCEA L3 Chemistry

Bachelor of Science major: Philosophy

SCIE101	Recommended 100 PHIL	Recommended 100 PHIL	100	100	100	100	100
PHIL233	200 PHIL	200 PHIL	200	200	200	200	100/200
PHIL305/310/311/317	300 PHIL	300 PHIL	300	300	200/300	200/300	

Bachelor of Science major: Physics

PHYS101	PHYS102	MATH102	MATH103	SCIE101	Required COSC131	PHYS111[1]	MATH101[2]
PHYS285	PHYS203	PHYS205	PHYS206	MATH201	Recommended MATH202 and/or 203	200	100/200
PHYS310	PHYS311	PHYS313	PHYS381	Recommended PHYS326[3]	300	200/300	200/300

[1] Required if you don't have 14 credits of NCEA L3 Physics   [2] Required if you don't have 14 credits of NCEA L3 Maths   [3] Recommended for entry to postgraduate study

Bachelor of Science major: Psychology

PSYC105	PSYC106	SCIE101	Recommended SPSC114	100	100	100	100
PSYC206	200 PSYC	200 PSYC	200 PSYC	200	200	200	100/200
300 PSYC	300 PSYC	300 PSYC	300 PSYC	300 PSYC	300	200/300	200/300

Note: Depending on your intended postgraduate study, PSYC344, PSYC336, or PSYC335 is required for entry.

Bachelor of Science major: Statistics

MATH102*	MATH103*	SCIE101	Recommended STAT101	100	100	100	100
STAT213	200 STAT	200 STAT	200	200	200	200	100/200
300 STAT	300 STAT	300 STAT	300 STAT	300	300	200/300	200/300

*The combination of MATH102 and 103 is equivalent to MATH199

Two additional 300-level MATH or STAT courses are required for postgraduate studies

Minors

Note: You cannot share any 200 or 300-level courses between a major and a minor, or between 2 minors.

The requirements for each minor are as follows:

Science

Astronomy
At least 75 points in Astronomy (ASTR) or Physics (PHYS), including at least 45 points at 200-level or above.

Biochemistry
At least 75 points in Biochemistry (BCHM) including at least 45 points at 200-level or above.

Biological Science
At least 75 points in Biology (BIOL) including at least 45 points at 200-level or above.

Chemistry
At least 75 points in Chemistry (CHEM), including CHEM111 and CHEM112, and at least 45 points at 200-level or above.

Computer Science
At least 75 points in Computer Science (COSC, SENG, ENCE) including at least 45 points at 200-level or above.

Economics
i.   ECON104 and ECON105; and
ii. ECON207 or ECON208; and
iii. A further 15 points of Economics at 200-level or above; and
iv. A further 15 points of Economics at 300-level.

Environmental Science
i.   STAT101 and ENVR101, and
ii. ENVR209*, and
iii. ENVR302, and
iv. One from: ANTA201, BIOL274, CHEM247, GEOG201, GEOG211, GEOG215, GEOG222, GEOL246, HLTH214, SOIL203, WATR201, WATR203.

*Students will also need to take GEOG106 and 15pts of CHEM, BIOL, or GEOL at 100 level for entry in ENVR209.

Finance
i.   ACCT102; and
ii. FINC201 and FINC203*; and
iii. A further 30 points of FINC at 200 or 300-level.

*STAT101 is also required for entry into FINC201 and FINC203.

Geography
At least 75 points in Geography (GEOG), including at least 45 points at 200-level or above.

Geology
At least 75 points in Geology (GEOL), including at least 45 points at 200-level or above.

Linguistics
At least 75 points in Linguistics (LING), including at least 45 points at 200-level or above.

Mathematics
At least 75 points in Mathematics (MATH) including at least 45 points at 200-level or above.

Philosophy
At least 75 points in Philosophy (PHIL), including at least 45 points at 200-level or above.

Physics
At least 75 points in Physics (PHYS), including at least 45 points at 200-level or above.

Psychology
At least 75 points in Psychology (PSYC), including at least 45 points at 200-level or above.

Statistics
At least 75 points in Statistics (STAT) (or from other relevant subjects with the approval of the Tumuaki Tari | Head of Department), including at least 45 points at 200-level or above.

Non-Science

As part of a science degree, you may take a non-science minor.

Note that a maximum of 105 non-science points will be counted towards the 360 points needed for a BSc.

If you are not sure if you have enough science points, check with the student advisors in the Faculty of Science.

Arts

Anthropology
At least 75 points in Anthropology (ANTH), which must include at least 45 points at 200-level or above.

Art History and Theory
At least 75 points in Art History and Theory (ARTH), which must include at least 45 points at 200-level or above.

Chinese
At least 75 points in Chinese (CHIN), which must include at least 45 points at 200-level or above, and which must include at least 15 points in Chinese language course(s) as approved by the Kairuruku Hōtaka | Programme Coordinator.

Cinema Studies
At least 75 points in Cinema Studies (CINE), which must include at least 45 points at 200-level or above.

Classics
At least 75 points in Classics (CLAS), which must include at least 45 points at 200-level or above.

Cultural Studies
At least 75 points in Cultural Studies (CULT) courses, or courses approved by the Cultural Studies Kairuruku Hōtaka | Programme Coordinator, which must include at least 45 points at 200-level or above.

Digital Humanities
At least 75 points, including at least 45 points at 200-level or above from the Digital Humanities (DIGI) schedule. DIGI101 is a required course.

Note: A student may include only one PACE internship course in their minor. Internship courses that are to be credited to the Digital Humanities minor must be approved in advance by the Kairuruku Hōtaka | Programme Coordinator.

Education
At least 75 points in Education (EDUC), which must include at least 45 points at 200-level or above, including at least one from each of the following lists:

i.   EDUC101, EDUC102, EDUC201, EDUC202, EDUC204, EDUC205.
ii.   EDUC101, EDUC103, EDUC206.

English
At least 75 points in English (ENGL), which must include at least 45 points at 200-level or above.

European and European Union Studies
At least 75 points in European and European Union Studies (EURA), which must include:

i.   EURA101,
ii.   at least 45 points at 200-level or above.

Note: A student may include up to 30 points of a European language (French, German, Russian, or Spanish) in this minor.

French
At least 75 points in French (FREN), which must include at least 45 points at 200-level or above.

German
At least 75 points in German (GRMN), which must include at least 45 points at 200-level or above, and must include at least GRMN152.

Note: EURA courses with German content may be included in the major or minor with the approval of the Kairuruku Hōtaka | Language Programme Coordinator.

History
At least 75 points in History (HIST) coded courses which must include at least 45 points at 200-level or above.

Human Services
At least 75 points in Human Services (HSRV), which must include at least 45 points at 200-level or above.

Japanese
At least 75 points in Japanese (JAPA), which must include at least 45 points at 200-level or above, and must include at least one Japanese language course as approved by the Kairuruku Hōtaka | Programme Coordinator.

Māori and Indigenous Studies
At least 75 points in Māori and Indigenous Studies (MAOR) (or their co-coded equivalents), which must include at least 45 points at 200-level or above.

Media and Communication
At least 75 points in Media and Communication (COMS), which must include at least 45 points at 200-level or above.

Music
At least 75 points in Music (MUSA), which must include at least 45 points at 200-level or above as approved by the Kairuruku Hōtaka | Programme Coordinator.

Pacific Studies
At least 75 points in Pacific Studies (PACS), which must include at least 45 points at 200-level or above, and must include PACS201.

Political Science and International Relations
At least 75 points in Political Science and International Relations (POLS), which must include at least 45 points from POLS 201–249 and POLS 301–349.

Russian
At least 75 points in Russian (RUSS), which must include at least 45 points at 200-level or above.

Note: EURA courses with RUSS content may be included in the major or minor with the approval of the Kairuruku Hōtaka | Language Programme Coordinator.

Sociology
At least 75 points in Sociology (SOCI), which must include 45 points at 200-level or above, and at least 15 points at 100-level and at least 30 points at 200-level.

Spanish
At least 75 points in Spanish (SPAN), which must include at least 45 points at 200-level or above.

Te Reo Māori
At least 75 points in Te Reo Māori (TREO) (or their co-coded equivalents), which must include at least 45 points at 200-level or above, including TREO211 and TREO212.

Commerce

Accounting

i.   ACCT102 and ACCT103; and
ii. Either ACCT211 or ACCT222; and
iii. A further 30 points of Accounting at 200-level or above which may include INFO243; and
iv. A further 15 points of Accounting at 300-level.

Business Analytics

i.   15 points from DATA101, STAT101, DIGI103
ii. 15 points from INFO123, INFO125, COSC101, COSC121, COSC122, COSC131, DIGI101; and
iii. INFO261 and INFO260; and
iv. INFO361 or 15 points from ECON213; ECON214; ECON314.

Business and Sustainability

i.   MGMT100
ii. MGMT230 and MGMT335; and
iii. A further 30 points from ECON225, MGMT270, ACCT340, MGMT333.

Entrepreneurship

i.   ACCT102, MGMT100, MKTG100; and
ii. MGMT223; and
iii. MGMT342, MGMT343

Human Resource management

i.   MGMT100; and
ii. MGMT206, MGMT207; and
iii. MGMT303, MGMT308.

Information Systems

i.   INFO123; and
ii. INFO223 or INFO253; and
iii. A further 30 points of Information Systems at 200-level or above; and
iv. A further 15 points of Information Systems at 300-level.

Innovation

i.   INOV200
ii. INOV201
iii. INOV202 or MGMT223
iv. INOV300 or MGMT342
v.   A further 15 points in INOV at 200 or 300-level.

International Business

i.   MGMT100, ECON104, MKTG100; and
ii. ECON222, MGMT221; and
iii. MGMT332.

Marketing

i.   MKTG100; and
ii. MKTG201, MKTG202, MKTG204; and
iii. A further 15 points of Marketing at 300-level.

Operations and Supply Chain Management

i.   MGMT170; and
ii. MGMT270, MGMT271; and
iii. MGMT370; and
iv. 15 points from MGMT371–379.

Taxation

i.   ACCT102, ACCT103, ACCT152; and
ii. ACCT254; and
iii. ACCT358, ACCT359.

Tourism and Marketing and Management

i.   MKTG100, MGMT100, STAT101; and
ii. MKTG205, MKTG240; and
iii. MKTG314

Digital Screen

Animation
At least 75 points, from the following courses: PROD142, DISC251, PROD241, PROD243, DISC213, DISC240, PROD341, PROD342, PROD343

Cinematic Arts
At least 75 points, from the following courses: DISC102, DISC211, DISC212, DISC213, DISC210, TITO202, DISC311, CINE302.

Game Arts
At least 75 points, from the following courses: PROD142, PROD121, PROD221, PROD241, PROD243, PROD222, PROD341, PROD342, PROD343.

Game Development
At least 75 points, from the following courses: PROD121, PROD221, PROD224, PROD223, PROD222, PROD225, PROD321, PROD323.

Indigenous Narrative
At least 75 points, of which 45 points must be above 100-level, and which must include the following:

i.   TITO101, TITO201, TITO202, and
ii. 30 points from either:

   a) TITO301, DISC101, ENGL118, MAOR107, DISC212, or

   b) TAKI101, TAKI301 (TAKI courses only available to students receiving a Te Whare Pūrākau Scholarship)

Screen Sound
At least 75 points, from the following courses: MUSA125, DISC231, DISC232, DISC233, DISC230, MUSA229, DISC331, DISC332.

Screenwriting
At least 75 points, from the following courses: DISC101, DISC212, DISC222, DISC223, DISC220, DISC321, DISC322, DISC333.

Education

Youth and Community Leadership
At least 75 points as follows:

i.   30 points from: EDUC206, YACL201, CULT202, EDUC204, INOV290, YACL301, YACL302, EDUC302, EDUC399.
ii.   45 points from: CHCH101, COMS101, YACL101, YACL201.

Health

Health Education
At least 75 points in Health Education (HLED), including at least 45 points at 200-level or above.

Physical Activity
At least 75 points, with at least 45 points at 200-level or above from the following courses: HLED223, SPCO101, SPCO104, SPCO107, SPCO126, SPCO204, SPCO208, SPCO209, SPCO221, SPCO223, SPCO305, SPCO308, SPCO335, SPCO336.

Note: if you are wanting to take this minor to later apply for a teaching qualification, we recommend the following courses: SPCO104, SPCO204, SPCO209, SPCO335 and SPCO336.

Public Health
At least 75 points, with at least 45 points at 200-level or above from the following courses: HLTH111, HLTH213, HLTH214, GEOG325, HLED321, HLTH312, MKTG315.
You may include a maximum of one of the following: ECON338, GEOG205, GEOG217, SOWK303.

Society and Policy
At least 75 points, with at least 45 points at 200-level or above from the following courses: PHIL240, POLS206, POLS307, SOCI243, SOCI363, SPCO368, SOWK101.

PACE

Professional and Community Engagement

i.   PACE225
ii.   PACE295
iii.   PACE395
iv.   one other 15-point course at any level that is not part of your major studies nor a compulsory course in your chosen degree.

Product Design

Applied Immersive Game Design
At least 75 points chosen from the following courses, with at least 45 points at 200-level or above:
PROD121, COSC121, COSC122, PROD221, PROD222, PROD223, PROD224, SENG201, PROD321, PROD322, PROD323.

Chemical Formulation Design
At least 75 points chosen from the following courses, with at least 45 points at 200-level or above:
CHEM111, PROD131, PROD230, PROD231, PROD232, PROD233, PROD234, PROD235, PROD331, PROD333, PROD334.

Digital Product Design
At least 75 points chosen from the following courses, with at least 45 points at 200-level or above:
PROD151, COSC121, COSC122, PROD251, PROD252, PROD254, INFO263, SENG201, PROD351, PROD353, PROD354.

Industrial Product Design
At least 75 points chosen from the following courses, with at least 45 points at 200-level or above:
PROD111, PROD112, PHYS101 (or PHYS111), PROD210, PROD211, PROD212, PROD213, PROD214, PROD311, PROD313, PROD314.

Sport

Performance Data Analysis
i.   SPCO104 and SPRT131
ii. Two from: SPCO201, SPCO204, SPCO209
iii. One from: SPCO304, SPCO331

Physical Activity and Wellbeing
i.   SPCO104 and SPCO107
ii. SPRT229
iii. One of: HLED223, HLTH201, and SPCO209
iv. SPRT322

Sport Coaching
i.   SPCO101
ii. One of: SPRT109, SPRT131
iii. SPCO201
iv. One of: SPCO204, SPCO209, SPRT229
v.   One of: SPCO301, SPCO302

Sport Management
i.   MGMT100 and SPRT108
ii. SPCO224
iii. One of: MGMT206, MGMT207
iv. SPCO301

Te Ao Hākinakina
i.   One of: TREO110 or SPCO126
ii. One of: HLTH106, MAOR107, MAOR108, SPCO126
iii. MAOR219
iv. One of: MAOR282, SPCO208, SPRT203
v.   SPCO310

Sport Studies
i.   Two from: SPCO101, PSOC104, SPCO105, SPCO110, SPCO208, SPCO320.
ii. Three from: HLTH201, MKG201, SPCO201, YACL201, MKTG204, SPCO204, MGMT206, MGMT207, SPCO208, SPCO209, SPCO210, MAOR214, PSYC214, MAOR219, SPCO221, HLED223, SPCO224, SPCO226, MKTG240, SPCO241, SPCO242, MAOR270, MAOR282, SPCO301, SPCO302, SPCO304, SPCO305, SPCO310, MAOR317, SPCO320, GEOG325, SPCO331, SPCO332, SPCO336, SPCO341, SPCO343.

Bachelor of Data Science (BDataSc)

The BDataSc degree contains a core of maths, data science and computer science. Along with these core subjects, students choose a 'major' subject to specialise in. The following majors are offered in the BDataSc:

- Bioinformatics
- Business Analytics
- Computational Linguistics
- Data Science
- Population Health Data Science
- Spatial Data Science

Bachelor of Data Science degree plan

SCIE101	MATH102	DATA101	COSC121	COSC122	100 MAJOR	100 MAJOR	100
DATA201	DATA203	STAT201/202	COSC262	PHIL240	200 MAJOR	200 MAJOR	200 MAJOR
DATA301	DATA303	STAT315/318	300 MAJOR	300 MAJOR	300 MAJOR (30 point project)		200/300

Bachelor of Data Science major: Bioinformatics

Use a wide range of applications and tools to understand and manage the vast amounts of complex biological data generated from scientific research.

SCIE101	MATH102	DATA101	COSC121	COSC122	BIOL111	BIOL112	100
DATA201	DATA203	STAT201/202	COSC262	PHIL240	BIOL215	BIOL231	BIOL271
DATA301	DATA303	STAT315/318	BIOL333	BIOL334	BIOL338		BIOL337

Bachelor of Data Science major: Business Analytics

SCIE101	MATH102	DATA101	COSC121	COSC122	Two courses from: MGMT 100; MKTG 100; ACCT102; ACCT 103; ECON 104; ECON 105; INFO 123; MGMT 170		100
DATA201	DATA203	STAT 201/202	COSC262	PHIL240	INFO260	INFO261	One course from 200-level ACCT/ECON/FINC/INFO/MGMT/MKTG
DATA301	DATA303	STAT 315/318	Two courses from one of 300-level ACCT/ECON/FINC/INFO/MGMT/MKTG		DATA309		200/300

Bachelor of Data Science major: Computational Linguistics

Apply computer science to the analysis, synthesis and comprehension of written and spoken language. Used in everything from speech recognition systems to search engines.

SCIE101	MATH102	DATA101	COSC121	COSC122	LING101	LING102	100
DATA201	DATA203	STAT 201/202	COSC262	PHIL240	LING217	LING223	200 LING/DIGI
DATA301	DATA303	STAT 315/318	COSC367	LING315	LING310		30 points from 300/200 COSC/STAT/DATA/DIGI/LING/COSC261

Bachelor of Data Science major: Data Science

Analyse past and current data to provide predictions and valuable insights into everything from social behaviours to the natural environment.

SCIE101	MATH102	DATA101	COSC121	COSC122	100	100	100
DATA201	DATA203	STAT201/202	COSC262	PHIL240	COSC265	One from STAT211–299	100/200
DATA301	DATA303	STAT315	COSC367	STAT318	DATA309		200/300

Bachelor of Data Science major: Population Health Data Science

Find data-driven solutions to disease prevention and improve public health and wellbeing on a large scale.

SCIE101	MATH102	DATA101	COSC121	COSC122	GISC101	Schedule for major	100*
DATA201	DATA203	STAT201/202	COSC262	PHIL240	HLTH213	HLTH214	200 HLTH/GEOG
DATA301	DATA303	STAT315/318	HLTH312	GEOG325	DATA309		Schedule for major

*Talk to a student advisor from the Faculty of Science about what you should take here

Bachelor of Data Science major: Spatial Data Science

Use location-based data and tools like geographic information systems to find patterns and tackle complex problems.

SCIE101	MATH102	DATA101	COSC121	COSC122	GEOG106/110	GISC101	Schedule for major
DATA201	DATA203	STAT201/202	COSC262	PHIL240	GEOG205	GEOG208	200 GEOG
DATA301	DATA303	STAT315/318	GEOG323	GEOG324	GEOG309		Schedule for major

Bachelor of Environmental Science with Honours (BEnvSci(Hons))

The BEnvSci(Hons) degree is a 4-year undergraduate degree focusing on bio-physical sciences and the impact of science on the social world. The first year of study centres on interdisciplinary science of biology, chemistry, and earth sciences while the second year includes a focus on the environmental major. The final year of study includes a community-based research project. Mātauranga Māori and bicultural concepts are embedded in the core of the degree as well as each of the majors.

Bachelor of Environmental Science with Honours degree plan

ENVR101	STAT101	CHEM114/111	BIOL112	GEOG106	SCIE101	100**	100**
ENVR209	ENVR210	BIOL209/ GEOG 205/208	BIOL274	200 MAJOR	200 MAJOR	200 MAJOR	100/200**
ENVR302	ENVR303		PSYC341	300 MAJOR	300 MAJOR	300 MAJOR	200/300**
ENVR415	ENVR411	ENVR480 Research project		400 MAJOR	400 MAJOR	400 MAJOR	400**

Note: You will also complete 400 hours of practical work placement arranged through UC with ENVR 300 Environmental Science Work Experience (0 points, 0 fees).
You can choose to take this course during the summer months (November-February) in either year 2 or 3 of the degree.

**Chosen from the approved schedule of courses.

Bachelor of Environmental Science major: Ecosystem Health and Biosecurity

Graduates will develop a deep understanding of ecological principles and a range of lab and field skills that will enable them to contribute to the sustainable use and management of natural resources.

ENVR101	STAT101	CHEM114/ CHEM111	BIOL112	GEOG106	SCIE101	100		100
ENVR209	ENVR210	BIOL209	BIOL274	BIOL275	SOIL203/WATR201/ GEOG201/BIOL213		BIOS201	100/200
ENVR302	ENVR303		PSYC341	BIOL309	30 points from: BIOL 332/336/371/375/377/378/383/384			200/300
ENVR415	ENVR411	ENVR480 Research project		30 points from: BIOL 420/423/424/425/ 426/427/428/ FORE447		400		400

Bachelor of Environmental Science major: Environmental Change

Develop a toolbox to help tackle a range of environmental issues. There is a strong foundation in Earth system science and courses to assist with understanding the importance of human activities on our environment.

ENVR101	STAT101	CHEM114/111	BIOL112	GEOG106	SCIE101	ANTA102	100
ENVR209	ENVR210	BIOL209/ GEOG205/208	BIOL274	ANTA201	GEOG 201/215	BIOL275	100/200
ENVR302	ENVR303		PSYC341	45 points from: GEOG312/311/ BIOL377 / PHYS 330			200/300
ENVR415	ENVR411	ENVR480 Research project		GEOG412		BIOL427	400

Bachelor of Environmental Science major: Environmental Contamination

There is a growing demand for skilled professionals who can work with mana whenua, communities, industry and governments to determine the extent and mitigate the impacts of environmental contamination. This major explores chemical and biological (eg, microbial) contaminants and their impacts on the environment.

ENVR101	STAT101	CHEM111	BIOL112	GEOG106	SCIE101	BIOL111	CHEM114*
ENVR209	ENVR210	BIOL209	BIOL274	BIOL213	CHEM247	SOIL203/ WATR201/ GEOG201/ HLTH214	100/200
ENVR302	ENVR303		PSYC341	30 points from: CHEM340 / BIOL313 / PHYS330 / BIOL309		ENVR304	200/300
ENVR415	ENVR411	ENVR480 Research project		WATR402	30 points from: ENVR414/ BIOL455 / WATR403 /WATR401		400

* Required unless 14+ credits of NCEA level 3 chemistry

Bachelor of Environmental Science major: Environmental Hazards and Disasters

This major allows environmentally passionate students to develop their interest in reducing the negative impacts that result when natural hazard events trigger disasters and provides a pathway to a professional qualification in Disaster Risk and Resilience (eg, MDRR), which is a rapidly-developing focus in NZ and globally.

ENVR101	STAT101	CHEM114/111	BIOL112	GEOG106	SCIE101	GEOL102	100
ENVR209	ENVR210	GEOG205	BIOL274	GEOL246	GEOG215	COMS232	100/200
ENVR302	ENVR303		PSYC341	GEOL354	GEOG351	GEOG 323/324/325	200/300
ENVR415	ENVR411	ENVR480 Research project		DRRE401	DRRE402	GEOG404/HLTH 403	

Bachelor of Environmental Science major: Freshwater

Graduates will develop an ability to think holistically about water management, and possess a range of skills that will enable them to contribute to the sustainable management of freshwater resources and ecosystems.

ENVR101	STAT101	CHEM114/111	BIOL112	GEOG106	SCIE101	Recommended BIOL111 or BIOL113	100
ENVR209	ENVR210	BIOL209 / GEOG205/208	BIOL274	WATR201	GEOG201	CHEM247/ BIOL213	Recommended BIOL275[2]
ENVR302	ENVR303		PSYC341	30 points from: BIOL375 / GEOG311/312 / CHEM340		WATR301	200/300
ENVR415	ENVR411	ENVR480 Research project		WATR401	WATR 402/403	BIOL425 / GEOG409[1]/412 / ENGE414 / ENVR 414	400

[1] 30 points   [2] If planning to do BIOL375

Bachelor of Environmental Science major: Sustainable Coasts

Graduates of this major will have a strong grounding in Earth and ecosystem science as it applies to coastal, marine and connected urban and river environments. They will have developed an ability to think holistically about the sustainable use and management of coastal and marine resources, and possess a range of skills that will enable them to contribute to a future where people thrive alongside, and as a part of, blue edge environments.

ENVR101	STAT101	CHEM114/111	BIOL112	GEOG106	SCIE101	Recommended BIOL113	100
ENVR209	ENVR210	BIOL209	BIOL274	GEOG201	BIOL212	GEOG215	BIOL275
ENVR302	ENVR303		PSYC341	GEOG311	BIOL384	BIOL 309/377/378/ GEOG 323/324	200/300
ENVR415	ENVR411	ENVR480 Research project		GEOG409		BIOL428	400

Bachelor of Speech and Language Pathology with Honours (BSLP(Hons))

Bachelor of Speech and Language Pathology – Intermediate

STAT101	At least 1 of: HLTH106 MAOR165/172 TREO110/111	100 *	100 *	100 *	100 *	100 *	100 *

*courses can be selected from recommended list: SPSC 133, SPSC 114, EDUC 102, LING 101, PSYC 105, PSYC 106 or with guidance from an Advisor.
To be considered for the BSLP (Hons), students need to apply by 1 October the year before.

Bachelor of Speech and Language Pathology (Hons)

SPSC222	SPSC223	SPSC232	HEAR243	SPSC262	One course from TREO, MAOR, or PSYC	SPSC281	SPSC282
SPSC320	SPSC332	SPSC365	SPSC366	SPSC351	SPSC369	SPSC381	SPSC382
SPSC420	SPSC461	SPSC483		One course from TREO, MAOR, or PSYC	SPSC484		SPSC 490 or 491

Bachelor of Psychological Science (BPsycSc)

This degree offers study in all disciplines within psychology: the field of human thought, growth, and capability. You will examine how our brains function, and how and why changes in our environment, culture, relationships, and more can influence our behaviour and overall wellbeing. You will also choose a minor subject to focus your study in a particular area of psychology. This degree will build foundational skills in psychological research and practice to prepare you for a career within scientific, healthcare, legal, or social sectors and beyond.

- Forensic Psychology
- Māori and Indigenous Perspectives
- Neuroscience and Cognition
- Psychological Wellbeing
- Psychology for Common Good
- Workplace Psychology

Bachelor of Psychological Science example degree structure

PSYC105	PSYC106	PSYC107	SPSC114	HLTH106/ MAOR108 /TREO110	100 2nd minor or elective	100 Elective from any degree	100 Elective from any degree
PSYC206	PSYC207	PSYC208	PSYC213	PSYC215	200 Minor	200 2nd minor or elective	100/200 2nd minor or elective
PSYC375	PSYC377	PSYC379	300 Minor	300 Minor	300 Minor*	200/300 2nd minor or elective	200/300 2nd minor or elective

*Note that for some minors, this course will be 200-level, and you will choose a 300-level elective / 2nd minor course in its place.

A second minor is optional, but if chosen, must be either: a) another Psychology minor, or b) one of the following:

Biology
Chemistry
Computer Science

Education
Economics
Environmental Science
Geography
Health Education
Human Resource Management

Human Services
Linguistics
Māori and Indigenous Studies
Marketing
Media and Communication
Nutrition
Pacific Studies

Performance Data Analysis
Philosophy
Physical Activity and Wellbeing
Public Health
Society and Policy
Sociology

Sport Coaching
Sport Management
Sport Studies
Statistics
Strength and Conditioning
Te Reo Māori
Youth and Community Leadership

Bachelor of Psychological Science minor: Forensic Psychology

PSYC105	PSYC106	PSYC107	SPSC114	HLTH106/ MAOR108 /TREO110	100	100	100
PSYC206	PSYC207	PSYC208	PSYC213	PSYC215	PSYC216	SOCI222	100/200
PSYC375	PSYC377	PSYC379	PSYC330	PSYC376*	300	200/300	200/300

*Students double minoring where PSYC376 is in both minors, will substitute PSYC376 with PSYC349.

Bachelor of Psychological Science minor: Workplace Psychology

PSYC105	PSYC106	PSYC107	SPSC114	HLTH106/ MAOR108 /TREO110	100	100	100
PSYC206	PSYC207	PSYC208	PSYC213	PSYC215	BSNS201	PSYC211*	100/200
PSYC375	PSYC377	PSYC379	PSYC366	PSYC376*	300	200/300	200/300

*Please talk to the Faculty of Science student advisors if PSYC211 is a requirement of both your minors.
**Students double minoring where PSYC376 is in both minors, will substitute PSYC376 with PSYC349.

Bachelor of Psychological Science minor: Māori and Indigenous Perspectives

PSYC105	PSYC106	PSYC107	SPSC114	HLTH106/ MAOR108 /TREO110	100	100	100
PSYC206	PSYC207	PSYC208	PSYC213	PSYC215	MAOR212/MAOR214 MAOR270/PACS211 /PACS221	200	100/200
PSYC375	PSYC377	PSYC379	MAOR373		PSYC376*	200/300	200/300

*Students double minoring where PSYC376 is in both minors, will substitute PSYC376 with PSYC349.

Bachelor of Psychological Science minor: Psychological Wellbeing

PSYC105	PSYC106	PSYC107	SPSC114	HLTH106/ MAOR108 /TREO110	100	100	100
PSYC206	PSYC207	PSYC208	PSYC213	PSYC215	PSYC214	200	100/200
PSYC375	PSYC377	PSYC379	PSYC374	PSYC376*	PSYC380	200/300	200/300

*Students double minoring where PSYC376 is in both minors, will substitute PSYC376 with PSYC349.

Bachelor of Psychological Science minor: Neuroscience and Cognition

PSYC105	PSYC106	PSYC107	SPSC114	HLTH106/ MAOR108 /TREO110	100	100	100
PSYC206	PSYC207	PSYC208	PSYC213	PSYC215	PSYC209	200	100/200
PSYC375	PSYC377	PSYC379	PSYC373	2 from: BIOL355/PSYC340/ PSYC381/PSYC382		200/300	200/300

*Please talk to the Faculty of Science student advisors if PSYC211 is a requirement of both your minors.
**Students double minoring where PSYC376 is in both minors, will substitute PSYC376 with PSYC349.

Bachelor of Psychological Science minor: Psychology for Common Good

PSYC105	PSYC106	PSYC107	SPSC114	HLTH106/ MAOR108 /TREO110	100	100	100
PSYC206	PSYC207	PSYC208	PSYC213	PSYC215	PSYC211*	200	100/200
PSYC375	PSYC377	PSYC379	3 from: PSYC341/PSYC374/PSYC378/PSYC382			200/300	200/300

*Please talk to the Faculty of Science student advisors if PSYC211 is a requirement of both your minors.

Types of degrees

Conjoint degrees

We currently offer five conjoint degrees.

Four-year conjoint degrees: Students take 135 points each year for four years to complete the degree (540 points total).

1. **The Conjoint Bachelor of Arts and Science (BA/BSc)**: advising is done primarily in the Faculty of Arts.
2. **The Conjoint Bachelor of Commerce and Science (BCom/BSc)**: advising is done primarily in the UC Business School.
3. **The Conjoint Bachelor of Product Design and Science (BProdDesign/BSc)**: advising is done primarily in the Faculty of Engineering.

Five-year conjoint degrees: Students take 135 points each year for five years to complete the degree (675 points total).

4. **The Conjoint Bachelor of Engineering with Honours and Data Science (BE(Hons)/BDataSc)**: advising is done primarily in the Faculty of Engineering.
5. **The Conjoint Bachelor of Engineering with Honours and Science (BE(Hons)/BSc)**: advising is done primarily in the Faculty of Engineering.

Key points:

Admission: students wishing to take a conjoint degree, must have a Merit endorsement minimum at NCEA Level 3.

Students are expected to maintain a B average (GPA of 4.0) in each year of study. Continuation in the conjoint degree is with the approval of the relevant Dean.

At least 1 course from each degree must be taken in each year of study.

Advising is absolutely critical to a student completing this degree.

On completion, a student will receive one degree parchment with both degrees on it.

Double degrees

Students can take double degrees at UC. The BSc can be taken with most other degrees at UC, with a few exceptions (BFA, BTchLn).

For most double degree combinations, you will share a maximum of 120 points between the two degrees. You may not share any 300-level points between two degrees.

Most combinations can be taken in 5 years at 120 points per year (600 points total) – planning is critical to help with this.

Students must complete the majoring, minoring, and compulsory requirements of both degrees.

The BE(Hons) double degree with the BSc has special regulations, and students will need to seek advice to ensure that they complete all the required elements.

On completion, a student will receive a degree parchment for each degree.

Why do a conjoint or double degree?

Conjoint and double degrees are best suited to students who want to gain expert knowledge in two subjects that cannot be studied under the same degree.

If you want to do two subjects that are both available as majors in the Bachelor of Science, then it is better to do these are a single degree with two majors, rather than a double degree. You are better to use the time saved by doing a single degree (1-2 years shorter) to do postgraduate study.

FAQ

I need help with planning my degree. Who do I go to?

First year: Kaitoko (Student Advisors for First Year Students)
Phone: 03 369 0409
Email: firstyearadvice@canterbury.ac.nz

Drop-ins: Available at various time throughout the year – check their website.

Second year and beyond: Faculty of Science Student Advisors
Email: scienceugadvice@canterbury.ac.nz
Drop-ins: 1pm – 3pm most weekdays, Beatrice Tinsley ground floor.

What is a major?

A major is the main subject area you will be studying during your bachelor's degree. Very likely, half or more of the courses you do at UC will be in your major subject.

How long does it take to do a double major? Is it too hard?

If the degree is planned carefully, in most cases it takes three years to graduate with a double major, which is the same time as a single major.

The overall workload is also the same as doing a single major, but with less room for electives.

Which courses are required for my major?

The number of courses required for each major differs, and you can find information on this in this booklet and on our website.

The rest of your enrolment needs to be filled with elective and/or minor courses, which can be either complementary to your major, or they can be in completely different subject areas.

What is SCIE101?

All students who enrolled in a BSc, BDataSc and BEnvSci(Hons) must take SCIE101, including those from engineering who have completed ENGR101.

In this foundational course, we examine stimulating questions such as what science is, who does science, how science is practised, how culture, society and science interact, and how science is communicated to differing audiences. This course will draw on a variety of historical and contemporary case studies, leading-edge research, ethical challenges, and controversial issues.

What is a minor?

A minor is a selection of courses in a specific subject area. At UC the minimum requirements for a minor are 75 points (45 of these must be at 200 or 300-level). This allows you to focus some of your elective points on a subject that interests you. Minor options are from BA, BCom, BDigiScreen, BHSc, BSc, BSport, PACE, and BYCL.

Can I take any Arts or Commerce courses as a Science student?

Yes, you can take up to 105 points of non-science courses throughout your BSc. Check with your student advisors if you are not sure what counts as science or non-science points.

How do I drop a course, or add another course into my enrolment?

You can drop or add a course through your myUC account. Key dates for withdrawing from courses are listed on our website.

If I fail or drop a course, do I have to take it again?

If the course you failed is required for your major, you will need to take it again. If it is not required, check what you still need for the overall points requirements of your degree.

Can I pass the year if I drop a paper?

BSc is a very flexible degree; in many cases you can take courses are a combination of different levels while you catch up.

If you fail or drop a paper, you may no longer meet the prerequisites for some higher-level papers in the following semester or year. However, you may still meet the prerequisites for other higher-level papers. In this case, you can continue with the higher-level papers you are eligible to take while at the same time taking the lower level papers you previously failed or need.

If you are unsure of the consequences of dropping or failing a paper, get in touch with your Student Advisor.

Can I study by distance?

This depends on your subject choices. If the courses for your degree/major have (D) occurrences, then you can study by distance. However, if they only have (C) occurrences, then on campus attendance is required.

Can I study part time?

Yes, part time study is possible, as long as it adheres to the time limits of your degree. The time limits refers to the length of time between the start of the first course that is being credited to your degree, to the end of the last one being credited.

The time limits are as follows:
- Bachelor of Science: 10 years
- Bachelor of Data Science: 10 years
- Bachelor of Psychological Science: 10 years

Bachelor of Environmental Science with honours:

- 8-year time limit
- No more than 4 years to complete the 300-level and 400-level requirements.

Bachelor of Speech and Language Pathology with Honours:

- The time limit for this qualification is 8 years.
- Enrolment is for full-time study across 48 months.

What other support is available to me?

There are many support services available on campus, whether you are looking to remedy a specific problem, or just see if you can do better in any area of university life. You can see the full list of support services under the "support services" tab in UC Home page. Here are a few examples of various support services:

Student Care: can help with a wide range of topics. Some examples are juggling commitments, dealing with financial hardship, or understanding UC policies and processes.

Location: Undercroft (under Puaka James Hight, Central Library)
Phone: 03 369 3388
Email: studentcare@canterbury.ac.nz

Student Accessibility Service: can help mitigate the effects of physical or mental impairment, whether temporary or permanent.

Location: Room 125 Ground floor
Forestry building
Phone: 03 369 3334
Email: sas@canterbury.ac.nz

Academic Skills Centre: have a range of workshops related to study skills and exam preparation. You can also book one on one appointments with them.

Location: Level 3, Puaka-James Hight
Phone: 03 369 3900
Email: academicskills@canterbury.ac.nz

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