

# UC SCIENCE

# Undergraduate Degrees

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## UC Science – Undergraduate Degree offering

We offer 4 undergraduate degrees:

- Bachelor of Science
- Bachelor of Environmental Science (Hons)
- Bachelor of Data Science
- Bachelor of Speech and Language Pathology (Hons)

# 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 18 majors and up to 58 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
- Medicinal Chemistry
- Philosophy
- Physics
- Psychology
- Statistics

## Bachelor of Science – example degree structure

### Year 1



### Year 2



### Year 3



<sup>1</sup> Students should allow for more than one potential major subject. Students should check the 100-level requirements for their potential majors as some majors require more than two 100-level courses or enrolment in a complementary subject such as Mathematics.

For full course requirements, go to [www.canterbury.ac.nz/regulations/academic-regulations/bsc-229/](http://www.canterbury.ac.nz/regulations/academic-regulations/bsc-229/)

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 (i.e. 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.

### Summary of structure

- 100: maximum of 9 courses
- 200: given the regulations for levels 100 and 300, all remaining points come from 200 level
- 300: minimum of 6 courses, with minimum of 2 in same subject

### Bachelor of Science major: Astronomy

ASTR 112	PHYS 101	PHYS 102	MATH 102	MATH 103	SCIE 101	Required COSC 131	100
ASTR 211/212	PHYS 285	PHYS 203	PHYS 205	PHYS 206	MATH 201	Recommended MATH 202 and/or 203	100/200
ASTR 323/325/326	PHYS 310	ASTR 381	PHYS 311/313	300	300	200/300	200/300

### Bachelor of Science major: Biochemistry

BCHM 111	BCHM 112	SCIE 101	CHEM 114*	Recommended BIOL 112, 113 and CHEM 111	100	100	100
BCHM 202	BCHM 212	BCHM 222	BCHM 281 or CHEM 281	BCHM 253	Recommended BCHM 206	200	100/200
BCHM 305	BCHM 306	BCHM 338	BCHM 339	Recommended BCHM 381	300	200/300	200/300

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

## Bachelor of Science major: Biological Sciences

BIOL 111	BIOL 112	BIOL 113	STAT 101	SCIE 101	Recommended: 15 points of 100-level Chemistry and 15 points of 100-level Mathematics	100	100
BIOL 209	200 BIOL	200 BIOL	200 BIOL	200	200	200	100/200
BIOL3__/ BCHM 305/306	BIOL3__/ BCHM 305/306	BIOL3__/ BCHM 305/306	BIOL3__/ BCHM 305/306	Recommended BIOL 309	300	200/300	200/300

## Bachelor of Science major: Chemistry

CHEM 111	CHEM 112	CHEM 114*	SCIE 101	100	100	100	100
CHEM 211	CHEM 212	CHEM 242	CHEM 251	CHEM 281	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__/ BCHM 388/339	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	COSC 122	MATH 102	MATH 120	SCIE 101	Recommended COSC 101, STAT 101	100	100
COSC 261	200 COSC SENG ENCE	200 COSC SENG ENCE	200	200	200	200	100/200
300 COSC/SENG/ ENCE or DATA 301	300 COSC/SENG/ ENCE or DATA 301	300 COSC/SENG/ ENCE or DATA 301	300 COSC/SENG/ ENCE or DATA 301	300	300	200/300	200/300

### Bachelor of Science major: Economics

ECON 104	ECON 105	SCIE 101	Recommended MATH 102, 103 and STAT 101	100	100	100	100
ECON 206	ECON 207	ECON 208	Recommended ECON 213	200	200	200	100/200
300 ECON	300 ECON	300 ECON	300 ECON	300	300	200/300	200/300

### Bachelor of Science major: Environmental Science

ENVR 101	GEOG 106	STAT 101/ MATH 102	SCIE 101	100 MAJOR	100 MAJOR	Recommended SCIM 101	100
ENVR 209	ENVR 210	BIOL 209	200 MAJOR	200 MAJOR	200 MAJOR	200	100/200
ENVR 301		GEOG 309		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.

### Bachelor of Science major: Finance

STAT 101	MATH 102	ACCT 102	SCIE 101	Recommended ECON 104, MATH 103	100	100	100
FINC 201	FINC 203	Recommended FINC 205 or 200 level STAT	Recommended ECON 213 or 200 level STAT	200	200	200	100/200
FINC 331	300 FINC	300 FINC	300 FINC	300	300	200/300	200/300

### Bachelor of Science major: Financial Engineering

STAT 101	MATH 102	MATH 103	COSC 131/121	COSC 122	ECON 104	SCIE 101	Required ACCT 102
FINC 201	ECON 207 or FINC 203	ECON 213	MATH 201	SENG 201	STAT 211/221	STAT 213	Recommended INFO 213
FINC 311/312	FINC 331/ ECON 331	STAT 317/ ECON 323	Schedule for major	300	300	200/300	200/300

### Bachelor of Science major: Geography

GEOG 106	GEOG 110	SCIE 101	100	100	100	100	100
200 GEOG	200 GEOG	200 GEOG	100	100	100	100	100/200
300 GEOG	300 GEOG	300 GEOG	300 GEOG	300	300	200/300	200/300

## Bachelor of Science major: Geology

GEOL 111	GEOL 113/115	SCIE 101	100	100	100	100	100
200 GEOL*	200 GEOL*	200 GEOL*	200 Recommended GEOL	200 Recommended GEOL	200	200	100/200
300 GEOL**	300 GEOL**	300 GEOL**	300 GEOL**	300 Recommended GEOL	300 Recommended GEOL	200/300	200/300

\*Required: 45 points from 200-level GEOL. Recommended: GEOL 240 and GEOL 241

\*\*Required: 60 points from 300-level Geology. Recommended: GEOL 351 or GEOL 352

## Bachelor of Science major: Linguistics

LING 101	LING 102/103	SCIE 101	100	100	100	100	100
LING 215	LING 217	200 LING	200	200	200	200	100/200
LING 310		300 LING	300 LING	300	300	200/300	200/300

## Bachelor of Science major: Mathematics

MATH 102*	MATH 103*	SCIE 101	MATH 101**	100	100	100	100
45 points from MATH 201/202/203/220/240			200	200	200	200	100/200
300 MATH	300 MATH	300 MATH	300 MATH	300	300	200/300	200/300

\*Equivalent to MATH 199

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



## Bachelor of Science major: Medicinal Chemistry

CHEM 111	CHEM 112/ BCHM 112	CHEM 114*	BIOL 116	SCIE 101	BCHM 111/ BIOL 111	100	100
CHEM 212/ BCHM 212	CHEM 242/ BCHM 206	CHEM 246	CHEM 281/ BCHM 281	200	200	200	200
CHEM 342	CHEM 346	CHEM 347	CHEM 381	300	300	200/300	200/300

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

## Bachelor of Science major: Philosophy

SCIE 101	100 Recommended PHIL	100 Recommended PHIL	100	100	100	100	100
PHIL 233	200 PHIL	200 PHIL	200	200	200	200	100/200
PHIL 305/310/311/317		300 PHIL	300 PHIL	300	300	200/300	200/300

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

## Bachelor of Science major: Physics

PHYS 101	PHYS 102	MATH 102	MATH 103	SCIE 101	Required COSC 131	PHYS 111*	100
PHYS 285	PHYS 203	PHYS 205	PHYS 206	MATH 201	Recommended MATH 202 and/or 203	200	100/200
PHYS 310	PHYS 311	PHYS 313	PHYS 381	300	300	200/300	200/300

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

### Bachelor of Science major: Psychology

PSYC 105	PSYC 106	SCIE 101	100	100	100	100	100
PSYC 206	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

### Bachelor of Science major: Statistics

MATH 102*	MATH 103*	SCIE 101	Recommended STAT 101	100	100	100	100
200 STAT	200 STAT	200 STAT	200	200	200	200	100/200
300 STAT	300 STAT	300 STAT	300 STAT	300	300	200/300	200/300

\*Equivalent to MATH 199 (See the math major as an example)

# Minors

## Science

### Astronomy

must be credited with the following:  
At least 75 points in Astronomy or Physics, including at least 45 points at 200-level or above

### Biochemistry

must be credited with the following:  
At least 75 points in Biochemistry including at least 45 points at 200-level or above.

### Biology

must be credited with the following:  
At least 75 points in Biology including at least 45 points at 200-level or above.

### Chemistry

must be credited with the following:  
At least 75 points in Chemistry, including CHEM 111 and CHEM 112 (BCHM 112), and at least 45 points at 200-level or above.

### Computer Science

must be credited with the following:  
At least 75 points from the Computer Science courses in Schedule V to these Regulations including at least 45 points at 200-level or above.

## Economics

must be credited with the following:

- i. ECON 104 and ECON 105; and
- ii. ECON 207 or ECON 208; 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

must be credited with the following: STAT 101 and at least 60 points in Environmental Science including at least 45 points at 200-level or above.

## Finance

must be credited with either:

- i. ACCT 102, STAT 101; and
- ii. MATH 101 or MATH 102; and
- iii. FINC 201, FINC 203; and
- iv. A further 15 points from FINC 301, FINC 311 or FINC 312.

or

- i. STAT 101; and
- ii. MATH 102 and MATH 103; and
- iii. FINC 201; and
- iv. A further 30 points of Finance, including at least one of FINC 301, FINC 311 or FINC 312

## Geography

must be credited with the following:  
At least 75 points in Geography, including at least 45 points at 200-level or above.

## Geology

must be credited with the following:  
At least 75 points in Geology, including at least 45 points at 200-level or above

## Linguistics

must be credited with the following:  
At least 75 points in Linguistics, including at least 45 points at 200-level or above.

## Mathematics

must be credited with the following:  
At least 75 points in Mathematics including at least 45 points at 200-level or above

## Philosophy

must be credited with the following:  
At least 75 points in Philosophy, including at least 45 points at 200-level or above

## Physics

must be credited with the following:

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

## Psychology

must be credited with the following:

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

## Statistics

must be credited with the following:

At least 75 points in Statistics (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

### Accounting

must be credited with the following:

- i. ACCT 102 and ACCT 103; and
- ii. Either ACCT 211 or ACCT 222; and
- iii. A further 30 points of Accounting at 200-level or above which may include INFO 243; and
- iv. A further 15 points of Accounting at 300-level.

### Anthropology

must be credited with at least 75 points in Anthropology, which must include at least 45 points at 200-level or above.

### Art History and Theory

must be credited with at least 75 points in Art History and Theory, which must include at least 45 points at 200-level or above.

### Business and Sustainability

must be credited with the following:

- i. MGMT 100
- ii. MGMT 230 and MGMT 335; and
- iii. A further 30 points from ECON 225, MGMT 270, ACCT 340, MGMT 333.

## Chinese

must be credited with at least 75 points in Chinese, 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

must be credited with at least 75 points in Cinema Studies, which must include at least 45 points at 200-level or above.

## Classics

must be credited with at least 75 points in Classics, which must include at least 45 points at 200-level or above.

## Cultural Studies

must be credited with at least 75 points in Cultural Studies 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

must be credited with at least 75 points, including at least 45 points at 200-level or above from the Digital Humanities (DIGI) schedule. DIGI 101 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**

must be credited with at least 75 points in English, which must include at least 45 points at 200-level or above.

### **English Language**

must be credited with at least 75 points in English Language, which must include at least 45 points at 200-level or above.

### **Entrepreneurship**

must be credited with the following:

- i. ACCT 102, MGMT 100, MKTG 100; and
- ii. MGMT 223; and
- iii. MGMT 342, MGMT 343

### **European and European Union Studies**

must be credited with at least 75 points in European and European Union Studies, which must include EURA 101, and at least 45 points at 200-level or above. A student may include up to 30 points of a European language (French, German, Russian, or Spanish) in their EURA Minor.

### **French**

must be credited with at least 75 points in French, which must include at least 45 points at 200-level or above.

### **German**

must be credited with at least 75 points in German, which must include at least 45 points at 200-level or above, and must include at least GRMN 152. 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**

must be credited with at least 75 points in HIST coded courses which must include at least 45 points at 200-level or above.

### **Human Resource management**

A student intending to minor in Human Resource Management must be credited with the following: i. MGMT 100; and ii. MGMT 206, MGMT 207; and iii. MGMT 303, MGMT 308.

### **Human Services**

must be credited with at least 75 points in Human Services, which must include at least 45 points at 200-level or above.

### **Information Systems**

must be credited with the following:

- i. INFO 123; and
- ii. INFO 223 or INFO 253; 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**

must be credited with the following:

- i. INOV 200
- ii. INOV 201
- iii. INOV 202 or MGMT 223
- iv. INOV 300 or MGMT 342
- v. A further 15 points in INOV at 200 or 300-level.

### **International Business**

must be credited with the following:

- i. MGMT 100, ECON 104, MKTG 100; and
- ii. ECON 222, MGMT 221; and
- iii. MGMT 332.

### **Japanese**

must be credited with at least 75 points in Japanese, 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**

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

### **Marketing**

must be credited with the following:

- i. MKTG 100; and
- ii. MKTG 201, MKTG 202, MKTG 204; and
- iii. A further 15 points of Marketing at 300-level.

### **Media and Communication**

must be credited with at least 75 points in Media and Communication, which must include at least 45 points at 200-level or above.

### **Music**

must be credited with at least 75 points in Music, which must include at least 45 points at 200-level or above as approved by the Kairuruku Hōtaka Programme Coordinator.

### **Operations and Supply Chain Management**

must be credited with the following:

- i. MGMT 170; and
- ii. MGMT 270, MGMT 271; and
- iii. MGMT 370; and
- iv. 15 points from MGMT 371–379.

### **Political Science and International Relations**

must be credited with at least 75 points in Political Science and International Relations, which must include at least 45 points from POLS 201–249 and POLS 301–349.

### **Russian**

must be credited with at least 75 points in Russian, 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**

must be credited with at least 75 points in Sociology, 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**

must be credited with at least 75 points in Spanish, which must include at least 45 points at 200-level or above.

### **Taxation/ Taxation and Accounting**

must be credited with the following:

- i. ACCT 102, ACCT 103, ACCT 152; and
- ii. ACCT 254; and
- iii. ACCT 358, ACCT 359.

### **Te Reo Māori**

must be credited with at least 75 points in Te Reo Māori (or their co-coded equivalents), which must include at least 45 points at 200-level or above, including TREO 211 and TREO 212.

### **Tourism and Marketing and Management**

must be credited with the following:

- i. MKTG 100, MGMT 100, STAT 101; and
- ii. MKTG 205, MKTG 240; and
- iii. MKTG 314.

## **Education**

### **Youth and Community Leadership**

Must be credited with at least 75 points as follows:

- i. 30 points from courses at 200 level or above from Schedule C to the regulations for the BYCL
- ii. 45 points from Schedule S to the BYCL (ie CHCH101, YAACL101 and YAACL201)

## Health

### Health Education

A student must complete a minimum of 75 points, with at least 45 points at 200 level or above from the courses listed in the Health Education minor

### Physical Activity

A student must complete a minimum of 75 points, with at least 45 points at 200 level or above from the courses listed in the Physical Activity minor schedule

NOTE – if students are wanting to take this minor to later apply for a teaching qualification, we recommend they take the following courses – SPCO104, SPCO204, SPCO209, SPCO335 and SPCO336 (they are in the schedule of available courses, but the ones recommended for the PE teaching pathway)

### Public Health

A student must complete a minimum of 75 points, with at least 45 points at 200 level or above from courses listed in the Public Health major

### Society and Policy

A student must complete a minimum of 75 points, with at least 45 points at 200 level or above from courses listed in the Society and Policy minor schedule

## Sport Coaching

(in general – a minor consists of a minimum of:

- 75pts from a single subject area; and
- At least 30pts at 200 level or above; and
- At least 15pts at 300 level

### Adventure Sport and Environment

SPCO 126, SPCO 222, SPCO 226, SPCO 227, SPCO 326

One of the courses above at 200 level may be substituted with one of the following (SPCO 107, SPCO 224 or SPCO 231) with approval of the Programme Coordinator.

NOTE – this minor is being phased out and not all courses are offered every year. My advice to students at present is that they can enrol in courses that are offered, but they may not be able to complete as a minor

### Nutrition

SPCO 107, SPCO 242, SPCO 343, plus two courses from the following: SPCO 223, SPCO 241, SPCO 309

### Performance Analysis

SPCO103 or STAT 101, SPCO 204, SPCO 231, SPCO 331 Plus one of the following: SPCO103, SPCO 223, SPCO 332

### Sport Science

Must complete 75 points from the following, with at least 45 points above 200 level and at least 15 points at 300 level:

SPCO 103, SPCO 107

SPCO 204, SPCO 221, SPCO 223, SPCO 231, SPCO 241, SPCO 242

SPCO 304, SPCO 309, SPCO 331, SPCO 332, SPCO 341, SPCO 343

### Strength and Conditioning

SPCO 107, SPCO 241, SPCO 242, SPCO 309, SPCO 341

One of the courses above may be substituted with SPCO343 with approval from the Programme Coordinator

# 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
- Spatial data science
- Population health data science
- Data science
- Computational linguistics

## Bachelor of Data Science degree plan

SCIE 101	MATH 102	DATA 101	COSC 121	COSC 122	100 MAJOR	100 MAJOR	100
DATA 201	DATA 203	STAT 201/202	COSC 262	PHIL 240	200 MAJOR	200 MAJOR	100/200
DATA 301	DATA 303	STAT 315/318	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.

SCIE 101	MATH 102	DATA 101	COSC 121	COSC 122	BIOL 111	BIOL 112	100
DATA 201	DATA 203	STAT 201/202	COSC 262	PHIL 240	BIOL 215	BIOL 231	BIOL 271
DATA 301	DATA 303	STAT 315/318	BIOL 333	BIOL 334	BIOL 338		BIOL 337



## Bachelor of Data Science major: Business Analytics

SCIE 101	MATH 102	DATA 101	COSC 121	COSC 122	Two courses from: MGMT 100; MKTG 100; ACCT102; ACCT 103; ECON 104; ECON 105; INFO 123; MGMT 170		100
DATA 201	DATA 203	STAT 201/202	COSC 262	PHIL 240	INFO 260	INFO 261	One course from 200 level ACCT/ECON/FINC/ INFO/MGMT/MKTG
DATA 301	DATA 303	STAT 315/318	Two courses from one of 300 level ACCT/ECON/ FINC/INFO/MGMT/MKTG		DATA 309		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.

SCIE 101	MATH 102	DATA 101	COSC 121	COSC 122	LING 101	LING 102	100
DATA 201	DATA 203	STAT 201/202	COSC 262	PHIL 240	LING 217	LING 223	100/200
DATA 301	DATA 303	STAT 315/318	COSC 367	LING 315	LING 310		200/300

## 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.

SCIE 101	MATH 102	DATA 101	COSC 121	COSC 122	100	100	100
DATA 201	DATA 203	STAT 201/202	COSC 262	PHIL 240	COSC 265	1 from STAT 211-299	100/200
DATA 301	DATA 303	STAT 315/318	COSC 367	STAT 318/315	DATA 309		200/300

### Bachelor of Data Science major: Population Health Data Science

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

SCIE 101	MATH 102	DATA 101	COSC 121	COSC 122	HLTH 110	GISC 101	100
DATA 201	DATA 203	STAT 201/202	COSC 262	PHIL 240	HLTH 213	HLTH 214	100/200
DATA 301	DATA 303	STAT 315/318	HLTH 312	GEOG 325	HLTH 309		200/300

### 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.

SCIE 101	MATH 102	DATA 101	COSC 121	COSC 122	GEOG 106/110	GISC 101	100
DATA 201	DATA 203	STAT 201/202	COSC 262	PHIL 240	GEOG 205	GEOG 208	100/200
DATA 301	DATA 303	STAT 315/318	GEOG 323	GEOG 324	GISC 309		200/300

# 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

ENVR 101	STAT 101	CHEM 114/111	BIOL 112	GEOG 106	SCIE 101	100	100
ENVR 209	ENVR 210	BIOL 209/ GEOG 205/208	BIOL 274	200 MAJOR	200 MAJOR	200	100/200
ENVR 304	ENVR 302		PSYC 341	300 MAJOR	300 MAJOR	300 MAJOR	200/300
ENVR 415	ENVR 411	ENVR 480 Research project		400 MAJOR	400 MAJOR	400 MAJOR	400

\*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.

## 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.

ENVR 101	STAT 101	CHEM 114/ CHEM 111	BIOL 112	GEOG 106	SCIE 101	100	100
ENVR 209	ENVR 210	BIOL 209/ GEOG 205/208	BIOL 274	BIOL 275	SOIL 203/WATR 201/ GEOG 201/BIOL 213	BIOS 201	200
ENVR 304	ENVR 302		PSYC 341	BIOL 309	Two courses from: BIOL 332/336/371/375/377/378/383/384		200/300
ENVR 415	ENVR 411	ENVR 480 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.

ENVR 101	STAT 101	CHEM 114/111	BIOL 112	GEOG 106	SCIE 101	ANTA 102	100
ENVR 209	ENVR 210	BIOL209/ GEOG 205/208	BIOL 274	ANTA 201	GEOG 201/215	BIOS 201	100/200
ENVR 304	ENVR 302		PSYC 341	Three courses from: GEOG 312/311/ BIOL 337* / PHYS 330			200/300
ENVR 415	ENVR 411	ENVR 480 Research project		GEOG 412		BIOL 427	400

\*BIOL337 (Not offered 2022)

## 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 (e.g. microbial) contaminants and their impacts on the environment.

ENVR 101	STAT 101	CHEM 114/111	BIOL 112	GEOG 106	SCIE 101	BIOL 111	100
ENVR 209	ENVR 210	BIOL 209/ GEOG 205/208	BIOL 274	BIOL 213	CHEM 247	SOIL 203/WATR 201/ GEOG 201/ HLTH 214	100/200
ENVR 304	ENVR 302		PSYC 341	Two courses from: CHEM 340/ BIOL 313/PHYS 330/ BIOL 309		ENVR 303	200/300
ENVR 415	ENVR 411	ENVR 480 Research project		WATR 402	Two courses from: ENVR 414/ BIOL 455/WATR 403/WATR 401		400

## 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 (e.g. MDRR), which is a rapidly-developing focus in NZ and globally.

ENVR 101	STAT 101	CHEM 114/111	BIOL 112	GEOG 106	SCIE 101	GEOL 113	100
ENVR 209	ENVR 210	BIOL 209/ GEOG 205/208	BIOL 274	GEOL 246	GEOG 215	COMS 232	100/200
ENVR 304	ENVR 302		PSYC 341	GEOL 354	GEOG 351	GEOG 323/324/325	200/300
ENVR 415	ENVR 411	ENVR 480 Research project		DRRE 401	DRRE 402	GEOL 404/HLTH 403	

## Bachelor of Environmental Science major: Fresh Water

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.

ENVR 101	STAT 101	CHEM 114/111	BIOL 112	GEOG 106	SCIE 101	100	100
ENVR 209	ENVR 210	BIOL 209/ GEOG 205/208	BIOL 274	WATR 201	GEOG 201	CHEM 247/ BIOL 213	100/200
ENVR 304	ENVR 302		PSYC 341	Two courses from: BIOL 375/ GEOG 311/312/CHEM 340		WATR 301	200/300
ENVR 415	ENVR 411	ENVR 480 Research project		WATR 402	WATR 401/403	BIOL 425/GEOG 409*/412*/ENGE 414/ ENVR 414	400

\*30 points

## 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.

ENVR 101	STAT 101	CHEM 114/111	BIOL 112	GEOG 106	SCIE 101	100	100
ENVR 209	ENVR 210	BIOL 209/ GEOG 205/208	BIOL 274	GEOG 201	BIOL 212	GEOG 215	BIOL 275
ENVR 304	ENVR 302		PSYC 341	GEOG 311	BIOL 384	BIOL 309/377/378/ GEOG 323/324	200/300
ENVR 415	ENVR 411	ENVR 480 Research project		GEOG 409		BIOL 428	400

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

## Bachelor of Speech and Language Pathology – Intermediate

SPSC 161	STAT 101	At least 1 of: HLTH 106 MAOR 165/172 TREQ 110/111	100 *	100 *	100 *	100 *	100 *
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\* courses can be selected from recommended list: CMDS 113, CMDS 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)

SPSC 222	SPSC 223	SPSC 232	HEAR 243	SPSC 262	SPSC 263	SPSC 281	SPSC 282
SPSC 320	SPSC 363	SPSC 365	SPSC 366	SPSC 367	SPSC 369	SPSC 381	SPSC 382
SPSC 421	SPSC 451	SPSC 461	SPSC 468	SPSC 482	SPSC 484	SPSC 490 or 491	

# Types of degrees

## Conjoint degrees

We currently offer two conjoint degrees.

1. The Conjoint Bachelor of Product Design and Science: advising is done primarily in the College of Engineering.
2. The Conjoint Bachelor of Commerce and Science: advising is done primarily in the School of Business.

### 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.

Students take 135 points each year for four years to complete the degree (540 points total).

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).

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.

# FAQ

## Which papers are required for my major?

You can find the list of required papers for your major on our web site.

All students who enrolled in a BSc, BDataSc and BEnvSci(Hons) must take SCIE101.

The number of papers required for each major differs, and you can find information on this on our website. The rest of your enrolment needs to be filled with elective papers, which can be either complementary to your major, or they can be in completely different subject areas.

## What is SCIE101?

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. Students will gain an understanding of the civic roles, responsibilities and influence of science in our Māori, New Zealand, and global communities. Students



will learn how to work effectively as a team and communicate successfully to communities and end-users. Students will learn what it means to be a successful scientist in Aotearoa New Zealand and the world in the 21st century.

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

If you want help with planning your degree, and choosing your papers, you need to get in touch with the UC Liaison team. 0800 827 748 or [liaison@canterbury.ac.nz](mailto:liaison@canterbury.ac.nz)

### **How do I drop a paper, or add another paper into my enrolment?**

You can drop a paper through your myUC account. Key dates are listed on our website.

### **If I fail or drop a paper, do I have to take it again?**

If the paper you failed is required for your major, you will need to take it again.

### **What is a major?**

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

## **BSc Majors**

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

### **Can I take any Arts or Commerce papers as a Science student?**

Yes, you can take up to 105 points of non-science papers throughout your BSc.

### **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 workload is also the same as doing a single major.

### **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 in total – and of these,

45 points must be at 200 or 300 level. This allows you pick and choose courses from a major that interest you.

From 2020, you can add minors from the BA, BSc, BCom and BSpC to the BSc if you wish – a minor is an option, not a requirement for the BSc.

### **What is the difference between a double degree and a conjoint degree?**

At UC, you can do a **double degree** in Science and most other degrees. This does, however, take careful planning and coordination. It requires a minimum of 600 points and students must complete all the major/minor/compulsory course requirements of both degrees.

We also offer a limited number of conjoint degrees. A **conjoint degree** at UC has specific degree regulations, and requires a minimum of 540 points, and students are required to maintain a specified GPA to remain in this qualification. Students must complete all major/minor/compulsory course requirements that are specified in the degree requirements.

The conjoint degrees currently available with the BSc are:

- the Conjoint Bachelor of Commerce and Science (primary advising from the School of Business)
- the Conjoint Bachelor of Product Design and Science (primary advising from the College of Engineering).







**Start now.**  
**[www.canterbury.ac.nz/science](http://www.canterbury.ac.nz/science)**